

CATALOG

2019-20

Casper College

Academic Information

Academic Credit

Students should expect to devote the following time per credit, per week for a 15-week semester. A period is 50-minutes or a minimum of 80 hours of on-the-job training with college supervision.

- 1 lecture credit equals 1 period with 2 hours of outside preparation.
- 1 laboratory or activity credit equals 2 to 4 periods and necessary outside preparation.
- 1 music studio credit equals 30 minutes of applied instruction plus three hours of practice per week.

An equivalent amount of work is expected for internships, practicums, studio work, clinicals, independent study, compressed courses, and other academic work leading to the award of academic credit.

Academic Standing

Students are considered in good standing if they attend Casper College for one or more semesters and earn a 2.0 or higher grade point average for that semester or for their cumulative average. The registrar notifies students who are not making satisfactory academic progress. Students may be placed on academic probation when:

- The student does not meet the minimum qualifications for admission or
- The student does not meet the minimum grade standard to be considered in good standing

The college removes students from academic probation who attain a semester grade point average that meets or exceeds the minimum requirements to be considered in good standing. Students who fail to achieve good standing after one semester on academic probation are subject to academic suspension.

The college issues an academic suspension when a student fails to achieve good standing after one semester on academic probation or for academic dishonesty. Students on academic suspension may not register for academic courses for at least one semester unless they receive an approved petition for an exception.

Financial aid probation and suspensions are issued in accordance with the rules and regulations governing the form of aid received and are determined separately from academic probation and suspension.

Corrective measures come in the following forms.

1. *Current semester problems.* Students having trouble with a course may withdraw from the course or the college (see schedule changes) audit the course (see Auditing Courses), or request an incomplete or in progress (see Incomplete and In Progress). All timelines must be met to make any changes.
2. *Academic standing.* Academic standing is based on either semester grade point average or cumulative grade point average (see Academic Standing), thus allowing redemption in one semester regardless of past record and avoiding a penalty for one below par semester in an otherwise satisfactory record.
3. *Academic Forgiveness.* Degree-seeking students currently attending Casper College may petition the registrar to remove up to two semesters, in their entirety, from the calculation of the student's cumulative grade point average (GPA) and degree credits. The registrar will approve petitions for students who have completed 24 semester credits of college level courses with a 2.5 GPA after the last semester listed on the forgiveness petition. This is a one-time-only option.

Advising

Your advisor is essential to your success. Be sure to meet with your advisor prior to enrolling for classes or making schedule changes.

Advisor Assignments

Students are assigned an advisor who has specific knowledge about their chosen program during new student advising and registration events. Students have the right to request a new advisor. Students who wish to change their advisor contact Enrollment Services. Students who want a specific advisor must obtain permission from that advisor and contact Enrollment Services to make the change.

Advisor's Roles and Responsibilities

- Help advisees develop realistic educational career plans.
- Assist advisees in planning a program of study consistent with abilities and interests.
- Assist with selecting courses and verify that prerequisites are met.
- Provide registration priority date and time.
- Monitor advisee's progress toward educational and career goals.
- Discuss the relationship between instructional programs and occupation/career goals.
- Interpret instructional policies, procedures, and requirements.
- Approve educational transactions (e.g. schedule, drops, adds, withdrawals, change of major, waivers, removing academic holds, etc.).
- Maintain a file for each advisee.
- Refer students to appropriate resources and services.
- Request reassignment of advisee to another advisor, if necessary.
- Assist advisees in identifying career opportunities.
- Direct advisees to career counselors, if necessary.

Advisee's Roles and Responsibilities

- Share interests, goals, and educational and career plans.
- Report personal information that has a bearing on your academic success such as the number of hours working, family responsibilities, and financial aid status.
- Be familiar with the academic catalog and student handbook.
- Know your advisor's advising hours and phone number.
- Schedule an appointment or meet during designated advising hours. Call if you are unable to keep an appointment. Meeting with your advisor is required before you can register.
- Keep a record of graduation requirements, which is your responsibility to fulfill.
- Keep correspondence from the college and meetings with your advisor(s).
- Know deadline dates listed in class schedules and Student Handbook.
- Contact the appropriate student support services when necessary.
- Prepare for meetings with your advisor, particularly when registering for classes. Have an idea about what courses you want to take for your program and electives. Have a list of alternative courses in case the courses you want are closed or wait-listed.
- Become familiar with how to use WebAdvisor or myCCinfo.
- Alert your advisor immediately of difficulties affecting your course work or continued enrollment.
- Provide Enrollment Services with your current address and phone number.

Class Attendance

Students are expected to attend all sessions of the classes in which they are enrolled. Students should contact the Vice President for Student Services Office in the Nolte Gateway Center or 307-268-2201 if they are called for jury duty, subpoenaed as a witness, or ill or injured and unable to attend class for an extended period. The office will notify instructors of students on extended leave. This notification does not give students an excused absence. Students should contact their instructors as soon as they are able to inform them of an absence. Instructors may request that students provide appropriate documentation to the Vice President for Student Services Office upon their return and complete any makeup work assigned. Contact the Vice President for Student Services Office at 307-268-2201 about documentation requirements.

Students should check with their instructors about their class attendance policies. Casper College encourages its instructors to make a reasonable effort to allow students to observe their major religious holidays or to participate in college-sponsored activities without academic penalty. Students must notify their instructors as soon as possible of dates for which they plan to request an excused absence and abide by their instructor's class policies.

Instructors are required to report the names of students who attend class irregularly or are absent for several consecutive class sessions to the Vice President for Student Services Office, who will contact students about their intent to continue in the course. Excessive absences or tardiness may result in a lower grade or in a faculty-initiated withdrawal from the course.

Automatic Withdrawal: Students who have not attended or participated in a course they are enrolled in during the first week of the semester will be automatically dropped from that course at the beginning of the second week. Contact your instructor if you have questions about automatic withdrawal.

Instructor sponsors or coaches submit a list of students who will miss class because of a college-sponsored activity to the student's faculty and to the vice president for student services at least three days before the first scheduled day to be gone. Students should talk with their instructors prior to any absences. The instructor may excuse absences and allow make-up work.

Choosing a Major

Many students come to Casper College with a clear idea about what they want to accomplish while they are here; other students are undecided. Instructors can provide information about the areas in which they teach. The Enrollment Services/Student Success Center in the Nolte Gateway Center, third floor provides assistance by looking at different majors and how those translate into careers, creating academic and career timelines, and providing direction on how to declare a major and find a new academic advisor.

Casper College offers certificates and associate's degrees. It is important when choosing a major or career to know the differences between the programs we offer. Certificates usually take two semesters to finish and include only the courses directly relevant to the field. An associate of applied science degree is a good choice for students who want to earn a college degree and enter the workforce, but do not plan to pursue a bachelor's degree. Students interested in pursuing a bachelor's degree will want to select majors that lead to an associate of arts, associate of business, associate degree in nursing, or associate of science. These programs parallel the first two years of most bachelor degree programs.

Course Evaluations

Casper College evaluates credit-bearing courses in which five or more students are enrolled. Near the end of the course meeting time, students will receive a link in their college email to an online evaluation for the course. Completing course evaluations assist instructors to improve their teaching. Student participation in course evaluations is highly encouraged. The information provided is anonymous.

Course Grading

The college issues student grade reports twice a semester. The mid-term grades indicate the student's academic progress part way through the semester and are not part of the student's permanent record. Final semester grades are a part of the student's permanent record. Students may view their grades online in WebAdvisor or myCCinfo.

Students who think they received an incorrect grade should contact their instructor. Instructors may submit a Grade Change Form to Enrollment Services if there has been an error. Grades are eligible to be changed for up to one year from the date the grade was assigned.

Grades	Grade Points
A — excellent	4 points
B — above average	3 points
C — average	2 points
D — below average	1 point
F — failure	0 points
I — incomplete	0 points
S — satisfactory	0 points
U — unsatisfactory	0 points
AU — Audit	0 points
W — withdrawn	0 points
Drop	0 points

Grade Point Averages (GPA). There are two types of grade point averages (GPA): semester and cumulative. Semester GPA is calculated by multiplying the credits a course is worth by the number of points the earned grade is worth to give the total grade points for that course. Do this for each course taken in a semester. Add the points for all the courses taken that semester and divide by the total number of credits attempted for that semester. The cumulative GPA is calculated by dividing the total number of grade points earned at Casper College by the total number of semester credits earned.

Incomplete Grade. An incomplete (I) is awarded when a student, for reasons beyond the student's control, is unable to finish the course and the student would otherwise have had a passing grade. A student who receives an incomplete must arrange with the instructor to complete the course. To be eligible for an incomplete grade assignment, the following criteria must be met.

1. The student must have completed at least 50% of the course.
2. The student must have a passing grade.
3. The instructor and student establish a time frame to complete the course, not to exceed one year. If the student does not complete in this time frame, the student will be assigned an F for the course.

The student must submit a completed Incomplete Grade Contract to the Registrar's Office.

Satisfactory/Unsatisfactory. Courses that offer an S/U grading option are identified as such in the Academic Catalog. Students may select S/U grading when they register for the course or prior to the withdraw deadline date. Instructor permission is required for any changes after registration. Grade points are not awarded for S/U or pass/fail grades, therefore, courses awarded an S/U grade are not included in the student's GPA calculation. S/U grades may count toward degree, satisfactory progress, and athletic or activity eligibility requirements

Audit. Students may audit a course when they want to attend a class but do not want to receive credit or a grade for that course. Students who wish to audit a course indicate so at the time of enrollment. Students who satisfactorily complete an audited course, including regular attendance, will receive an audit notation on their transcript. They will not receive credit or a grade. The college charges full tuition to audit a course.

Withdraw/Drop. Students may drop a course at any time prior to the census date listed in the academic calendar (usually day 10 of the semester) using WebAdvisor, myCCinfo, or by going to Enrollment Services. Dropped courses are not recorded on a student's transcript. Students may withdraw from courses after the census date in WebAdvisor, myCCinfo, or they may submit a completed Change Form to Enrollment Services prior to the withdrawal deadline listed on the academic calendar. Withdrawals are recorded on the student's transcript as a withdrawn (W) course. After the withdraw deadline, a student may submit a completed petition with their instructor's permission to Enrollment Services. Additional documentation may be requested, and approval is not guaranteed. Check the refund schedule for any applicable charges.

Course Identification

(Insert Graph)

Course Load

Course load is measured in credits enrolled in each semester. Twelve credits is full-time enrollment. On average, a student will need to take a minimum of 16 credits to complete an associate's degree within two years. The maximum recommended credit load is 19 credits per semester. Students should discuss their appropriate course loads with their academic advisors. The vice president for student services or an enrollment service director may grant an exception to this rule for students with a good academic record.

Course Numbering System

General Transfer Course Numbers

1000- 1499	Freshman
2000- 2499	Sophomore

If the second digit starts with 0, 1, 2, 3, or 4 the course is academic/transfer.

Vocational Course Numbers

1500- 1999	Freshman
2500- 2999	Sophomore

If the second digit starts with 5, 6, 7, 8, or 9 the course is vocational/technical.

Course Numbers for Undergraduate Variable Courses

Course Type	General	Occupational
Capstone Courses	1395, 2395	1895, 2895
Field Studies	1460, 2460	1960, 2960
Directed Studies/Research Problems	1465, 2465	1965, 2965
Internship/Practicum	1470, 2470	1970, 2970
Independent Studies	1475, 2475	1975, 2975
Cooperative Work Experience	1480, 2480	1980, 2980
Seminar	1485, 2485	1985, 2985
Topics	1490, 2490	1990, 2990
Workshop	1495, 2495	1995, 2995

Capstone Courses - The capstone course is usually the last class in a program of study. It represents a “crowning achievement” as a capstone does in architecture. A capstone course may require a project and/or presentation; an assessment exam to test interdisciplinary skills (like math, writing, critical thinking, etc.). A capstone may also involve a final research paper exploring a topic of interest, emerging from a student’s program of study. Ultimately, a capstone gives the student the opportunity to demonstrate knowledge and skills gained during the college career.

Field Studies - A combination of classroom instruction with participation in the actual field being studied.

Directed Studies/Research Problems - Special projects and research carried out under the direction of faculty.

Internship/Practicum - Unpaid work experience related to a chosen field of study.
(Approximately 30 hours work experience equates to 1 credit hour)

Independent Studies - A course designed and taken under a special contract with a faculty member.

Cooperative Work Experience - A planned academic program allowing students to blend classroom theory with related paid work experience. Prerequisites: Approval of appropriate faculty member. (80 hours work experience equates to one credit hour)

Seminar - In-depth examination of a specific issue or subject. A seminar can meet at varying times and durations during a semester. (16 contact hours equates to one credit hour)

Special topics courses - Courses that are not part of the regular catalog curriculum. Designed to meet special needs or interests and provide flexibility in the curriculum to meet a variety of situations. Courses may be designed to meet the interests of a group of students, to fit the talents of a visiting professor, to study a current problem, or to meet similar educational situations. Special topics courses may be offered in any department and are normally semester-long courses for one to three credits with a max of 6 credits if different topics are offered. Special topics may also be offered, however, as short courses by visiting professors for one or two credits. Special topics courses offered are listed in the registration material for each semester.

Workshop - Specific training or instruction with the emphasis on skills development. Involves interactive participation among class members and instructors. Students acquire a basic understanding of principles and procedures in the field being addressed. (1-3 hrs lec)

Credit for Prior Learning

Credit for prior learning (CPL) is a process that enables students to demonstrate what they have learned and translate that learning into college credit. CPL validates college-level knowledge and competencies acquired through life, work, military experience, civic engagement, independent study, and professional development classes or training. It may be used to obtain credit for courses taken at another institution that did not transfer. Contact the Records Office with questions about CPL.

Casper College offers students three ways to earn CPL: by exam, professional certification, or military training and experience. Academic departments may identify courses for which students can earn credit by taking an exam. Exams may be departmental, College Level Exam Program (CLEP), College Entrance Exam Board Advanced Placement Exam (AP), or International Baccalaureate (IB).

Departmental Exam. Students who have experience, training, or noncredit coursework in a subject area may request credit by exam. If the request is granted, the departmental instructor will develop an exam that corresponds with the outcomes, objectives, and rigor of the course and program. Exams may be written, oral, or a demonstration.

CLEP. CLEP assesses proficiency through exams on business, composition and literature, world languages, history and social sciences, and science and mathematics. Most CLEP exams cover lower-level and introductory knowledge.

AP. High schools administer AP exams to students who have taken an AP course. The test assesses the student's subject area knowledge. Casper College awards credits to students who pass an AP exam at the minimum level for a course approved for AP credit.

IB. High schools administer IB exams to students who have taken an IB course. The test assesses the student's subject area knowledge. Casper College awards credits to students who pass an IB exam at the minimum level for courses approved for IB credit.

The college may grant credit for professional certifications that directly correspond to a course. To receive credit, students must provide documentation of the certification that is current and valid to an instructor in the area of study that corresponds with the certification. Upon acceptance of the certification, the instructor submits a request to issue CPL to their department chair or program director for approval. Upon approval, the request is submitted to the Records Office who records the credits.

Students who have earned military education and training credit may apply for CPL. Casper College uses the *American Council of Education's (ACE) Guide to the Evaluation of Educational Experiences in the Armed Services* to determine credit for military training and experience and *ACE's National Guide to College Credit for Workforce Training* to

determine credit in exceptional cases. The college reserves the right to make an independent determination of equivalency of courses or to require departmental exams and evaluations.

The college will grant one semester credit for physical education to students who present a Report of Discharge (DD Form 214) to the Records Office establishing active duty of 181 days or more. Students who present such evidence for more than one year of active duty will be granted two semester credits.

The veteran coordinator will request the Registrar's Office complete a military transcript evaluation for students who requested a transcript evaluation on the Request for Certification form. The Registrar's Office will evaluate transcripts for classes that could count for elective or general education credit. Students who would like their transcripts evaluated for specific course credits that could apply to their program of study must contact their advisors. Advisors will coordinate with the Records Office to review the transcripts to determine if there are any specific course credits eligible to apply towards a student's program of study.

The following are requirements of CPL at Casper College.

1. Casper College awards CPL for coursework in disciplines related to its degree and certificate programs. Students must prove their knowledge and competencies in an area of study offered by the college.
2. Students may only apply for CPL for courses applicable to curriculum requirements in the student's declared program of study.
3. Students must be registered as degree seeking and admitted into a specific program during the semester in which CPL is awarded.
4. Students may apply for CPL only one time for the same course.
5. Students must submit official documentation of previous work or demonstrated competencies before CPL will be awarded.
6. Students may not earn CPL for courses in which they are currently enrolled, have audited, received a failing grade, or earned credit in a higher-level course in the same subject area. Students cannot use CPL to replace a failed grade or raise a passing grade in the same course.
7. Students placed in a higher-level course may earn CPL in lower-level courses by taking an approved exam. Any exams taken for CPL must be completed by midterm of the semester in which the student is enrolled in the higher-level course.
8. CPL satisfies prerequisite requirements the same as coursework.
9. Students who take AP or IB exams must score the minimum or above on each test to receive credit. They must request an official transcript from the College Board for AP exams or International Baccalaureate for an IB exam be sent to the Record's Office, who makes the placement decision for AP and IB credit.
10. Students who intend to use CPL in a course in which a grade has not been awarded to meet degree requirements at another institution should check the requirements of the receiving institution.
11. The Records Office awards and records CPL. Credits are assigned but not a grade. Credit earned through CPL is not used to calculate grade point average.
12. To earn a grade for a departmental exam, students must pass an assessment developed by a Casper College instructor with expertise in the subject area that corresponds to the published course outcomes. Students must pass all work assessed at 75% or a "C" level proficiency or better for all of the course outcomes and competencies.
13. All CPL must be awarded before the semester prior to graduation.

14. Casper College may accept CPL awarded by a regionally accredited institution with the approval of the Records Office and the dean of the school in which a similar course would typically be offered. These credits have the same limitations in meeting graduation requirements as CPL earned at Casper College and will be used in computing the total credits of CPL for which a student is eligible.
15. Regardless of the amount of CPL the college awards, degree-seeking students must earn at least 15 of the credits applied toward graduation through the completion of Casper College coursework. For certificate programs, 40% of the total required credits must be earned through Casper College coursework. No more than 40% of the total credits applied toward a degree or certificate may be awarded through CPL.

Credit for Prior Learning Fees

Students who take a CLEP exam must pay a non-refundable third-party vendor fee and a non-refundable college processing fee. Contact the Testing Center at 307-268-3850 or testing@caspercollege.edu for more information on fees. Students who take a departmental exam or earn CPL via a professional certification must pay a college processing fee to Accounting and Financial Management. Students requesting military education and training credit are not required to pay a processing fee. High schools administer AP and IB exams. Students should inquire with their respective high school for more information.

Credit for Prior Learning Appeals

Students who wish to appeal a CPL decision must follow the student grievance policy before the end of the semester in which the student requested CPL or the CPL exam was administered. The college will deny appeal requests made after the deadline.

CLEP Course Equivalencies

CLEP Subject Exam	Minimum Exam Score	Equivalent Casper College Course	Semester Credits Awarded
Business			
Financial Accounting	See Accounting Department		
Information Systems	50	COSC 1200: Computer Information Systems	3
Introductory Business Law	50	BADM 2010: Business Law I	3
Principles of Management	50	MGT 2100: Principals of Management	3
Principals of Marketing	50	MKT 2100: Principles of Marketing	3
Composition and Literature			
American Literature	50	ENGL 2310: American Literature I	3
Analyzing and Interpreting Literature	See English Department		
College Composition Modular*	55	ENGL 1010: English Composition	3
English Literature	50	ENGL 2210: English Literature I	3

World Language			
French Language: Level 1 and 2	41+	FREN 1010: First Year French I	4
French Language: Level 1 and 2	50+	FREN 1020: First Year French II	8
French Language: Level 1 and 2	57+	FREN 2030: Second Year French I	12
German Language: Level 1 and 2	40+	GERM 1010: First Year German I	4
German Language: Level 1 and 2	48+	GERM 1020: First Year German II	8
German Language: Level 1 and 2	54+	GERM 2030: Second Year German I	12
Spanish Language: Level 1 and 2	41+	SPAN 1010: First Year Spanish I	4
Spanish Language: Level 1 and 2	50+	SPAN 1020: First Year Spanish II	8
Spanish Language: Level 1 and 2	54+	SPAN 2030: Second Year Spanish I	12

History and Social Sciences			
American Government #	50	POLS 1000: U.S. and Wyoming	3
History of the United States I #	50	HIST 1211: United States to 1865	3
History of the United States II #	50	HIST 1221: United States from 1865	3
Introduction to Educational Psychology	50	EDFD 2100: Educational Psychology	
Introductory Psychology	50	PSYC 1000: General Psychology	3
Introductory Sociology	50	SOC 1000: Introduction to Sociology	3
Principles of Microeconomics	50	ECON 1020: Microeconomics	3
Principles of Macroeconomics	50	ECON 1010: Macroeconomics	3
Western Civilization: Ancient Near East to 1648	50	HIST 1110: Western Civilization I	3
Western Civilization II: 1648 to Present	50	HIST 1120: Western Civilization II	3
Science and Mathematics			
Biology	50	BIOL 1010: General Biology	4
Calculus	50	MATH 2200: Calculus I	4
Chemistry	50	CHEM 1025: Chemistry I, CHEM 1028: Chemistry Lab I, CHEM 1035: Chemistry II, & CHEM 1038: Chemistry Lab II	8
College Algebra	50	MATH 1400: Pre-Calculus Algebra	4
Precalculus	See Math Department		
General Exam - General exams provide credit for applied degrees ONLY			
Humanities	50		6
College Mathematics	50		6
Natural Sciences	50		6
* -- The essay portion of the test is required and will be scored by Casper College English Faculty.			

-- This credit will not meet the requirement for Wyoming Constitution. If credit is to be awarded the individual must pass the CLEP exam and the one credit Wyoming Constitution course. This still may not meet the requirements for the University of Wyoming.

Advanced Placement Course Equivalencies

AP EXAM	Minimum Exam Score	Equivalent Casper College Course	Semester Credits Awarded
Arts			
Art History	4+	ART 2020: Art History II	3
Music Theory	4+	MUSC 1030: Written Theory I & MUSC 1035: Aural Theory I	4
English			
English Language and Composition	4+	ENGL 1010: English I Composition	3
History			
Macroeconomics	4+	ECON 1010: Macroeconomics	3
Microeconomics	4+	ECON 1020: Microeconomics	3
Psychology	3+	PSYC 1000: General Psychology	3
United States History*	4	HIST 1211: United States to 1865 & HIST 1221: United States from 1865	6
STEM			
Biology	4+	BIOL 1010: General Biology	4
Calculus AB	3+	MATH 2200: Calculus I	4
Calculus BC	3+	MATH 2200: Calculus I & MATH 2205: Calculus II	8
Chemistry	4+	CHEM 1025: Chemistry I, CHEM 1028: Chemistry Lab I, CHEM 1035: Chemistry II, & CHEM 1038: Chemistry Lab II	8
Computer Science A	4	COSC 1010: Introduction to Computer Science	4

Computer Science A	5	COSC 1010: Introduction to Computer Science & COSC 1030: Computer Science I	8
Computer Science Principles	4+	COSC 1010: Introduction to Computer Science & COSC 1030: Computer Science I	8
Physics 1	4+	PHYS 1110: General Physics I	4
Physics 2	4+	PHYS 1110: General Physics I & PHYS 1120: General Physics II	8
Physics C: Mechanics Physics C: Electricity and Magnetism	4+	PHYS 1310: College Physics I & PHYS 1320: College Physics II	8
Statistics	3+	STAT 2050: Fundamentals of Statistics	4
World Languages and Cultures			
French Language and Culture	3	FREN 1010: First Year French I	4
French Language and Culture	4	FREN 1010: First Year French I & FREN 1020: First Year French II	8
French Language and Culture	5	FREN 1010: First Year French I, FREN 1020: First Year French II, & FREN 2030: Second Year French I	12
German Language and Culture	3	GERM 1010: First Year German I	4
German Language and Culture	4	GERM 1010: First Year German I & GERM 1020: First Year German II	8
German Language and Culture	5	GERM 1010: First Year German I, GERM 1020: First Year German II, & GERM 1030: Second Year German I	12
Spanish Language and Culture	3	SPAN 1010: First Year Spanish I	4
Spanish Language and Culture	4	SPAN 1010: First Year Spanish I & SPAN 1020: First Year Spanish II	8
Spanish Language and Culture	5	SPAN 1010: First Year Spanish I, SPAN 1020: First Year Spanish II, & SPAN 2030 Second Year Spanish I	12

* This credit will not meet the requirements for Wyoming Constitution.

International Baccalaureate Course Equivalencies

IB Exam	Minimum Exam Score	Equivalent Casper College Course	Semester Credits Awarded
Arts			
Art HL	4+	ART 1000: General Art: Studio	
Music HL	4	MUSC 1000: Introduction to Music	3
Music SL	4+	MUSC 1000: Introduction to Music	3
Theatre HL	4+	THEA 2050: Theatre Practice	3
Theatre SL		THEA 2050: Theatre Practice	3
Individuals and Societies			
Economics HL	5+	ECON 1010: Principals of Macroeconomics & ECON 1020: Principals of Microeconomics	6
History of the Americans HL*	4	HIST 1211: United States to 1865 & HIST 1221: United States from 1865	6
Macroeconomics, Principals of	6+	ECON 1010: Principals of Macroeconomics	3
Microeconomics, Principals of	6+	ECON 1020: Principals of Microeconomics	3
Philosophy HL	4+	PHIL 1000: Intro to Philosophy	3
Psychology HL	4+	PSYC 1000: General Psychology	3
Psychology SL	4+	PSYC 1000: General Psychology	3
Social and Culture Anthropology SL	4+	ANTH 1200: Introduction to Cultural Anthropology	3
World Religions SL	4+	RELI 1000: Introduction to World Religion	3
Language Acquisition			
French Language	4	FREN 1010: First Year French I	4
French Language	5	FREN 1010: First Year French I & FREN 1020: First Year French II	8

French Language	6+	FREN 1010: First Year French I, FREN 1020: First Year French II, & FREN 2030: Second Year French I	12
German Language	4	GERM 1010: First Year German I	4
German Language	5	GERM 1010: First Year German I & GERM 1020: First Year German II	8
German Language	6+	GERM 1010: First Year German I, GERM 1020: First Year German II, & GERM 1030: Second Year German I	12
Russian Language	4	RUSS 1010: 1st Year Russian I	4
Russian Language	5	RUSS 1010: 1st Year Russian I & RUSS 1020: 1st Year Russian II	8
Spanish Language	4	SPAN 1010: First Year Spanish I	4
Spanish Language	5	SPAN 1010: First Year Spanish I & SPAN 1020: First Year Spanish II	8
Spanish Language	6+	SPAN 1010: First Year Spanish I, SPAN 1020: First Year Spanish II, & SPAN 2030 Second Year Spanish I	12
Language and Literature			
English HL	4+	ENGL 1010: English Comp I	3
Mathematics			
Mathematical Studies SL	4	MATH 1000: Problem Solving	3
Mathematical SL	4	MATH 1450: Algebra & Trigonometry	5
Mathematics HL	4	MATH 2200: Calculus I & MATH 2205: Calculus II	8
Sciences			
Biology HL	4+	BIOL 1010: General Biology I	4
Biology SL	4+	BIOL 1000: Introduction to Biology I	4
Chemistry HL	4	CHEM 1005: Basic Chemistry I CHEM 1006: Basic Chemistry Lab I	4
Chemistry HL	5+	CHEM 1025: Chemistry I, CHEM 1028: Chemistry Lab I,	8

		CHEM 1035: Chemistry II, & CHEM 1038: Chemistry Lab II	
Computer Science HL	4+	COSC 1010: Introduction to Computer Science I & COSC 1030: Introduction to Computer Science II	8
Computer Science SL	4+	COSC 1010: Introduction to Computer Science I	4
Environmental Systems and Societies SL	4+	ENR 1200: Environmental Science	4
Physics HL	4	PHYS 1110: General Physics I & PHYS 1120: General Physics II	3

*This credit will not meet the requirement for the Wyoming Constitution course.

*Must have official transcript from International Baccalaureate Program.

Honor Rolls

The college uses semester or cumulative grade point averages to determine eligibility for the following honors:

President's Honor Roll. This honor is granted at the end of the fall and spring semesters to full time, degree-seeking students who completed at least 12 credits with a 3.5 or higher grade point average in the given semester.

Dean's Honor Roll. This honor is granted at the end of the fall and spring semesters to part-time, degree-seeking students who completed at least 6 but fewer than 12 credits and non-degree seeking students who completed 6 or more credits with a 3.5 or higher grade point average in the given semester.

Graduate with Distinction. Students receiving associates degrees who have earned a minimum of 32 semester credits (semester credits attempted as defined in Grade Averages) at Casper College and have attained a cumulative GPA of 3.8 or better in Casper College coursework graduate with distinction.

Honor Societies

Lambda Epsilon Chi. A national honor society that recognizes excellence in legal assistant/paralegal studies.

Phi Rho Pi. This national organization recognizes excellence in forensics competition and is open to students interested in competitive speaking.

Phi Theta Kappa. An invitation to join Phi Theta Kappa, a national two-year college honorary scholastic fraternity, is dependent upon meeting several qualifications. The student must:

- have a Casper College cumulative grade point average of 3.5 or higher at the time of initiation;
- have completed at least 12 credits of Casper College coursework; and
- be enrolled in Casper College for at least six credits in the semester he or she becomes eligible for membership and is initiated.

Psi Beta. A National Honor society in psychology that encourages professional development and psychological literacy of all students at two-year colleges through promotion and recognition of excellence in scholarship, leadership, research, and community service

Moodle4Me

Moodle4Me is a Learning Management System (LMS) used in distance education classes and classes with a web component. At the beginning of each semester, Enrollment Services will email students enrolled in online courses information on how to get their username, pin (password), and directions for logging into Moodle4Me. Classes become accessible on the first day of school.

To access Moodle4Me, go to <https://www.caspercollege.edu/current-students>. For technical assistance, contact the Digital Learning Center at www.caspercollege.edu/dlc.

Repeated Courses

If a student repeats a Casper College course, the most recently completed course will be used to calculate the student's cumulative grade point average. All attempts at a course are included on the student's official transcripts. Repeated courses may be eligible for financial aid.

Transcripts

A transcript is a record of the courses a student has taken. Students can download unofficial transcripts from WebAdvisor or myCCinfo at any time. Students may request official transcripts by completing the request application. No transcripts will be released until all administrative holds have been satisfied. There may be a charge for official transcripts.

Syllabi

Your instructor will provide a syllabus, or you can locate it on the college's website. Select "Current Students" on the homepage and then "Syllabi." Choose the semester, course group, and section number for the course syllabus you are looking for. Syllabi for the current semester are not usually available until after the first week of classes. Your course syllabus will include information on grading, assignments, and other important course information.

Transferring

Each college or university sets its own standards. Generally, a student in good standing at an accredited college or university can transfer to another accredited school without difficulty if the student has satisfactory grades (C or better) and proper course selection. Casper College is accredited by the Higher Learning Commission and by other special accrediting bodies.

Students who plan to transfer to another college or university after they graduate should select Casper College courses in accordance with the requirements of the schools to which they plan to transfer and consult with their transfer institution. Student Success Center professionals, who are located in the Nolte Gateway Center, third floor, are good resources for transfer information. The following suggestions may assist you with your transfer planning.

- Start planning for your transfer during your freshman year.
- Research in- and out-of-state colleges and universities to compare costs and programs.
- Request an academic catalog and admission materials from institutions you are considering.
- Select a transfer institution by the beginning of your sophomore year.
- Know admission, housing, and financial aid deadlines.
- Select Casper College classes that match your transfer institution's requirements. Their academic catalog and your advisor can help with this process.

- Apply for admission. Allow enough time to complete additional requirements such as a written essay, portfolio of your work, or reference letters. Budget for application fees.
- Send a copy of your Casper College transcript with your application. Your transfer institution will need it to determine which credits will transfer.
- Contact the financial aid office at your transfer institution to inquire about available financial aid. Enrollment Services can help in this process.
- Arrange for housing early. Many college towns have housing shortages. Contact the housing office if you plan to live on campus. They may offer special housing arrangements for upperclassmen including single rooms.
- Have your official Casper College transcript sent to your transfer institution after you have completed your last semester.

Degree Requirements

Degrees Conferred

Casper College grants six types of degrees: associate of arts, associate of science, associate of business, associate of fine arts, associate degree in nursing, and associate of applied science degrees. Certificates are also offered in many areas. There are two types of course requirements.

General education. All students seeking the same degree or certificate are required to take these classes in addition to the classes for their major to meet the college's general education outcomes.

Major requirements. These are classes required for a major. For example, communication majors are required to take classes in public speaking, interpersonal communication, communication theory, and mass media.

Application for Graduation

Casper College awards degrees and certificates for eligible candidates for graduation at the end of each semester (fall, spring, and summer). A candidate for graduation must file an application for graduation with the Records Office by the published deadline, which is December 1 for December graduation, April 1 for May graduation, and July 16 for August graduation. The form is located at www.caspercollege.edu/offices-services/records. A degree or certificate check and an application for graduation must be completed and on file with the Records Office before the candidate registers for the final semester. Enrollment Services determines eligibility for graduation.

A commencement ceremony is held at the end of the spring semester for students who were eligible for graduation within the year. Watch for signs posted around campus for deadlines to order your cap and gown, usually around mid-March. Candidates may order announcements through the Jack McCann Campus Store.

Academic Catalog Governing Graduation

Students are expected to fulfill the requirements for graduation stated in the Academic Catalog in effect at the time of their graduation. They may elect to fulfill the requirements for graduation in the Academic Catalog in effect at the time they first enrolled as a degree-seeking student in their program if they have not interrupted that program for more than one year.

Institutional Requirements

To graduate from Casper College a student must:

- Complete a minimum of 60 approved semester credits with a grade point average of 2.0 or higher in those courses counted toward graduation.
- Earn at least 15 of the semester credits applied toward graduation through the completion of Casper College coursework, including at least six hours within the desired major. The vice president for academic affairs may waive this requirement.
- Complete at least one physical education activity course. (The associate degree in nursing is exempt from this requirement.) The college will waive this requirement for any student who presents a physician's statement of medical restriction to Enrollment Services. No more than four semester credits in physical activity courses will count toward an associate degree.
- Students who have earned a C or better in a college level political science or history course that covered the U.S. Constitution may be able to take POLS 1100 Survey of the U. S. and Wyoming Constitutions (1CR) in lieu of one of the courses used to satisfy the U.S. and Wyoming Constitutions course requirement. Students must receive a C or better in POLS 1100 to satisfy the requirement. Contact the Political Science Department by calling 307-268-2368 to request permission to take POLS 1100 or to schedule an appointment.

- Complete the requirements for one of the six degrees listed in this section (e.g., A.A., A.S., A.B.A., A.D.N., A.F.A., and A.A.S.).
- If the student is seeking a second associate's degree, the student must complete all general and departmental degree requirements and 15 semester credits beyond the study requirements of the first degree.

General Education Philosophy Statement, Outcomes, and Requirements (GERs)

While education within a major field of study prepares each student to achieve success within a chosen vocation, general education provides the cornerstone of understanding in areas that prepare students for life. The goal of general education is to provide the skills necessary for one to be an educated member of society. Therefore, as a fundamental part of their education at Casper College, graduates are expected to possess the following core abilities, commonly termed institutional learning outcomes.

Students will be able to

- Demonstrate effective oral and written communication
- Use the scientific method
- Solve problems using critical thinking and creativity
- Demonstrate knowledge of diverse cultures and historical perspectives
- Appreciate aesthetic and creative activities
- Use appropriate technology and information to conduct research
- Describe the value of personal, civic, and social responsibilities
- Use quantitative analytical skills to evaluate and process numerical data

General Education Course Requirements are criteria established by Faculty Senate to apply when considering if a course should be designated as a general education course. These criteria include reasoning and inquiry in science, math computation, communication, human behavior, and cultural environment.

Reasoning and Inquiry in Science

As a result of completing general education courses in this area, students will be able to comprehend and apply the basic principles of science and scientific inquiry methods.

Evaluation Criteria:

Comprehension: define central facts, concepts, and theories of the physical universe and understand the mechanics (chemical, physical, biological) of the natural world.

Application: execute laboratory exercises, document and evaluate empirical observations, and implement the scientific method and creative thinking.

Inquiry: exercise critical thinking in the evaluation of current science, gather, assess, and weigh evidence, and demonstrate the ability to locate, evaluate, and effectively use and cite scientific literature.

Courses used to satisfy the general education reasoning and inquiry in science requirement for graduation must be selected from the following departments or courses and must include a lab: astronomy (ASTR), atmospheric science (ATSC), biology (BIOL), chemistry (CHEM), environment and natural resources (ENR), geology (GEOL), GEOG 1010, life science (LIFE), molecular biology (MOLB), physics (PHYS), or zoology (ZOO)

Math Computation

As a result of completing general education courses in this area, students will be able to comprehend and use quantitative concepts and methods to interpret and critically evaluate data and effectively problem-solve in a variety of contexts demanding quantitative literacy.

Evaluation Criteria:

Comprehension and Application: implement appropriate use of operators and formulas and solve quantitative exercises with mathematical concepts, tools, and methods.

Interpretation and Evaluation: demonstrate logical reasoning, read and communicate using the language of mathematics, and assess nature or importance of quantitative data.

Problem Solving: formulate and implement strategies incorporating math, statistics, logic, and probability and address real-world situations using computational analysis.

Courses used to satisfy the math computation requirement for graduation must be selected from the following departments or courses: business administration BADM 1005 (AAS degree only), mathematics (MATH), or statistics (STAT).

Communication

As a result of completing general education courses in this area, students will be able to effectively use the English language, writing and speaking with clarity, coherence, and persuasiveness.

Evaluation Criteria:

Clarity: practice proper grammar, mechanics, and formatting, use proper diction and selection of suitable wording, integrate appropriate visual digital elements such as graphs, tables, and charts, and incorporate audience awareness and adaptation.

Coherence: employ appropriate organization and structure for different forms of communication and practice production of delivery that is effective for a specific audience or occasion.

Persuasiveness: apply critical and creative thinking through the use of logic, evidence, and appeals, use citation, sources, and documentation, and exhibit the ability to locate, evaluate, and effectively use source materials.

Courses used to satisfy the communication requirement for graduation must be selected from the following departments or courses: BADM 1020, BOTK 1540, communication (CO/M), ENGL 1010, ENGL 1020, ENGL 2005 or ENGL 2020. Students in A.A., A.S., A.D.N., and A.B. degrees are required to complete ENGL 1010 and need to verify with their advisers which second approved English composition course they should complete for their specific degree requirements.

Human Behavior

As a result of completing general education courses in this area, students will have developed a deeper understanding of the relation of self to the world through investigation of the influence of social, cultural, economic, and political institutions in shaping human thought, value, and behavior.

Evaluation Criteria:

Relation of Self to the World: examine human values, ideas, and experiences, analyze human ideas, behavior, influence, and social interactions, investigation of world influences, delineate and examine intersections of social, cultural, economic, and political institutions, explore different forms of self and cultural expression through artifacts, and exhibit the ability to locate, evaluate, and effectively use source materials.

Shaping Human Thought, Value, and Behavior: compare different methods and theories to interpret and explain human events and cultures and examine the role of diversity in human societies and its impact on global change.

Courses used to satisfy the human behavior requirement for graduation must be selected from the following departments or courses: AGEC 1010, AGEC 1020, anthropology (ANTH), addictionology (ADDN), criminal justice (CRMJ), economics (ECON), GNDR 1000, geography (GEOG), history (HIST), political science (POLS), psychology (PSYC), or sociology (SOC).

The following courses can be used to satisfy the U.S. and Wyoming Constitutions requirement for graduation: HIST 1211, HIST 1221, HIST 1251, POLS 1000, or POLS 1100 (by instructor permission only).

Cultural Environment

As a result of completing general education courses in the fine arts concentration area, students will have a deeper appreciation and understanding of the creative process, the pleasures and challenges of artistic expression, and the role and value of the fine arts in society and culture.

As a result of completing general education courses in the humanities concentration area, students will have a richer understanding of the human condition through investigation, appreciation, and evaluation of the aesthetic, historical, philosophical, and literary dimensions of human experience.

Evaluation Criteria for Fine Arts Concentration:

Artistic Expression: explore, identify, and discuss artistic genres, their pleasures, and their challenges.

Creative Process: practice and assess the creative process and expression through participation as viewers or creators of artistic objects, texts, or performances.

Role and Value: evaluate the role and value of fine arts in culture and society.

Evaluation Criteria for Humanities Concentration (must use a combination of the following criteria):

Aesthetic Dimension: recognize and articulate the aesthetic value of cultural objects thereby developing a deeper appreciation for them.

Historical Dimension: recognize and interpret historical contexts and relevance of cultural objects.

Philosophical Dimension: examine the development of philosophies and their influence on the aesthetics and content of cultural objects.

Literary Dimension: interpret literary ideas and analyze form and structures of texts.

Courses used to satisfy the cultural environment requirement for graduation must be selected from the following departments or courses: art (ART), AAST 1000, BADM 2050, BADM 2060, CO/M 2380, dance (DANC), EDCI 2250, ENGL 2006, ENGL 2011, ENGL 2020, ENGL 2050, ENGL 2055, ENGL 2060, ENGL 2080, ENGL 2130, ENGL 2140, ENGL 2150, ENGL 2185, ENGL 2210, ENGL 2220, ENGL 2225, ENGL 2230, ENGL 2235, ENGL 2270, ENGL 2310, ENGL 2320, ENGL 2350, ENGL 2440, humanities (HUMN), INST 2350, philosophy (PHIL), music (MUSC) [a maximum of four credit hours in music studio and ensembles], POLS 2290, POLS 2460, RELI 1000, theatre (THEA), WMST 1080, WMST 2020, WMST 2021, WMST 2025, WMST 2040, or world languages: ASL 1200, ASL 1220, ASL 2220, French (FREN), German (GERM), Japanese (JAPN), Latin (LATN), Russian (RUSS), or Spanish (SPAN).

Physical Education

Courses that may be used to satisfy the physical education requirement for graduation must be selected from the following departments or courses: physical education activity (PEAC) and physical education varsity sports (PEAT).

Associate of Arts, Associate of Business, and Associate of Science Degree Requirements

Students seeking the associate of arts, associate of business, or associate of science degree must complete a minimum of 32 hours in general education at the 1000 level or above, including at least one credit in physical education activity, and a course in the U.S. and Wyoming Constitutions. Students must fulfill the minimum course requirements of categories 1,2,3,4 and 5 as listed below. Students must select the remainder of their general education from areas one, two, and/or three. Courses can be taken from within or outside the student's major field of study. These degrees are considered transfer degrees.

Category	Credit
1. Reasoning and Inquiry in Science (laboratory science)	4
2. Math Computation	3
3. Communication	6
4. Human Behavior	3
A. U.S. and Wyoming Constitutions course	3
5. Cultural Environment	3
6. General Education Electives. to be chosen from areas 1, 2, 3, 4, or 5 above	8-11
7. Physical Education	1-2
TOTAL GENERAL EDUCATION (All credit hours must be 1000 level or above)	32
TOTAL MAJOR REQUIREMENTS	28
Approved by the academic department	
TOTAL MINIMUM DEGREE CREDITS	60

Associate of Fine Arts and Associate of Applied Science Degree Requirements

Students seeking the associate of fine arts or associate of applied science degree must complete a minimum of 17 credits in general education, including a minimum of one credit in physical education activity and a course in the U.S. and Wyoming Constitutions. Students must complete at least one course in each of the three general education areas listed below. Courses can be taken from within or outside the student's major field of study. These degrees are considered nontransfer degrees.

Category	Credit
1. Reasoning and Inquiry (laboratory science) or Math Computation	3-4
2. Communication	3

3. Human Behavior	
A. U.S. and Wyoming Constitutions course	3
4. Cultural Environment	
5. General Education Electives. To be chosen from area 1, 2, 3, or 4 above	5-11
6. Physical Education	1
TOTAL GENERAL EDUCATION (All credit hours must be 1000 level or higher)	17
TOTAL MAJOR REQUIREMENTS	43
Approved by the academic department	
TOTAL MINIMUM DEGREE CREDITS	60

Associate Degree In Nursing

Students seeking the associates degree in nursing must complete a minimum of 24 hours in general education at the 1000 level or above, including a course in the U.S. and Wyoming Constitutions. Students must fulfill the minimum course requirements of categories 1,2, 3, and 4 as listed below. Courses can be taken from within or outside the student's major field of study. This degree is considered a transfer degree.

Category	Credit
1. Reasoning and Inquiry in Science (Laboratory science) (ZOO 2040, ZOO 2041, and ZOO 2110)	8
2. Math Computation (MATH 1400)	4
3. Communication	6
4. Human Behavior (PSYC 1000)	3
A. U.S. and Wyoming Constitutions course	3
TOTAL GENERAL EDUCATION (All credit hours must be 1000 level or above)	24
TOTAL MAJOR REQUIREMENTS	44
Approved by the academic department	
TOTAL MINIMUM DEGREE CREDITS	68

Certificate of Completion

Certificates derive from and are an integral part of our degree programs. To qualify for a certificate of completion, a student must be enrolled as a degree-seeking student and complete one of the certificate programs listed under the various department curricula with a grade point average of 2.0 or better.

Accounting

This curriculum is for students wishing to pursue four-year degrees in accounting. To meet the requirements of the Associate of Business in Accounting, students must elect two semesters of intermediate accounting in the sophomore year.

Bookkeeper, A.A.S.

Designed to combine entrepreneurial concepts and business knowledge needed by an individual who plans to set up an accounting/bookkeeping practice.

This is a nontransfer degree.

Recommended Curriculum
General Education (Minimum 17 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- MATH 1000 - Problem Solving (3CR) or higher
- BADM 1005 - Business Mathematics I (3CR)

2. Communication

- BADM 1020 - Business Communications (3CR)
- CO/M 1030 - Interpersonal Communication (3CR)
- ENGL 1010 - English I: Composition (3CR)

3. Relationship with the World

(One course minimum)

Human Behavior

- U.S. and Wyoming constitutions (3CR)
- Cultural Environment

4. General Education Electives

Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- ACCT 1010 - Principles of Accounting I (4CR)
- ACCT 1450 - CB Exam Review (3CR)
- ACCT 1510 - Accounting for Bookkeepers (4CR)
- ACCT 2110 - QuickBooks Desktop and Online (3CR)

- ACCT 2410 - Intermediate Accounting I (4CR)
- ACCT 2420 - Intermediate Accounting II (4CR)
- ACCT 2460 - Payroll Accounting (3CR)
- BADM 2010 - Business Law I (3CR)
- CMAP 1765 - Spreadsheet Applications (3CR)
- COSC 1200 - Computer Information Systems (3CR)
- IMGT 2400 - Introduction to Information Management (3CR)
- MGT 2100 - Principles of Management (3CR)
- MKT 2100 - Principles of Marketing (3CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements:
A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Accounting, A.B.

Recommended Curriculum
General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study

1. Exploration and Participation

17 credits allowed in this field of study.

Laboratory science (4CR)

- MATH 2350 - Business Calculus I (4CR)
- MATH 2355 - Business Calculus II (4CR)
- STAT 2050 - Fundamentals of Statistics (4CR)
- or
- STAT 2070 - Introductory Statistics for Social Science (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)

- OR
- ENGL 2005 - Technical Writing (3CR)
- OR
- ENGL 2020 - Introduction to Literature (3CR)
- OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

ECON 1010 - Principles of Macroeconomics (3CR)

- U.S. and Wyoming Constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- ACCT 2410 - Intermediate Accounting I (4CR)
- ACCT 2420 - Intermediate Accounting II (4CR)
- BADM 2010 - Business Law I (3CR)
- ECON 1020 - Principles of Microeconomics (3CR)
- IMGT 2400 - Introduction to Information Management (3CR)
- MGT 2100 - Principles of Management (3CR)
- or
- MKT 2100 - Principles of Marketing (3CR)

Note:

The normal length of this program is two academic years at 16-18 credit hours per semester.

Graduation

Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Bookkeeper Certificate

This certificate is designed to combine entrepreneurial concepts and business knowledge needed by an individual who plans to set up or work for an accounting/bookkeeping practice.

Certificate Requirements

General Education

- BADM 1005 - Business Mathematics I (3CR)
- or
- MATH 1000 - Problem Solving (3CR)
- BADM 1020 - Business Communications (3CR)

Major Requirements

- ACCT 1010 - Principles of Accounting I (4CR)
- ACCT 1450 - CB Exam Review (3CR)
- ACCT 1510 - Accounting for Bookkeepers (4CR)
- ACCT 2110 - QuickBooks Desktop and Online (3CR)
- ACCT 2460 - Payroll Accounting (3CR)
- CMAP 1765 - Spreadsheet Applications (3CR)
- COSC 1200 - Computer Information Systems (3CR)

Note:

The normal length of this program is nine months.

Graduation

Requirements

For specific graduation requirements see "Degree Requirements".

Addiction Studies

Certified addiction practitioner assistants (CAPA) are licensed in Wyoming to work under supervision of licensed professionals in private and public sector organizations to provide assessment, education, and treatment services to clients with alcohol, drug, and other addiction problems. In addition, CAPA's refer clients with addiction problems to other social services agencies. The program is designed to update the skill and knowledge of individuals currently working addictionology or those with previous degrees preparing to become certified addiction practitioners or licensed addiction therapists. It also trains students preparing to work in counseling, psychiatry, psychology, nursing, social work, rehabilitation, criminal justice, community service, or related human service fields. Courses are also available for current addiction practitioners who meet course requirements. With careful course selection, students may earn associate degrees in both addictionology and either social work or psychology simultaneously.

Program Prerequisite: While participating in the program, recovering students will agree to abstain from alcohol and other illicit drugs. All other students must agree not to abuse alcohol or use illicit drugs while in the program.

Addiction Studies, A.S.

This degree is recommended to students planning to continue toward a baccalaureate degree in social work (BSW), psychology, or other human services curriculum. Students completing the degree are prepared with a strong cognate area of training that is in great demand for entry-level social workers.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- BIOL 1000 - Introduction to Biology I (4CR)
- MATH 1000 - Problem Solving (3CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- PSYC 1000 - General Psychology (3CR)
- POLS 1000 - American and Wyoming Government (3CR)

Cultural Environment (3CR)

4. General Education Electives (9CR)

Choose nine credits from the following:

- ECON 1010 - Principles of Macroeconomics (3CR)
- SOC 1000 - Introduction to Sociology (3CR)
- SOWK 2000 - Foundations of Social Work (3CR)
- STAT 2050 - Fundamentals of Statistics (4CR)
- STAT 2070 - Introductory Statistics for Social Science (4CR)

5. Physical Education (1CR)

Major Requirements

- ADDN 1020 - Foundations of Substance Use Disorders Counseling I (3CR)

- ADDN 2005 - Group Process (3CR)
- ADDN 2010 - Addictions Assessment (3CR)
- ADDN 2015 - Ethics and Professional Issues (3CR)
- ADDN 2100 - Foundations of Substance Use Disorder Counseling II (3CR)
- ADDN 2970 - Addiction Practicum (3CR)
- PSYC 2155 - Motivational Interviewing (3CR)
- PSYC 2050 - Introductory Counseling/Clinical Theories (3CR)
- PSYC 2080 - Biological Psychology (3CR)
- PSYC 2210 - Drugs and Behavior (3CR)
- PSYC 2340 - Abnormal Psychology (3CR)

Electives - (6CR)

Choose from the following electives:

- ADDN 1050 - Crime and Drugs (3CR)
- ADDN 1520 - Anger, Addiction and Trauma (3CR)
- PSYC 2260 - Alcoholism (3CR)
- PSYC 2300 - Developmental Psychology (3CR)
- PSYC 2360 - Lifespan: Adulthood and Aging (1CR)

Note:

The normal length of this program is two years at 15-17 credit hours per semester.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Addiction Studies Certificate

Certificate Requirements

- ADDN 1020 - Foundations of Substance Use Disorders Counseling I (3CR)
- ADDN 2005 - Group Process (3CR)
- ADDN 2010 - Addictions Assessment (3CR)
- ADDN 2015 - Ethics and Professional Issues (3CR)
- ADDN 2100 - Foundations of Substance Use Disorder Counseling II (3CR)
- ADDN 2970 - Addiction Practicum (3CR)

- PSYC 2155 - Motivational Interviewing (3CR)
- PSYC 1000 - General Psychology (3CR)
- PSYC 2050 - Introductory Counseling/Clinical Theories (3CR)
- PSYC 2080 - Biological Psychology (3CR)
- PSYC 2210 - Drugs and Behavior (3CR)
- PSYC 2340 - Abnormal Psychology (3CR)
- Electives - (5CR)

Choose from the following electives:

- ADDN 1050 - Crime and Drugs (3CR)
- ADDN 1520 - Anger, Addiction and Trauma (3CR)

Note:

The certificate program is only available to students who have previously earned a degree in another major area.

The normal length of this program is nine months.

Graduation Requirements

For specific graduation requirements see "Degree Requirements".

Agriculture

Classes in agriculture are arranged to meet the needs of students who wish to complete their formal college work at Casper College or for persons who plan to obtain a bachelor's degree elsewhere. Every effort is made to assist students in selecting a program which will fit their needs. Modern agriculture is a business and a science as well as a way of life, and the faculty recognizes that it is as important to produce alert and well-informed citizens as it is to train competent farmers and ranchers.

Agri-Business, A.A.S.

The A.A.S. in Agri-Business is designed for students that choose to go back to the farm, ranch or small business directly after graduating with an associates degree from Casper College. The program is rich in Agriculture, Agriculture Business, and General Business with minimal general education requirements and flexibility for the student to choose their academic and practical emphasis.

Recommended Curriculum

General Education (Minimum 17 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

(One course minimum)

- Lab Science
- Or
- Mathematics

2. Communication

(One course minimum)

- Written or Oral Communication

3. Relationship with the World

(One course minimum)

- Human Behavior
- U.S. and Wyoming constitutions (3CR) Required
- Cultural Environment

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements (32 CR)

- AGEC 1010 - Agriculture Economics I (3CR)
- AGEC 1020 - Agriculture Economics II (3CR)
- AGEC 2010 - Farm-Ranch Business Records (3CR)
- AGEC 2020 - Farm-Ranch Business Management (4CR)
- AGEC 2300 - Agricultural Marketing (3CR)
- AGRI 1010 - Introduction to Agricultural Technology (2CR)
- ANSC 1010 - Livestock Production I (4CR) or
- AECL 1000 - Agroecology (4CR)
- ANSC 1020 - Livestock Production II (3CR) or
- CROP 2200 - Forage Crop Science (4CR)
- SOIL 2010 - Introduction to Soil Science (4CR)

Approved Electives: (minimum 11 credits)

Any appropriate business or agriculture course may be taken for elective credit with departmental approval. Recommended business electives are sales (2), advertising (3), and retail merchandising (3). Work experience for credit can be arranged if desired, one to six maximum.

- AECL 1000 - Agroecology (4CR)
- AGRI 2475 - Independent Study in Agriculture
- AGTK 1580 - Introduction to Outdoor Recreation: Guide Outfitting (3CR)
- AGTK 1590 - Packing and Outfitting (2CR)
- ANSC 1030 - Equine Management (3CR)
- ANSC 1100 - Artificial Insemination (1CR)
- ANSC 1150 - Animal Diseases (2CR)
- ANSC 1200 - Livestock Fitting and Showing (2CR)
- ANSC 1210 - Livestock Judging I (3CR)
- ANSC 1220 - Livestock Judging II (Advanced) (3CR)
- ANSC 2020 - Feeds and Feeding (4CR)
- ANSC 2110 - Beef Production (3CR)
- ANSC 2120 - Sheep Production (3CR)
- ANSC 2130 - Swine Production (3CR)
- ANSC 2230 - Livestock Judging II/I (2CR)
- BADM 1000 - Introduction to Business (3CR)
- BADM 1030 - Personal Finance (3CR)
- BADM 2010 - Business Law I (3CR)
- CO/M 1030 - Interpersonal Communication (3CR)
- CROP 2200 - Forage Crop Science (4CR)
- ECON 1010 - Principles of Macroeconomics (3CR)
- FDSC 2100 - Principles of Meat Science (3CR)
- MGT 2100 - Principles of Management (3CR)
- MKT 2100 - Principles of Marketing (3CR)
- PSYC 1000 - General Psychology (3CR)
- REWM 2000 - Principles of Range Management (3CR)
- SOC 1000 - Introduction to Sociology (3CR)

Note:

The normal length of this program is two academic years at 15 credit hours per semester.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Animal Science Technology, A.A.S.

This two-year course of study is designed to provide the training and skills necessary to enter some phase of livestock production either as an employee or as a farmer or rancher.

Students following this curriculum will qualify for the Associate of Science degree; however, courses in either business or farm mechanics may be substituted for some of the courses shown, and the program can be tailored to the student's needs.

Recommended Curriculum

General Education (Minimum 17 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- BIOL 1000 - Introduction to Biology I (4CR)
or
- BIOL 1010 - General Biology I (4CR)

2. Communication

(One course minimum)

- Written or Oral Communication

3. Relationship with the World

(One course minimum)

- Human Behavior
- U.S. and Wyoming constitutions (3CR) required
- Cultural Environment

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- AGECE 2010 - Farm-Ranch Business Records (3CR) **
- AGECE 2020 - Farm-Ranch Business Management (4CR) **
- AGRI 1010 - Introduction to Agricultural Technology (2CR) **
- ANSC 1010 - Livestock Production I (4CR) **
- AECL 1000 - Agroecology (4CR)
or
- CROP 2200 - Forage Crop Science (4CR)
- ANSC 1020 - Livestock Production II (3CR) **
- ANSC 1030 - Equine Management (3CR)
- ANSC 2020 - Feeds and Feeding (4CR)
- ANSC 2110 - Beef Production (3CR)
- ANSC 2120 - Sheep Production (3CR)
or
- ANSC 2130 - Swine Production (3CR)
- REWM 2000 - Principles of Range Management (3CR)
- Electives - (11CR)

Recommended Electives:

- AGECE 1020 - Agriculture Economics II (3CR) **
- AGRI 1020 - GPS and GIS in Agriculture (2CR)
- AGRI 2475 - Independent Study in Agriculture
- AGTK 1570 - Horseshoeing (2CR)
- AGTK 1580 - Introduction to Outdoor Recreation: Guide Outfitting (3CR) **
- AGTK 1590 - Packing and Outfitting (2CR)
- ANSC 1100 - Artificial Insemination (1CR)
- ANSC 1160 - Issues in Agriculture (3CR)
- ANSC 1200 - Livestock Fitting and Showing (2CR)
- ANSC 1210 - Livestock Judging I (3CR)
- ANSC 1220 - Livestock Judging II (Advanced) (3CR)
- ANSC 2230 - Livestock Judging II/I (2CR)
- BIOL 2022 - Animal Biology (4CR)
- FDSC 2040 - Principles of Meat Animal Evaluation (3CR)
- FDSC 2100 - Principles of Meat Science (3CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

**These courses may be available online

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Agri-Business, A.S.

The agricultural business curriculum is offered for students who are planning a career in agri-business. This includes farming and ranching and jobs in agriculture related businesses such as farm equipment companies, fertilizer sales, feed companies, and commercial banks as well as other farm credit agencies. Numerous sales and management positions are available with the agricultural marketing industries, which form the connecting link between farmers and consumers.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- MATH 1400 - Pre-Calculus Algebra (4CR) (or higher)
- Biology Science with Lab (4CR)
- Physical Science with Lab (4CR)
or
- MATH 2350 - Business Calculus I (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR

- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- AGECE 1010 - Agriculture Economics I (3CR)
- AGECE 1020 - Agriculture Economics II (3CR)
- AGECE 2010 - Farm-Ranch Business Records (3CR)
- AGECE 2020 - Farm-Ranch Business Management (4CR)
- AGECE 2300 - Agricultural Marketing (3CR)
- AGRI 1010 - Introduction to Agricultural Technology (2CR)

Approved Electives (10 credits)

- AECL 1000 - Agroecology (4CR)
- AGRI 1020 - GPS and GIS in Agriculture (2CR)
- AGRI 2000 - Agriculture Chemicals I (3CR)
- AGRI 2010 - Agriculture Chemicals II (3CR)
- AGTK 1570 - Horseshoeing (2CR)
- AGTK 1580 - Introduction to Outdoor Recreation: Guide Outfitting (3CR)
- AGTK 1590 - Packing and Outfitting (2CR)
- ANSC 1010 - Livestock Production I (4CR)
- ANSC 1020 - Livestock Production II (3CR)
- ANSC 1030 - Equine Management (3CR)
- ANSC 1200 - Livestock Fitting and Showing (2CR)
- ANSC 1210 - Livestock Judging I (3CR)
- ANSC 1220 - Livestock Judging II (Advanced) (3CR)
- ANSC 2020 - Feeds and Feeding (4CR)

- ANSC 2110 - Beef Production (3CR)
- ANSC 2120 - Sheep Production (3CR)
- ANSC 2130 - Swine Production (3CR)
- ANSC 2230 - Livestock Judging II/I (2CR)
- BADM 1000 - Introduction to Business (3CR)
- BADM 1020 - Business Communications (3CR)
- BADM 1025 - Entrepreneurial Finance (3CR)
- BADM 2010 - Business Law I (3CR)
- BADM 2040 - E-commerce (3CR)
- BADM 2100 - Small Business Practices (2CR)
- BADM 2195 - Entrepreneurship (3CR)
- BADM 2245 - Real Estate Law (3CR)
- BANK 1500 - Principles of Banking (3CR)
- CO/M 2010 - Public Speaking (3CR)
- CO/M 1030 - Interpersonal Communication (3CR)
- FDSC 2100 - Principles of Meat Science (3CR)
- MATH 2350 - Business Calculus I (4CR)
- REWM 2000 - Principles of Range Management (3CR)
- SOIL 2010 - Introduction to Soil Science (4CR)
- STAT 2050 - Fundamentals of Statistics (4CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Agriculture Communications, A.S.

This degree is intended for students wishing to pursue careers in journalism, public relations, sales and marketing, and other professions in the agriculture industry. This program of study will also assist students wishing to transfer to a university to continue their study in agriculture.

Recommended Curriculum

General Education (Minimum 32 credits)

1. Exploration & Participation

General education coursework can be completed from within or outside of the major field of study.

- BIOL 1000 - Introduction to Biology I (4CR)
- MATH 1000 - Problem Solving (3CR)
- Physical Science (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives (minimum of 4CR)

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- AGECE 1010 - Agriculture Economics I (3CR)
- ANSC 1010 - Livestock Production I (4CR)
or
- AECL 1000 - Agroecology (4CR)
- CO/M 1000 - Introduction to Mass Media (3CR)
- CO/M 1040 - Introduction to Human Communication (3CR)
- CO/M 2010 - Public Speaking (3CR)
- CO/M 2100 - Media Writing I (3CR) 3
- CO/M 2520 - Intro to Social Media (3CR)

Approved Electives (minimum 10 credits)

- AGECE 1020 - Agriculture Economics II (3CR)
- AGECE 2300 - Agricultural Marketing (3CR)
- AGRI 1020 - GPS and GIS in Agriculture (2CR)
- AGRI 2000 - Agriculture Chemicals I (3CR)
- AGRI 2010 - Agriculture Chemicals II (3CR)
- AGRI 2475 - Independent Study in Agriculture
- ANSC 1030 - Equine Management (3CR)
- ANSC 1100 - Artificial Insemination (1CR)
- ANSC 1150 - Animal Diseases (2CR)
- ANSC 1200 - Livestock Fitting and Showing (2CR)
- ANSC 1210 - Livestock Judging I (3CR)
- ANSC 1220 - Livestock Judging II (Advanced) (3CR)
- ANSC 2020 - Feeds and Feeding (4CR)
- ANSC 2130 - Swine Production (3CR)
- ANSC 2230 - Livestock Judging II/I (2CR)
- CO/M 2090 - Introduction to Persuasion (3CR)
- CO/M 2300 - Intro to Public Relations (3CR)
- CO/M 2190 - Basic Video Production (3CR)
- CO/M 2340 - Editing and Production (3CR)
- CO/M 2355 - Introduction to Media Photography (3CR) 3
- FDSC 2100 - Principles of Meat Science (3CR)
- REWM 2000 - Principles of Range Management (3CR)
- SOIL 2010 - Introduction to Soil Science (4CR)

Note:

The above curriculum meets the requirements for the Associate of Science degree. Substitutions may be made to comply with the requirements of the institution to which a student may desire to transfer.

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Agriculture, A.S.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- BIOL 1000 - Introduction to Biology I (4CR)
or
- BIOL 1010 - General Biology I (4CR)
- BIOL 2022 - Animal Biology (4CR)
or
- BIOL 2023 - Plant and Fungal Biology (4CR)
- CHEM 1005 - Basic Chemistry I (3CR)
- CHEM 1006 - Basic Chemistry Laboratory I (1CR)
- Mathematics (3CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- AGRI 1010 - Introduction to Agricultural Technology (2CR)
- AGECE 1010 - Agriculture Economics I (3CR)
or

- AGECE 1020 - Agriculture Economics II (3CR)
- ANSC 1010 - Livestock Production I (4CR)
or
- AECL 1000 - Agroecology (4CR)
- AGECE 2020 - Farm-Ranch Business Management (4CR)
or
- ANSC 2020 - Feeds and Feeding (4CR)

Approved Electives: (19-20 credits)

- AGECE 2010 - Farm-Ranch Business Records (3CR) *
- AGECE 2300 - Agricultural Marketing (3CR) *
- AGRI 1020 - GPS and GIS in Agriculture (2CR)
- AGTK 1570 - Horseshoeing (2CR)
- AGTK 1580 - Introduction to Outdoor Recreation: Guide Outfitting (3CR) *
- AGTK 1590 - Packing and Outfitting (2CR)
- ANSC 1020 - Livestock Production II (3CR)
- ANSC 1030 - Equine Management (3CR)
- ANSC 1100 - Artificial Insemination (1CR)
- ANSC 1160 - Issues in Agriculture (3CR)
- ANSC 1200 - Livestock Fitting and Showing (2CR)
- ANSC 1210 - Livestock Judging I (3CR)
- ANSC 1220 - Livestock Judging II (Advanced) (3CR)
- ANSC 2020 - Feeds and Feeding (4CR)
- ANSC 2110 - Beef Production (3CR)
- ANSC 2120 - Sheep Production (3CR)
- ANSC 2130 - Swine Production (3CR)
- ANSC 2230 - Livestock Judging II/I (2CR)
- BIOL 2022 - Animal Biology (4CR)
- BIOL 2023 - Plant and Fungal Biology (4CR)
- CO/M 2010 - Public Speaking (3CR) *
- CO/M 1030 - Interpersonal Communication (3CR)
- CROP 2200 - Forage Crop Science (4CR)
- EDEX 2484 - Introduction to Special Education (3CR)
- EDFD 2020 - Foundations of Education (3CR)
- EDFD 2100 - Educational Psychology (3CR)
- EDUC 2100 - Public School Practicum (4CR)
- FDSC 2040 - Principles of Meat Animal Evaluation (3CR)
- FDSC 2100 - Principles of Meat Science (3CR)
- ITEC 2360 - Teaching with Technology (3CR)

- PSYC 1000 - General Psychology (3CR)
 - PSYC 2300 - Developmental Psychology (3CR)
 - REWM 2000 - Principles of Range Management (3CR)
 - SOC 1000 - Introduction to Sociology (3CR)
 - SOIL 2010 - Introduction to Soil Science (4CR)
- * Courses available online. All general education and jamor requirements are offered online.

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

The above curriculum meets the requirements for the Associate of Science degree. Substitutions may be made to comply with the requirements of the institution to which a student may desire to transfer.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Animal Science, A.S.

This degree program will meet the needs of students who plan on transferring to a university to continue their studies in animal science.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- BIOL 1010 - General Biology I (4CR)
- CHEM 1005 - Basic Chemistry I (3CR)
- CHEM 1006 - Basic Chemistry Laboratory I (1CR)
- MATH 1400 - Pre-Calculus Algebra (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- AGECE 1010 - Agriculture Economics I (3CR)
or
- AGECE 1020 - Agriculture Economics II (3CR)
- ANSC 1010 - Livestock Production I (4CR)
- ANSC 2020 - Feeds and Feeding (4CR)
- FDSC 2040 - Principles of Meat Animal Evaluation (3CR)

Must also select at least six hours from:

- AGECE 2010 - Farm-Ranch Business Records (3CR)
- AGECE 2020 - Farm-Ranch Business Management (4CR)
- ANSC 1020 - Livestock Production II (3CR)
- ANSC 1030 - Equine Management (3CR)
- ANSC 2110 - Beef Production (3CR)
- ANSC 2120 - Sheep Production (3CR)
- ANSC 2130 - Swine Production (3CR)
- REWM 2000 - Principles of Range Management (3CR)

Approved Electives (12 credits):

- AECL 1000 - Agroecology (4CR)

- AGEC 1020 - Agriculture Economics II (3CR)
- AGEC 2300 - Agricultural Marketing (3CR)
- AGRI 1010 - Introduction to Agricultural Technology (2CR)
- AGRI 1020 - GPS and GIS in Agriculture (2CR)
- AGRI 2475 - Independent Study in Agriculture
- AGTK 1570 - Horseshoeing (2CR)
- AGTK 1590 - Packing and Outfitting (2CR)
- ANSC 1100 - Artificial Insemination (1CR)
- ANSC 1160 - Issues in Agriculture (3CR)
- ANSC 1200 - Livestock Fitting and Showing (2CR)
- ANSC 1210 - Livestock Judging I (3CR)
- ANSC 1220 - Livestock Judging II (Advanced) (3CR)
- ANSC 2230 - Livestock Judging II/I (2CR)
- BIOL 2022 - Animal Biology (4CR)
- CO/M 2010 - Public Speaking (3CR)
- CO/M 1030 - Interpersonal Communication (3CR)
- CROP 2200 - Forage Crop Science (4CR)
- FDSC 2100 - Principles of Meat Science (3CR)
- SOIL 2010 - Introduction to Soil Science (4CR)
- ZOO 2040 - Human Anatomy (3CR)
- ZOO 2041 - Human Anatomy Lab (1CR)
- ZOO 2110 - Human Physiology (4CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Range Management, A.S.

This program is designed to introduce students to the science of range ecology and range management. Students will be exposed to all aspects necessary in range management and ecology such as soils, plant science, and livestock nutrition. This degree program will also meet the needs of students who plan on

transferring to a university to continue their studies in range management/range ecology.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- BIOL 1010 - General Biology I (4CR)
- CHEM 1005 - Basic Chemistry I (3CR)
- CHEM 1006 - Basic Chemistry Laboratory I (1CR)
- MATH 1400 - Pre-Calculus Algebra (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- AECL 1000 - Agroecology (4CR)
- AGEC 1010 - Agriculture Economics I (3CR)
- ANSC 1010 - Livestock Production I (4CR)
- BIOL 2023 - Plant and Fungal Biology (4CR)
- BIOL 2400 - General Ecology (3CR)
- CROP 2200 - Forage Crop Science (4CR)

- REWM 2000 - Principles of Range Management (3CR)
- SOIL 2010 - Introduction to Soil Science (4CR)
- Electives - (4CR)
Choose from the following:
- AGECE 2010 - Farm-Ranch Business Records (3CR)
- AGECE 2300 - Agricultural Marketing (3CR)
- AGRI 1010 - Introduction to Agricultural Technology (2CR)
- AGRI 1020 - GPS and GIS in Agriculture (2CR)
- AGRI 2000 - Agriculture Chemicals I (3CR)
- AGRI 2010 - Agriculture Chemicals II (3CR)
- AGRI 2475 - Independent Study in Agriculture
- ANSC 1020 - Livestock Production II (3CR)
- ANSC 1030 - Equine Management (3CR)
- ANSC 1100 - Artificial Insemination (1CR)
- ANSC 1150 - Animal Diseases (2CR)
- ANSC 1200 - Livestock Fitting and Showing (2CR)
- ANSC 1210 - Livestock Judging I (3CR)
- ANSC 1220 - Livestock Judging II (Advanced) (3CR)
- ANSC 2020 - Feeds and Feeding (4CR)
- ANSC 2110 - Beef Production (3CR)
- ANSC 2120 - Sheep Production (3CR)
- ANSC 2490 - Topics: (Subtitle)
- BIOL 2410 - Field Ecology I (2CR)
- CO/M 2010 - Public Speaking (3CR)
- CO/M 1030 - Interpersonal Communication (3CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Anthropology

Anthropology, A.A.

Anthropology is a holistic discipline that is concerned with the physical nature of humans and their relationship with the environment, as well as the social and cultural aspects of behavior. Students will find an anthropology background useful in any occupation in which knowledge and appreciation of human diversity is important, such as education, government, social service, personnel, marketing/advertising, international business, tourism, museum work, health professions, cultural resource management, city planning, and environmental consulting. The curriculum at Casper College offers a general background in anthropology for students who are pursuing a liberal education and provides basic preparation for students who wish to become professional anthropologists.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- BIOL 1010 - General Biology I (4CR)
- BIOL 2022 - Animal Biology (4CR)
- Mathematics (3CR) - must be 1000 level or higher

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- HIST 1110 - Western Civilization I (3CR)
- Human Behavior (3CR)
- U.S. & Wyoming Constitutions (3CR)
- Cultural Environment (3CR)
- HIST 1120 - Western Civilization II (3CR)

5. Physical Education (1CR)

Major Requirements

- ANTH 1100 - Introduction to Physical Anthropology (3CR)
- ANTH 1200 - Introduction to Cultural Anthropology (3CR)
- ANTH 1300 - Introduction to Archaeology (3CR)
- RELI 1000 - Introduction to Religion (3CR)
or
- ANTH 2210 - North American Indian (3CR)
- SOC 1000 - Introduction to Sociology (3CR)
- STAT 2050 - Fundamentals of Statistics (4CR)
or
- STAT 2070 - Introductory Statistics for Social Science (4CR)
- World Language (8CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Auto Body Repair Technology

Working with industry professionals, we offer training necessary to achieve a one-year certificate or a two-year Associate of Applied Science in Auto Body Repair Technology. As collision repair technology advances, we are committed to offer in-depth coverage of both conventional and innovative collision repair technologies and processes. We offer knowledge-based training, performance-based testing and emphasize hands-on exercises.

The major objectives of the auto body repair technology program at Casper College are:

1. To provide comprehensive training in auto body repair process and theory with emphasis on skills and standards necessary for obtaining employment upon graduation.
2. To structure courses which will provide a thorough background necessary for those

students continuing their education in related fields.

Note: To graduate with a certificate or degree, students must earn a "C" or better in all major requirements.

Auto Body Repair Technology, A.A.S.

Recommended Curriculum

General Education (Minimum 17 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

(One course minimum)

- Laboratory Science or
- Mathematics

2. Communication

(One course minimum)

- Written or Oral communication
- CO/M 1505 - Communication for Professional Success (highly recommended)

3. Relationship with the World

(One course minimum)

- Human Behavior
- U.S. and Wyoming Constitutions (3CR) Required
- Cultural Environment

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education - (1CR)

Major Requirements

- AUBR 1540 - Auto Body Welding (3CR)
- AUBR 1550 - Auto Body Repair I (5CR)
- AUBR 1560 - Auto Body Repair II (5CR)
- AUBR 1710 - Frame and Chassis I (2.5CR)
- AUBR 1810 - Collision Damage Repair I (4CR)
- AUBR 1820 - Collision Damage Repair II (4CR)
- AUBR 1910 - Auto Paint I (5CR)
- AUBR 1920 - Auto Paint II (5CR)

- AUBR 1975 - Independent Study - Auto Body Repair (3 credits minimum)
or
- AUBR 1980 - Cooperative Work Experience (3 credits minimum)
- WELD 1820 - GMAW and GTAW Welding (2.5CR)
- WELD 1910 - Specialized Welding and Joining (3CR)
- WELD 1700 - General Welding

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Auto Body Repair Technology Certificate

Certificate Requirements

Fall Semester

- AUBR 1540 - Auto Body Welding (3CR)
- AUBR 1550 - Auto Body Repair I (5CR)
- AUBR 1810 - Collision Damage Repair I (4CR)
- AUBR 1910 - Auto Paint I (5CR)
- WELD 1820 - GMAW and GTAW Welding (2.5CR)

Spring Semester

- AUBR 1560 - Auto Body Repair II (5CR)
- AUBR 1710 - Frame and Chassis I (2.5CR)
- AUBR 1820 - Collision Damage Repair II (4CR)
- AUBR 1920 - Auto Paint II (5CR)
- WELD 1910 - Specialized Welding and Joining (3CR)

Note:

The normal length of this program is nine months.

Graduation Requirements

For specific graduation requirements see "Degree Requirements".

Automotive Technology

The automotive technology program provides quality training relevant to current trends in automotive repair technology. The program enhances a student's employment potential and opportunities; provides knowledge and skills relevant to current trends in automotive repair; provides a solid foundation for continuing education in related fields; and provides a flexible, career-oriented path of training and education.

Housed in the spacious shop facility of the Neil and Doris McMurry Career Studies Center, the automotive technology program is one of 30 career programs at Casper College designed to prepare students for the work force. Students can earn a one-year certificate or a two-year associate of applied science degree, which includes general education coursework with automotive, machine tool and welding electives.

Note: To graduate with a certificate or degree, students must earn a "C" or better in all major requirements.

Automotive Technology, A.A.S.

Recommended Curriculum

General Education (Minimum 17 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

(One course minimum)

- Laboratory Science
or
- Mathematics

2. Communication

(One course minimum)

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR

- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior
- U.S. and Wyoming constitutions (3CR) required
- Cultural Environment

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

Fall Semester

- AUTO 1510 - Engine System Fundamentals (6CR)
- AUTO 1690 - Manual Power Train Fundamentals (4CR)
- AUTO 1765 - Automotive Electrical (5CR)
- AUTO 2555 - Suspension and Steering (4CR)
- AUTO 2980 - Cooperative Work Experience (Automotive) (2CR) required

Spring Semester

- AUTO 1740 - Brake Systems (4CR)
- AUTO 1760 - Heating and Air Conditioning (4CR)
or
- AUTO 2500 - Advanced Engine Rebuilding (4CR)
- AUTO 2565 - Advanced Automotive Electrical (5CR)
- AUTO 2610 - Computerized Fuel Systems (5CR)
- AUTO 2980 - Cooperative Work Experience (Automotive) (2CR) required

Approved Electives (15 credits)

Approved electives may be any other AUBR, AUTO, DESL, ELTR, WELD, and/or MCHT courses.

Note:

The normal length of this program is two academic years at 16-18 credit hours per semester.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Automotive Technology Certificate

Certificate Requirements

Fall Semester

Students beginning the program in the fall semester will register for the fundamental courses listed below.

- AUTO 1510 - Engine System Fundamentals (6CR)
- AUTO 1690 - Manual Power Train Fundamentals (4CR)
- AUTO 1765 - Automotive Electrical (5CR)
- AUTO 2555 - Suspension and Steering (4CR)
- AUTO 2980 - Cooperative Work Experience (Automotive) (2CR) required

Spring Semester

Students will select from the following courses in the spring semester.

- AUTO 1740 - Brake Systems (4CR)
- AUTO 1760 - Heating and Air Conditioning (4CR)
or
- AUTO 2500 - Advanced Engine Rebuilding (4CR)
- AUTO 2565 - Advanced Automotive Electrical (5CR)
- AUTO 2610 - Computerized Fuel Systems (5CR)
- AUTO 2980 - Cooperative Work Experience (Automotive) (2CR) required

Note:

The normal length of this program is nine months.

Graduation Requirements

For specific graduation requirements see "Degree Requirements".

Aviation

The program is a unique partnership between Casper College and air flight schools. The program allows students to complete academic coursework and flight training toward an associate degree in aviation and a commercial pilot's license. The primary goal is to provide a curriculum that will lead to employment in commercial aviation or airway science.

Academic coursework takes place at Casper College. Students are allowed to schedule flight training around these courses. Students make their own arrangements for the actual flight training on a contractual basis with any flight school. Flight costs are not covered by tuition costs.

Aviation, A.A.S.

Recommended Curriculum

General Education (Minimum 17 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

(One course minimum)

- Science
or
- Mathematics

2. Communication

(One course minimum)

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

(One course minimum)

- Human Behavior
- U.S. and Wyoming constitutions (3CR)
required
- Cultural Environment

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- ATSC 2000 - Introduction to Meteorology (4CR)
- AVTN 2510 - Private Pilot Ground School (3CR)
- AVTN 2520 - Private Pilot Flight School (3CR) *
- AVTN 2600 - Instrument Pilot Ground School (3CR)
- AVTN 2620 - Instrument Pilot Flight School (3CR) **
- AVTN 2705 - Commercial Pilot Ground School (3CR)
- AVTN 2720 - Commercial Pilot Flight I (3CR) ***
- AVTN 2730 - Commercial Pilot Flight II (3CR) ***
- BADM 1030 - Personal Finance (3CR)
- CO/M 2010 - Public Speaking (3CR)
or
- CO/M 1030 - Interpersonal Communication (3CR)
- ELTR 1515 - Basic AC/DC Electronics (2CR)
- GEOG 1080 - Introduction to GPS and Maps (3CR)
- MATH 1000 - Problem Solving (3CR)
or
- MATH 1400 - Pre-Calculus Algebra (4CR)
- MGT 2100 - Principles of Management (3CR)
- PHYS 1050 - Concepts of Physics (4CR)
- Electives - (8-9CR)

Note:

*The estimated flight cost for AVTN 2520 is between \$8,500 to \$12,000.

**The estimated flight cost for AVTN 2620 is between \$14,000 and \$17,000.

***The estimated flight cost for AVTN 2720 and AVTN 2730 total between \$23,000 and \$26,000.

All AVTN flight schools must either be taken concurrently with corresponding ground schools or have already been taken.

The normal length of this program is two academic years at 15 credit hours per semester.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Biology

Biology, A.S.

Students who are planning to enroll in biology courses should consider the following: A maximum of four semester hours credit may be applied toward graduation by completing both BIOL and BIOL 1010. This degree program is intended for students who plan to continue their education beyond the associate degree. It provides a curriculum which is broad based in the biological sciences and helps students meet the requirements for a variety of other degree programs. It is the recommended major for students planning to pursue a four year biology degree on the Casper College campus via the UW-Casper program. It is also advised for students who desire to pursue baccalaureate and/or graduate education in the biological sciences.

Recommended Curriculum

General Education (Minimum 32 hours)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Included in the major requirements below

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- BIOL 1010 - General Biology I (4CR)
- CHEM 1025 - Chemistry I (3CR)
- CHEM 1028 - Chemistry Laboratory I (1CR)
- CHEM 2300 - Introductory Organic Chemistry (4CR)
- MATH 2200 - Calculus I (4CR)
- PHYS 1110 - General Physics I (4CR)
- PHYS 1120 - General Physics II (4CR)

Students must choose two of the following three (8 cr):

- BIOL 2022 - Animal Biology (4CR)
- BIOL 2023 - Plant and Fungal Biology (4CR)
- MOLB 2210 - General Microbiology (4CR)

Recommended Electives (12 CR)

Electives may be chosen at the direction of the academic advisor.

Students who wish to study ecology should major in biology.

- CHEM 1035 - Chemistry II (3CR)
- CHEM 1038 - Chemistry Laboratory II (1CR)
- BIOL 2022 - Animal Biology (4CR)
- BIOL 2023 - Plant and Fungal Biology (4CR)
- MOLB 2210 - General Microbiology (4CR)

- COSC 1010 - Introduction to Computer Science (4CR)
- STAT 2050 - Fundamentals of Statistics (4CR)

Note:

The normal length of this program is two academic years at 14-16 credit hours per semester.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Wildlife and Fisheries Biology and Management, A.S.

The curriculum is designed to provide students with an array of experiences in the biological sciences, including exposure to plant and vertebrate biology in a variety of field settings, and access to a departmentally operated greenhouse and vertebrate museum.

This is a transfer degree.

Recommended Curriculum

General Education (Minimum 32 hours)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- BIOL 1000 - Introduction to Biology I (4CR)
or
- BIOL 1010 - General Biology I (4CR)
- MATH 1400 or higher (7CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)

OR

- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- BIOL 2022 - Animal Biology (4CR)
or
- BIOL 2023 - Plant and Fungal Biology (4CR)
- BIOL 2400 - General Ecology (3CR)
- BIOL 2410 - Field Ecology I (2CR)
- CHEM 1025 - Chemistry I (3CR)
and
- CHEM 1028 - Chemistry Laboratory I (1CR)
- CHEM 1035 - Chemistry II (3CR)
and
- CHEM 1038 - Chemistry Laboratory II (1CR)
- ENR 2450 - Principles of Fish and Wildlife Management (3CR)
or
- ZOO 2450 - Principles of Fish and Wildlife Management (3CR)
- Electives - (16CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Business

The Department of Business is dedicated to both academic and vocational education. Therefore, the department offers associate degrees and certificate programs in business, and credit and noncredit continuing education in business.

The Department of Business is committed to providing programs parallel to the first two years of those offered in four year business schools and promotes the opportunity for individuals to achieve degrees beyond the associate degree on campus. In this pursuit, the department offers the associate of business degree.

The Department of Business offers associate of applied science degrees and certificate programs to develop vocational proficiency to qualify individuals for responsible and productive positions in business and government and to retrain individuals for current and new positions.

The Department of Business recognizes the need for a community environment in which there exists an opportunity for educational growth. Therefore, the department is dedicated to providing continuing business education to enhance skills and knowledge for members of the community.

The Department of Business recognizes a changing business environment and changing technology. Therefore, the department is committed to innovation in course design, instructional methods, and integration of appropriate equipment in the curricula.

Entrepreneurship, A.A.S.

The Associate of Applied Science in Entrepreneurship is designed to prepare the student for success in starting their own business or playing a critical role in an established business. Beyond assisting students in starting their own business, the entrepreneurship degree will prepare students for entry level positions as an analyst, sales representative, market researcher, personal financial advisor, etc.

This is a nontransfer degree.

Recommended Curriculum

General Education (Minimum 17 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- MATH 1400 - Pre-Calculus Algebra (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
- BADM 1020 - Business Communications (3CR)

3. Relationship with the World

(One course minimum)

- Cultural Environment
- ECON 1010 - Principles of Macroeconomics (3CR)
- POLS 1000 - American and Wyoming Government (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- ACCT 2430 - Income Tax (3CR)
or
- ACCT 2460 - Payroll Accounting (3CR)
- BADM 1025 - Entrepreneurial Finance (3CR)
- BADM 2010 - Business Law I (3CR)
- BADM 2030 - Business Ethics (3CR)
- BADM 2195 - Entrepreneurship (3CR)
- BADM 2340 - Business Organizations and Government Regulations (3CR)
- BUSN 2000 - International Business (3CR)
- COSC 1200 - Computer Information Systems (3CR)
- ECON 1020 - Principles of Microeconomics (3CR)
- IMGT 2400 - Introduction to Information Management (3CR)
- MGT 2100 - Principles of Management (3CR)
- MGT 2150 - Leadership (3CR)
- MKT 2100 - Principles of Marketing (3CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Leadership and Organizational Management, A.A.S.

The Associate of Applied Science in Leadership teaches key organizational leadership elements such as ethics, motivation, creativity, vision, strategic planning, customer service, and organizational development. The leadership degree will not only provide effective leadership skills for students wishing to lead an organization, but will also assist students in working with and understanding the leadership styles of other organizational leaders.

This is a nontransfer degree.

Recommended Curriculum General Education (Minimum 17 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- BADM 1005 - Business Mathematics I (3CR)
- MATH 1400 - Pre-Calculus Algebra (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
- BADM 1020 - Business Communications (3CR)

3. Relationship with the World

(One course minimum)

- SOC 1000 - Introduction to Sociology (3CR)
- ECON 1010 - Principles of Macroeconomics (3CR)
- POLS 1000 - American and Wyoming Government (3CR)
- Cultural Environment

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- BADM 1030 - Personal Finance (3CR)
or
- ECON 1020 - Principles of Microeconomics (3CR)
- BADM 2010 - Business Law I (3CR)
- BADM 2030 - Business Ethics (3CR)
- BADM 2340 - Business Organizations and Government Regulations (3CR)
or
- BUSN 2000 - International Business (3CR)
- COSC 1200 - Computer Information Systems (3CR)
- IMGT 2400 - Introduction to Information Management (3CR)
- MGT 2050 - Leading Organizational Change (3CR)
- MGT 2100 - Principles of Management (3CR)
- MGT 2110 - Organizational Behavior (3CR)
- MGT 2150 - Leadership (3CR)
- MKT 2100 - Principles of Marketing (3CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Management, A.A.S.

Students who major in management are trained in a wide variety of skills ranging from management and accounting to marketing and spreadsheets. This training gives students excellent opportunities to pursue entry level management jobs in business.

This is a nontransfer degree.

Recommended Curriculum General Education (Minimum 17 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- BADM 1005 - Business Mathematics I (3CR)
or
- MATH 1400 - Pre-Calculus Algebra (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
- BADM 1020 - Business Communications (3CR)

3. Relationship with the World

(One course minimum)

- Cultural Environment
- ECON 1010 - Principles of Macroeconomics (3CR)
- POLS 1000 - American and Wyoming Government (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- BADM 1030 - Personal Finance (3CR)
- BADM 2010 - Business Law I (3CR)
- BADM 2030 - Business Ethics (3CR)
- BADM 2340 - Business Organizations and Government Regulations (3CR)
- COSC 1200 - Computer Information Systems (3CR)
- ECON 1020 - Principles of Microeconomics (3CR)
- IMGT 2400 - Introduction to Information Management (3CR)
- MGT 1200 - Human Resources Management (3CR)
- MGT 2100 - Principles of Management (3CR)
- MGT 2110 - Organizational Behavior (3CR)
- MGT 2150 - Leadership (3CR)
- MKT 2100 - Principles of Marketing (3CR)
- Advisor Approved Elective from BADM, HOSP, MKT, MGT, ACCT or ECON (3CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Business Administration, A.B.

The business administration program is designed to acquaint the student with the role of business in society while keeping individual courses in focus with business methods, practices, and techniques. Students may build upon this background to pursue a four-year degree in a field of specialization such as advertising, finance, insurance, labor relations, management, marketing, or statistics.

This is a transfer degree.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Laboratory Science (4CR)
- MATH 2350 - Business Calculus I (4CR)
- MATH 2355 - Business Calculus II (4CR)
- STAT 2050 - Fundamentals of Statistics (4CR)
or
- STAT 2070 - Introductory Statistics for Social Science (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR

- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- ECON 1010 - Principles of Macroeconomics (3CR)
- POLS 1000 - American and Wyoming Government (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- BADM 1030 - Personal Finance (3CR)
or
- BADM 2030 - Business Ethics (3CR)
- BADM 2010 - Business Law I (3CR)
- ECON 1020 - Principles of Microeconomics (3CR)
- IMGT 2400 - Introduction to Information Management (3CR)
- MGT 2100 - Principles of Management (3CR)
- MKT 2100 - Principles of Marketing (3CR)
- Advisor Approved Elective from BADM, HOSP, MKT, MGT, ACCT, ECON, COSC (2CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Chemistry

Because chemistry deals with the composition of substances and their interactions to produce new substances, students in a wide variety of majors benefit from a knowledge of its fundamentals.

Students who have had no high school chemistry and those with majors like agriculture, forestry, and occupational therapy begin with CHEM 1005 and perhaps CHEM 1006 (concurrent enrollment in CHEM 1005 required). Chemistry, engineering, pre-professional (medicine, veterinary, pharmacy, and medical technology), biology, physics, and geology majors begin with CHEM 1025 and CHEM 1028 and continue with selected 2000 level courses.

1. A maximum of four semester credits may be applied toward graduation by completing any combination of CHEM 1005, CHEM 1006, CHEM 1025, and CHEM 1028.
2. Students who are taking CHEM 1005 in order to prepare for CHEM 1025 and CHEM 1035 need not take CHEM 1006.
3. Students who expect to take one or more chemistry laboratory courses must provide eye protection in the form of 1) prescription eyeglasses or 2) laboratory goggles which may be purchased at the bookstore. Please note that we strongly urge that contact lenses not be worn in the laboratory even under laboratory goggles. Goggles will not prevent irritating vapors from getting under contact lenses to cause much discomfort and pain. Contact lens wearers are urged to be sure to have a pair of prescription glasses to wear in the laboratory when they begin their chemistry studies.

In order to obtain a degree in chemistry students must achieve a 2.0 GPA in those courses taken in chemistry.

Chemistry, A.S.

This transfer program prepares students for a four-year degree in chemistry. After the bachelor's degree, graduates may be employed in a variety of industries, including food and beverages, manufacturing, pharmaceuticals, petroleum and energy, commercial and fine chemicals, lab analysis, environmental monitoring and testing, and many others.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Included in the major requirements below

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- CHEM 1025 - Chemistry I (3CR)
- CHEM 1028 - Chemistry Laboratory I (1CR)
- CHEM 1035 - Chemistry II (3CR)
- CHEM 1038 - Chemistry Laboratory II (1CR)
- CHEM 2230 - Quantitative Analysis (4CR)
- CHEM 2320 - Organic Chemistry I (3CR)
- CHEM 2325 - Organic Chemistry Laboratory I (1CR)
- CHEM 2340 - Organic Chemistry II (3CR)
- CHEM 2345 - Organic Chemistry Laboratory II (1CR)
- MATH 2200 - Calculus I (4CR)
- PHYS 1310 - College Physics I (4CR)
- Electives - (13CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

To obtain a degree in chemistry, a student must obtain a grade of "C" or better in all major requirements.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Communication

The communication department offers an array of broad and specific courses for students who plan careers related to communication and mass media. Courses encompass writing, speaking and analyzing messages from all contexts: interpersonal, small group, public, and mass.

The communication major includes nine credits of departmental core courses, and nine to 15 credits of courses in one of three emphasis areas: human communication, journalism, and multimedia production.

Intended to be primarily a transfer degree, this major is for students interested in mass media, customer relations, human resource development, teaching, sales, public relations, advertising, and business. The professional and students who wish to enter other careers which demand effective human interaction should benefit.

Communication - Public Relations, A.A.

The Associate of Arts degree in Communication (emphasis in public relations) prepares individuals to function in a wide range of public and private sector positions requiring the skills of persuasive communication. Instruction will include communication theory, public relations, persuasion techniques, message/image design, marketing strategy, media and professional writing, public speaking and digital communications. Graduates will be ready to transfer to a four-year university or for entry-level employment in public relations, such as press relations, community or consumer relations, market research, in-house publications, political campaigns, fund raising and volunteer recruitment. Students will develop a portfolio that will exhibit their ability to write press release, news stories and feature articles; to plan and coordinate events; to develop communication and public relations campaigns; and to produce social media campaigns, advertisements, videos and promotional publications.

Recommended Curriculum

General Education (Minimum 32 Credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Lab Science (4CR)
- MATH 1000 - Problem Solving (3CR)
or
- MATH 1400 - Pre-Calculus Algebra (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives (6CR)

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- CO/M 1000 - Introduction to Mass Media (3CR)
- CO/M 1030 - Interpersonal Communication (3CR)
- CO/M 1040 - Introduction to Human Communication (3CR)
- CO/M 2010 - Public Speaking (3CR)
- CO/M 2090 - Introduction to Persuasion (3CR)
- CO/M 2100 - Media Writing I (3CR) 3
- CO/M 2300 - Intro to Public Relations (3CR)
- CO/M 2390 - Independent Publications (1CR)

- CO/M 2520 - Intro to Social Media (3CR)
- MKT 2100 - Principles of Marketing (3CR)
- Major Electives (5-6CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Communication -Human Communication, A.A.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Laboratory Science (4CR)
- Mathematics (3CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- CO/M 1000 - Introduction to Mass Media (3CR)
- CO/M 2010 - Public Speaking (3CR)
- CO/M 1030 - Interpersonal Communication (3CR)
- CO/M 1040 - Introduction to Human Communication (3CR)
- Communication Electives (6CR)
- General Electives (14CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Communication — Journalism, A.A.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Laboratory Science (4CR)
- Mathematics (3CR) - 1000 level or higher

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR

- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- ART 2122 - Digital Design I (3CR)
- CO/M 1000 - Introduction to Mass Media (3CR)
- CO/M 2010 - Public Speaking (3CR)
or
- CO/M 1030 - Interpersonal Communication (3CR)
- CO/M 1040 - Introduction to Human Communication (3CR)
- CO/M 2100 - Media Writing I (3CR) 3
- CO/M 2340 - Editing and Production (3CR)
- CO/M 2355 - Introduction to Media Photography (3CR) 3
- CO/M 2390 - Independent Publications (1CR)
- Electives - (8CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Communication — Multimedia, A.A.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Laboratory Science (4CR)
- Mathematics (3CR) - 1000 level or higher

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- ART 2122 - Digital Design I (3CR)
- CO/M 1000 - Introduction to Mass Media (3CR)
- CO/M 2010 - Public Speaking (3CR)
or
- CO/M 1030 - Interpersonal Communication (3CR)
- CO/M 1040 - Introduction to Human Communication (3CR)
- CO/M 2100 - Media Writing I (3CR) 3
- CO/M 2190 - Basic Video Production (3CR)
- CO/M 2200 - Broadcast Production (3CR)

- CO/M 2390 - Independent Publications (1CR)
- MUSC 2410 - Sound Reinforcement I (2CR)
- Electives - (5CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Construction Technology

Construction technology students have several options available to them so that a program can be designed to meet individual needs. A transfer program for those students interested in a baccalaureate degree in construction management from four year schools accredited by the American Council of Construction Education is available.

Construction Technology, A.A.S.

The graduate of the Associates of Applied Science degree will have gained a solid foundation in the construction industry. The curriculum requires both training in the technical aspects of many of the components of construction, blended with some engineering communication tools, and an understanding of the tools used by management to foster efficiency in the industry. The graduate of this program will be well equipped to enter the industry at a level above entry craft or assume a position in entry-level management.

Recommended Curriculum

General Education (Minimum 17 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

(One course minimum)

- Science
- Mathematics- 1000 level or higher

2. Communication

(One course minimum)

- Written or Oral Communication

3. Relationship with the World

(One course minimum)

- Human Behavior
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- CNTK 1560 - Construction Safety (3CR)
- CNTK 1700 - Introduction to Construction (4CR)
- CNTK 1750 - Blueprint Reading (2CR)
- CNTK 1860 - Woodworking Fundamentals I (4CR)
- CNTK 1870 - Building Materials and Systems (3CR)
- CNTK 1905 - Carpentry (4CR)
- CNTK 1975 - Materials Handling and Construction Equipment (3CR)
- CNTK 2510 - Construction Estimating (3CR)
- CNTK 2520 - Architectural and Construction Planning (3CR)
- CNTK 2525 - Construction Project Management (3CR)
- ENTK 1010 - Elements of Surveying (3CR)
- ENTK 1510 - Drafting I (4CR)
- ENTK 1710 - Architectural Drafting I (4CR)
- ENTK 1750 - Commercial Architectural Drafting (4CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Construction Management, A.S.

The construction management curriculum is designed to provide the student with a technical base of industrial management ability and skills for productive employment. Whether in the area of building, engineering, or industrial construction, the middle-management-oriented construction technologist will be involved with a people-oriented industry and must be able to communicate with and lead people through decision making. In addition to these managerial skills, a thorough background in the many technical aspects of the construction process are required. Following graduation, employment possibilities will include contractor organizations, engineering and architectural firms, material and sales firms, agricultural businesses, etc.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- CHEM 1005 - Basic Chemistry I (3CR)
- CHEM 1006 - Basic Chemistry Laboratory I (1CR)
- MATH 1400 - Pre-Calculus Algebra (4CR)
- MATH 1405 - Pre-Calculus Trigonometry (3CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR

- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- PSYC 1000 - General Psychology (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- BADM 2010 - Business Law I (3CR)
- CNTK 1560 - Construction Safety (3CR)
- CNTK 1870 - Building Materials and Systems (3CR)
- CNTK 1975 - Materials Handling and Construction Equipment (3CR)
- CNTK 2510 - Construction Estimating (3CR)
- CNTK 2520 - Architectural and Construction Planning (3CR)
- CNTK 2525 - Construction Project Management (3CR)
- ENTK 1510 - Drafting I (4CR)
- MGT 2100 - Principles of Management (3CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Students who plan to transfer to a four-year school in construction engineering, construction technology, or industrial management should contact the school of their choice for transferability and credit requirements. Advisement will follow the guidelines of the school of choice. Check with the construction technology instructor or the university partnerships coordinator about articulation agreements that may exist.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Technical Education, A.S.

Education Technology students have several options available to them so that a program can be designed to meet individual needs. A transfer articulation for a **bachelor's degree** for those students interested is in place.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- MATH 1000 - Problem Solving (3CR)
- PHYS 1110 - General Physics I (4CR)
or
- PHYS 1050 - Concepts of Physics (4CR)
- STAT 2050 - Fundamentals of Statistics (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- POLS 1000 - American and Wyoming Government (3CR)
- PSYC 1000 - General Psychology (3CR)
- PSYC 2300 - Developmental Psychology (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.
(CO/M 2010 and STAT 2050 recommended)

5. Physical Education (1CR)

Major Requirements

- CNTK 1860 - Woodworking Fundamentals I (4CR)
- EDFD 2020 - Foundations of Education (3CR)
- EDFD 2100 - Educational Psychology (3CR)
- EDUC 2100 - Public School Practicum (4CR)
- EDEX 2484 - Introduction to Special Education (3CR)
- ELTR 1515 - Basic AC/DC Electronics (2CR)
- ENTK 1510 - Drafting I (4CR)
- ENTK 2510 - CAD-3D Modeling (4CR)
- ENTK 2525 - Design and Manufacturing Methods I (4CR)
- ITEC 2360 - Teaching with Technology (3CR)
- WELD 1700 - General Welding (2.5CR)
- WELD 1820 - GMAW and GTAW Welding (2.5CR)

Note:

Students who plan to transfer to a four-year school in industrial education should make contact with that institution for information about transferability and credits. Student advisement will follow the guidelines of the school of choice.

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Construction Technology Certificate

A number of students choose to take only selected courses to meet their immediate needs. Courses taken can later be applied toward an associate degree program. This option often takes the form of a one-year program of work in construction and drafting. Thirty-three credits must be completed from the list below.

Certificate Requirements

- CNTK 1560 - Construction Safety (3CR)
- CNTK 1700 - Introduction to Construction (4CR)
- CNTK 1750 - Blueprint Reading (2CR)
- CNTK 1860 - Woodworking Fundamentals I (4CR)
- CNTK 1870 - Building Materials and Systems (3CR)
- CNTK 1905 - Carpentry (4CR)
- CNTK 1975 - Materials Handling and Construction Equipment (3CR)
- CNTK 2510 - Construction Estimating (3CR)
- CNTK 2520 - Architectural and Construction Planning (3CR)
- ENTK 1510 - Drafting I (4CR)
- ENTK 1710 - Architectural Drafting I (4CR)

Note:

The normal length of this program is nine months.

Graduation Requirements

For specific graduation requirements see "Degree Requirements".

Criminal Justice

NOTE: Criminal justice employment will almost always require the applicant to complete and pass a thorough background investigation. Students majoring in criminal justice should be aware that criminal history, substance abuse, mental illness, and significant financial problems may render them unemployable in a criminal justice agency. Likewise, students should make every effort to safeguard their reputations while attending college. Many criminal justice agencies also have physical fitness requirements that candidates for certain positions must be able to pass. In addition, some agencies have maximum age standards for entry level positions.

Criminal Justice, A.A.S.

The A.A.S. degree in criminal justice offers a curriculum which provides a focused education, preparing the student to pursue a career after graduation from Casper College. In so doing, it also attempts to develop the qualities that are desirable for employment in the criminal justice fields: communication capabilities, intelligence, tolerance, self-discipline, and respect for constitutional values. It also develops professional qualities within those students currently employed with a criminal justice agency, and it provides a general knowledge about the successes and failures of America's criminal justice system. The

A.A.S degree is not designed for those students who anticipate pursuing a baccalaureate degree after graduation from Casper College. The A.A.S. degree requires fewer general education classes in the areas of math, English and science than does the A.A. degree.

Recommended Curriculum

General Education (Minimum 17 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

(One course minimum)

- Science
- Mathematics- 1000 level or higher

2. Communication

(One course minimum)

- Written or Oral Communication

3. Relationship with the World

Human Behavior

- U.S. and Wyoming constitutions (3CR)
- PSYC 1000 - General Psychology (3CR)
- CRMJ 2120 - Introduction

Cultural Environment

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements (39-41 Credits)

- CRMJ 2130 - Criminal Investigation I (3CR)
- CRMJ 2210 - Criminal Law I (3CR)
- CRMJ 2250 - Police Administration (3CR)
- CRMJ 2350 - Introduction to Corrections (3CR)
- CRMJ 2280 - Criminal Procedure (3CR)
- CRMJ 2430 - The Community and the Police (3CR)
- CRMJ 2895 - Capstone Directed Studies in Criminal Justice (1CR)
- FIRE 1670 - Basic Emergency Care/First Responder (3CR)

- SOC 1000 - Introduction to Sociology (3CR)
- SOC 2400 - Criminology (3CR)
- ADDN 1050 - Crime and Drugs (3CR)
- CRMJ 1705 - Firearms (3CR)
- CRMJ 2970 - Criminal Justice Internship (1-3CR) (MAX 3)
- CRMJ 2570 - Criminalistics (3CR)
- CRMJ 2005 - Introduction to Automated Fingerprint Identification Systems (1CR)

Electives (As needed to achieve 60 total credits)

Electives will be selected in consultation with the academic advisor from courses in the departments of criminal justice (CRMJ), psychology (PSYC), sociology (SOC), computer applications (CMAP) or addictionology (ADDN). In addition, any of the following courses may be selected as an elective:

- CSEC 1530 - Computer Forensics (3CR)
- FIRE 1550 - Causes and Investigation (3CR)
- GEOG 1080 - Introduction to GPS and Maps (3CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Criminal Justice, A.A.

The A.A. degree in criminal justice offers a curriculum which provides a liberal education, preparing the student to pursue a baccalaureate degree after graduation from Casper College. In so doing, it also attempts to develop the qualities that are desirable for employment in the criminal justice fields: communication capabilities, intelligence, tolerance, self-discipline, and respect for constitutional values. It also develops professional qualities within those students currently employed with a criminal justice agency, and it provides a general knowledge about the successes and failures of America's criminal justice system.

Recommended Curriculum

General Education (Minimum 32 Credits)

1. Exploration and Participation

- Laboratory Science (4CR)
- Mathematics (3CR or 4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- SOC 1000 - Introduction to Sociology (3CR)
- Cultural Environment (3CR or 4CR)
- POLS 1000 - American and Wyoming Government (3CR)
- PSYC 1000 - General Psychology (3CR)
- CRMJ 2120 - Introduction to Criminal Justice (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- CRMJ 2130 - Criminal Investigation I (3CR)
- CRMJ 2210 - Criminal Law I (3CR)
- CRMJ 2230 - Law of Evidence (3CR)
- CRMJ 2250 - Police Administration (3CR)
- CRMJ 2280 - Criminal Procedure (3CR)
- CRMJ 2350 - Introduction to Corrections (3CR)
- CRMJ 2430 - The Community and the Police (3CR)
- CRMJ 2895 - Capstone Directed Studies in Criminal Justice (1CR)
- SOC 1100 - Social Problems (3CR)
- SOC 2400 - Criminology (3CR)

Electives (If needed to achieve 60 total credits)

Major elective will be selected in consultation with the academic advisor from courses in the departments of criminal justice (CRMJ), psychology (PSYC), sociology (SOC), political science (POLS), or addictionology (ADDN).

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Forensic Science, A.S.

The A.S. degree in forensic science offers a curriculum which provides an eclectic education, preparing the student to pursue a baccalaureate degree after graduation from Casper College. In so doing, it attempts to develop skill areas that are desirable for employment or further study in forensic science: math, chemistry, biology and criminal justice. Forensic scientists typically have advanced degrees and work in laboratories. Some forensic scientists with B.S. degrees will find employment in major metropolitan areas as a crime scene technician.

Recommended Curriculum

General Education (Minimum 32 hours)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Included in the major requirements below

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR

- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- BIOL 1000 - Introduction to Biology I (4CR)
- CHEM 1005 - Basic Chemistry I (3CR)
and
- CHEM 1006 - Basic Chemistry Laboratory I (1CR)
or
- CHEM 1025 - Chemistry I (3CR)
and
- CHEM 1028 - Chemistry Laboratory I (1CR)
- CHEM 2300 - Introductory Organic Chemistry (4CR)
- CRMJ 2120 - Introduction to Criminal Justice (3CR)
- CRMJ 2130 - Criminal Investigation I (3CR)
- CRMJ 2230 - Law of Evidence (3CR)
- CRMJ 2570 - Criminalistics (3CR)
- MATH 1400 - Pre-Calculus Algebra (4CR)
- ZOO 2040 - Human Anatomy (3CR)
- ZOO 2041 - Human Anatomy Lab (1CR)
- Electives approved by the advisor if needed to complete 64 total credits.

Note:

Major courses listed are designed to fit a variety of transfer programs. Students transferring to specific Baccalaureate programs at other institutions should provide their academic advisor with a copy of that program to ensure proper transfer of courses (some substitution of courses will be allowed).

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation

requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Cyber Security and Information Systems

Office Management, A.A.S.

Are you interested in learning a set of skills that are not industry specific but are in high demand? Would you like to be a key player for an organization? Although often thought of as a support position, office management is an integral part of any organization. Successful graduates are suited for a wide variety of office assistant, administrative assistant, executive assistant, or lower management opportunities depending on the region of the country and the industry they choose for employment. Students completing this degree will have the technical, industry and business skills for a professional position in a variety of industries. This degree offers opportunities for traditional and non-traditional students alike and establishes a solid background for additional opportunities within an organization.

This is an online degree so if you are currently employed or cannot come to campus to take classes, this is the degree that will help elevate you in your current career or give you the skills necessary to start a new career. Although this is an Associate of Applied Science degree, graduates from this program may apply this degree toward an online four-year applied science degree at the University of Wyoming.

This is a nontransfer degree.

Recommended Curriculum

General Education (Minimum 17 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- MATH 1400 - Pre-Calculus Algebra (4CR)
OR
- BADM 1005 - Business Mathematics I (3CR)

2. Communication

- BADM 1020 - Business Communications (3CR)
- ENGL 1010 - English I: Composition (3CR)

3. Relationship with the World (One Course Minimum)

- POLS 1000 - American and Wyoming Government (3CR)
- Human Behavior
- Cultural Environment

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- ACCT 2110 - QuickBooks Desktop and Online (3CR)
- BADM 2010 - Business Law I (3CR)
- BADM 2030 - Business Ethics (3CR)
- BOTK 1655 - Keyboarding Speed and Accuracy (1CR)
- BOTK 1660 - Document Formatting (2CR)
- BOTK 1955 - Professional Development (3CR)
- BOTK 1980 - Cooperative Work Experience I *(1CR needed for degree)*
- CMAP 1550 - E-Portfolio Development (1CR)
- CMAP 1715 - Word Processing (3CR)
- CMAP 1765 - Spreadsheet Applications (3CR)
- OR
- CMAP 1815 - Database Applications (3CR)
- CMAP 2630 - Presentation Graphics (2CR)
- COSC 1200 - Computer Information Systems (3CR)
- IMGT 2400 - Introduction to Information Management (3CR)
- INET 1590 - Web Page Design (3CR)
- MGT 1200 - Human Resources Management (3CR)
- MGT 2100 - Principles of Management (3CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

All classes in the major must be passed with a "C" or better.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Software Support Specialist, A.A.S.

The recommended curriculum is designed to prepare students for employment in software support, help desk, and end user support positions. This comprehensive program emphasizes the development of skills and the attainment of knowledge necessary to obtain a position in the different types of businesses using the latest systems and software.

This is a nontransfer degree.

Recommended Curriculum

General Education (Minimum 17 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- BADM 1005 - Business Mathematics I (3CR)

2. Communication

- BADM 1020 - Business Communications (3CR)
- ENGL 1010 - English I: Composition (3CR)

3. Relationship with the World

(One course minimum)

- Human Behavior
- U.S. and Wyoming constitutions (3CR) required
- Cultural Environment

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- ACCT 2110 - QuickBooks Desktop and Online (3CR)
- BOTK 1655 - Keyboarding Speed and Accuracy (1CR)
- BOTK 1660 - Document Formatting (2CR)
- BOTK 1955 - Professional Development (3CR)
- BOTK 1980 - Cooperative Work Experience I (1CR)
- CMAP 1550 - E-Portfolio Development (1CR)
- CMAP 1610 - Windows I (2CR)
- CMAP 1715 - Word Processing (3CR)
- CMAP 1765 - Spreadsheet Applications (3CR)
- CMAP 1815 - Database Applications (3CR)
- CMAP 1855 - Desktop Publishing (3CR)
- CMAP 2630 - Presentation Graphics (2CR)
- COSC 1200 - Computer Information Systems (3CR)
- CSCO 2000 - Beginning Internetworking (3CR)
- IMGT 2400 - Introduction to Information Management (3CR)
- INET 1590 - Web Page Design (3CR)
- Electives - (5CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

All classes in the major must be passed with a "C" or better.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Web Design, A.A.S.

Today's web designers must be familiar with a variety of Internet technologies. This program teaches the web design, e-commerce, scripting, and authoring skills necessary to advance in the field of web design. General education classes and other business classes are included in the program to provide students with general business, communication, and problem solving skills.

This is a nontransfer degree program.

Recommended Curriculum

General Education (Minimum 17 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- BADM 1005 - Business Mathematics I (3CR)

2. Communication

- BADM 1020 - Business Communications (3CR)
- ENGL 1010 - English I: Composition (3CR)

3. Relationship with the World

(One course minimum)

- Human Behavior
- U.S. and Wyoming constitutions (3CR) required
- Cultural Environment

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- ART 2122 - Digital Design I (3CR)
or
- ART 2105 - Digital Design II (3CR)
or
- ART 2245 - Digital Photography I (3CR)
- BADM 2010 - Business Law I (3CR)
- BADM 2040 - E-commerce (3CR)

- CMAP 1815 - Database Applications (3CR)
- CO/M 2520 - Intro to Social Media (3CR)
- IMGT 2400 - Introduction to Information Management (3CR)
- INET 1590 - Web Page Design (3CR)
- INET 1610 - Dynamic Web Graphics (3CR)
- INET 1885 - Adobe Photoshop for the Web (3CR)
- INET 1890 - Introduction to Web Design (3CR)
- INET 2670 - Internet Ethics and Cyber Law (3CR)
- INET 2675 - Web Design Business Fundamentals (3CR)
- INET 2895 - Web Design Capstone/Seminar (3CR)
- MGT 2100 - Principles of Management (3CR)
- MKT 2000 - E-Marketing (3CR)

Note:

The normal length of this program is two academic years at 16-18 credit hours per semester.

All classes in the major must be passed with a "C" or better.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Web Development, A.A.S.

This program focuses on the technologies used to create and operate an effective Web site or e-business. It is very technology based with advanced coursework in computer networking and programming, as well as Web development and design. As such, this program focuses much more on the back office technologies involved with Web development including advanced Web authoring, HTML scripting, Visual Basic programming, and database design.

This is a non-transfer degree program.

Recommended Curriculum

General Education (Minimum 17 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- MATH 1400 - Pre-Calculus Algebra (4CR)

2. Communication

- BADM 1020 - Business Communications (3CR)
- ENGL 1010 - English I: Composition (3CR)

3. Relationship with the World

(One course minimum)

- Human Behavior
- U.S. and Wyoming constitutions (3CR) required
- Cultural Environment

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- BADM 2010 - Business Law I (3CR)
- COSC 1010 - Introduction to Computer Science (4CR)
- IMGT 2400 - Introduction to Information Management (3CR)
- INET 1590 - Web Page Design (3CR)
- MGT 2100 - Principles of Management (3CR)
- or
- MKT 2100 - Principles of Marketing (3CR)
- CMAP 1815 - Database Applications (3CR)
- COSC 1030 - Computer Science I (4CR)
- INET 1890 - Introduction to Web Design (3CR)
- INET 2670 - Internet Ethics and Cyber Law (3CR)

Select at least 13 credits from the following electives

- COSC 1200 - Computer Information Systems (3CR)
- COSC 2300 - Discrete Structures (3CR)

- COSC 2405 - User Interface Design (2CR)
- COSC 2406 - Object-oriented Programming (4CR)
- COSC 2409 - Programming: Topic
- CSCO 2000 - Beginning Internetworking (3CR)
- INET 1650 - Web Programming I (3CR)
- Electives approved by department head (3CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

All classes in the major must be passed with a "C" or better.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Cyber Security, A.S.

A degree in computer security trains students to find and remove data from a variety of digital media and protect computer information systems from malignant uses, computer viruses, and emerging digital threats. The program blends theory and practice into a learning experience that develops skills applicable to complex real-world problems, and is designed to provide a solid foundation for future professional growth to help meet the growing demand for professionals with information assurance expertise in various disciplines.

This is a transfer degree.

Recommended Curriculum

General Education (Minimum 32 hours)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- (16 credits allowed in this field of study)
- MATH 2200 - Calculus I (4CR)
or
- MATH 2350 - Business Calculus I (4CR)
- Laboratory Science (8CR)

2. Communication

- BADM 1020 - Business Communications (3CR)
and
- ENGL 1010 - English I: Composition (3CR)
and
- ENGL 1020 - English II: Composition (3CR)
or
- ENGL 2005 - Technical Writing (3CR)
or
- ENGL 2020 - Introduction to Literature (3CR)
or
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- POLS 1000 - American and Wyoming Government (3CR)
- Human Behavior (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- COSC 1010 - Introduction to Computer Science (4CR)
- COSC 1200 - Computer Information Systems (3CR)
- CSCO 2000 - Beginning Internetworking (3CR)
or
- ELTR 2910 - Computer Networking (2CR)
- CSCO 2010 - Advanced Internetworking I (3CR)
- CSEC 1500 - Network Security Fundamentals (3CR)
- CSEC 1510 - Network Defense Principles (3CR)
- CSEC 1520 - Network Attack Principles (3CR)
- CSEC 1530 - Computer Forensics (3CR)
- CSEC 1980 - Cooperative Work Experience - Internship
- IMGT 2400 - Introduction to Information Management (3CR)
- INET 2670 - Internet Ethics and Cyber Law (3CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

All classes in the major must be passed with a "C" or better.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Office Management Certificate

Certificate Requirements

- BADM 1000 - Introduction to Business (3CR)
- BADM 1020 - Business Communications (3CR)
- BOTK 1660 - Document Formatting (2CR)
- BOTK 1955 - Professional Development (3CR)
- CMAP 1550 - E-Portfolio Development (1CR)
- CMAP 1715 - Word Processing (3CR)
- CMAP 1765 - Spreadsheet Applications (3CR)
- CMAP 1815 - Database Applications (3CR)
- CMAP 2630 - Presentation Graphics (2CR)
- Electives chosen in consultation with advisor (5CR)

Note:

The normal length of this program is nine months.

All classes in the major must be passed with a "C" or better.

Graduation Requirements For specific graduation requirements see "Degree Requirements".

Software Application Certificate

The recommended business information systems curriculum at Casper College is designed to prepare students for employment in software application positions. This comprehensive program emphasizes the development of skills and the attainment of knowledge

necessary to obtain a position in the different types of businesses using the latest systems and software.

Certificate Requirements

General Education

- BADM 1005 - Business Mathematics I (3CR)
- BADM 1020 - Business Communications (3CR)
- ENGL 1010 - English I: Composition (3CR)

Major Requirements

- BOTK 1655 - Keyboarding Speed and Accuracy (1CR)
- BOTK 1660 - Document Formatting (2CR)
- CMAP 1610 - Windows I (2CR)
- CMAP 1715 - Word Processing (3CR)
- CMAP 1765 - Spreadsheet Applications (3CR)
- CMAP 2630 - Presentation Graphics (2CR)
- INET 1590 - Web Page Design (3CR)

Note:

The normal length of this program is nine months.

All classes in the major must be passed with a "C" or better.

Graduation Requirements For specific graduation requirements see "Degree Requirements".

Web Design Certificate

Today's web designers must be familiar with a variety of Internet technologies. This program teaches the web design, e-commerce, scripting, and authoring skills necessary to advance in the field of web design. General education classes and other business classes are included in the program to provide students with general business, communication, and problem solving skills.

Certificate Requirements

- ART 2122 - Digital Design I (3CR)
- ART 2105 - Digital Design II (3CR)
- ART 2245 - Digital Photography I (3CR)
- BADM 1020 - Business Communications (3CR)
- CMAP 1815 - Database Applications (3CR)

- COSC 1010 - Introduction to Computer Science (4CR)
- IMGT 2400 - Introduction to Information Management (3CR)
- INET 1590 - Web Page Design (3CR)
- INET 1610 - Dynamic Web Graphics (3CR)
- INET 1650 - Web Programming I (3CR)

Note:

The normal length of this program is nine months.

All classes in the major requirements must be passed with a "C" or better.

Graduation Requirements For specific graduation requirements see "Degree Requirements".

Diesel Power Technology

Diesel Power Technology, A.A.S.

Four days each week will be lecture and laboratory classes in diesel related courses. One day per week is set aside for on-the-job training and/or laboratory work.

Recommended Curriculum

General Education (Minimum 17 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

(One course minimum)

- Science
or
- Mathematics- 1000 level or higher

2. Communication

(One course minimum)

- Written or Oral Communication

3. Relationship with the World

(One course minimum)

- Human Behavior
- U.S. and Wyoming constitutions (3CR) required

- Cultural Environment

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- DESL 1540 - Heavy Duty Electrical Systems (3CR)
- DESL 1580 - Power Train, Braking, and Steering (3CR)
- DESL 1610 - Engine Rebuilding I (9CR)
- DESL 1620 - Engine Rebuilding II (9CR)
- DESL 1650 - Diesel Fuel Systems and Tuning I (5CR) (5 weeks)
- DESL 1660 - Diesel Fuel Systems and Tuning II (3CR) (5 weeks)
- DESL 1850 - Basic Hydraulics (3CR)
- DESL 1980 - Co-op Work Experience (Diesel) (8CR) required
- Diesel Electives to include AUTO, AUBR, ELTR, MCHT and WELD (4CR)

Natural Gas Option:

Complete all degree requirements above with the exception of DESL 1620. DESL 1680 will be taken in its place.

*Permission of instructor required.

- DESL 1680 - Natural Gas Engine Technology (10.5CR) *

Note:

A minimum of a "C" average is required in all Diesel classes to receive the AAS Degree.

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Diesel Power Technology Certificate

Diesel power technology consists of two semesters. Four days each week will be lecture and laboratory classes in diesel related courses. One day per week is set aside for on-the-job training and/or laboratory work. Satisfactory completion of those two semesters will earn the student a certificate of completion in diesel power technology.

Certificate Requirements

Fall Semester

- DESL 1540 - Heavy Duty Electrical Systems (3CR)
- DESL 1610 - Engine Rebuilding I (9CR)
- DESL 1650 - Diesel Fuel Systems and Tuning I (5CR) (5 weeks)
- DESL 1980 - Co-op Work Experience (Diesel) (4CR) required

Spring Semester

- DESL 1580 - Power Train, Braking, and Steering (3CR)
- DESL 1620 - Engine Rebuilding II (9CR)
- DESL 1660 - Diesel Fuel Systems and Tuning II (3CR) (5 weeks)
- DESL 1850 - Basic Hydraulics (3CR)
- DESL 1980 - Co-op Work Experience (Diesel) (4CR) required

Natural Gas Option:

Complete all degree requirements above with the exception of DESL 1620. DESL 1680 will be taken in its place.

* Permission of instructor required.

- DESL 1680 - Natural Gas Engine Technology (10.5CR)

Note:

A minimum of a "C" average is required in all Diesel classes to receive certificate.

Courses listed above may be run separately or concurrently. Separate course enrollment may not be available.

The normal length of this program is nine months.

Graduation Requirements For specific graduation requirements see "Degree Requirements".

Economics

Economics, A.S.

The following two-year curriculum is offered as a guide in meeting the Casper College general education requirements and to prepare students wishing to pursue four-year degrees in economics.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Laboratory Science (4CR)
- MATH 1400 - Pre-Calculus Algebra (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR) AND
- ENGL 1020 - English II: Composition (3CR) OR
- ENGL 2005 - Technical Writing (3CR) OR
- ENGL 2020 - Introduction to Literature (3CR) OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- COSC 1200 - Computer Information Systems (3CR)
- ECON 1010 - Principles of Macroeconomics (3CR)
- ECON 1020 - Principles of Microeconomics (3CR)
- MATH 2200 - Calculus I (4CR)
or
- MATH 2350 - Business Calculus I (4CR)
- MATH 2205 - Calculus II (4CR)
or
- MATH 2355 - Business Calculus II (4CR)
- STAT 2050 - Fundamentals of Statistics (4CR)
- Electives (12CR) - Recommended electives: courses in accounting, business, mathematics, statistics and sciences.

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Education

The Casper College education program provides the first two years of a baccalaureate degree program, which leads to certification of elementary and secondary public school teachers. Students who follow the recommended curriculum may also receive an associate of arts or an associate of science degree from Casper College.

Students should consult the catalogs of the colleges or universities to which they are transferring for requirements.

Notice of background check: All education students are subject to background checks and fingerprinting for selected educational coursework involving student contact and future employment as professionals in education and related fields.

Early Childhood Education, A.A.

The Early Childhood program is designed to qualify students for teaching and management positions in child care centers, preschools, child development

centers, and in other positions dealing with the care and education of young children. Students may pursue coursework for transfer to baccalaureate programs in Elementary Education, Early Childhood Education, or Child Development. Students may also pursue coursework for a minor degree and/or teaching endorsement in early childhood education.

Notice of background check: All education students are subject to background checks and fingerprinting for selected educational coursework involving student contact and future employment as professionals in education and related fields.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Two (2) Laboratory Science (8CR)
- MATH 1000 - Problem Solving (3CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- POLS 1000 - American and Wyoming Government (3CR)
- PSYC 1000 - General Psychology (3CR)
- SOC 2325 - Marriage and Family (3CR)
- Cultural Environment (3CR)

4. General Education Electives (1CR)

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- EDEC 1020 - Introduction to Early Childhood Education (3CR)
- EDEC 1030 - Infant and Toddler Care (2CR)
- EDEC 1035 - Infant and Toddler Care Lab (1CR)
- EDEC 1100 - Observation and Guidance of Young Children (2CR)
- EDEC 1105 - Observation and Guidance of Young Children Lab (1CR)
- EDEC 1200 - Administration in Early Childhood Programs (3CR)
- EDEC 1300 - Curriculum Planning and Development for Young Children (2CR)
- EDEC 1305 - Curriculum Planning and Development for Young Children Lab (1CR)
- EDEC 2210 - Student Teaching in Early Childhood Education (6CR)
- EDEL 2280 - Literature for Children (3CR)
- FCSC 2122 - Child Development Lab (1CR)
- HLTK 1620 - American Heart Association Heart Saver First Aid, CPR and AED (.33CR)
- PSYC 2300 - Developmental Psychology (3CR)
- Approved Elective (1CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

To obtain a degree in early childhood education all major educational coursework must be passed with a "C" or better.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Elementary Education, A.A.

The Casper College education program provides the first two years of a baccalaureate degree program, which leads to certification of elementary and secondary public school teachers. Students who follow the recommended curriculum may also receive an associate of arts degree from Casper College.

Students should consult the catalogs of the colleges or universities to which they are transferring for requirements.

Notice of background check: All education students are subject to background checks and fingerprinting for selected educational coursework involving student contact and future employment as professionals in education and related fields.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed within or outside of the major field of study.

1. Exploration and Participation

- MATH 1100 - Number and Operations for Elementary School Teachers (3CR)

Lab Science (Choice of two Science courses required for A.A.)

- GEOL 1070 - Earth Science for Elementary Education Majors (4CR)
- LIFE 1020 - Life Science (4CR)
- PHYS 1090 - The Fundamentals of the Physical Universe (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- POLS 1000 - American and Wyoming Government (3CR)
- PSYC 1000 - General Psychology (3CR)
- PSYC 2300 - Developmental Psychology (3CR)
- Cultural Environment

4. General Education Electives (2CR)

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- EDCI 1430 - Life Science in the Elementary School (1CR)
- EDCI 1440 - Physical Science in the Elementary School (1CR)
- EDCI 1450 - Earth Science in the Elementary School (1CR)
- EDCI 1500 - Introduction to Teaching (1CR)
- EDEL 1410 - Theory I Seminar: Education (1CR)
- EDEL 2280 - Literature for Children (3CR)
- EDEL 2410 - Theory II Seminar: Education (1CR)
- EDEX 2484 - Introduction to Special Education (3CR)
- EDFD 2020 - Foundations of Education (3CR)
- EDFD 2100 - Educational Psychology (3CR)
- EDUC 2100 - Public School Practicum (4CR)
- HLED 2006 - Health for Elementary Educators (1CR)
- ITEC 2360 - Teaching with Technology (3CR)
- MATH 1105 - Data, Probability and Algebra for Elementary School Teachers (3CR)
- MATH 2120 - Geometry and Measurement for Elementary School Teachers (3CR)
(Third Lab Science HIGHLY recommended)

Suggested Electives

- EDEL 2140 - Teaching Literacy in the Elementary School (3CR)
Lab Science
Choice of remaining science recommended as elective
- LIFE 1020 - Life Science (4CR)
- GEOL 1070 - Earth Science for Elementary Education Majors (4CR)
- PHYS 1090 - The Fundamentals of the Physical Universe (4CR)
- CO/M 2010 - Public Speaking (3CR)
- CO/M 1030 - Interpersonal Communication (3CR)
- ART courses (3CR)
- MUSC courses (3CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation.

For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Social Studies — Secondary Education, A.A.

The Casper College secondary education-social studies degree provides the first two years of a baccalaureate degree program which leads to certification in secondary social studies education. Students should consult the catalogs of the colleges or universities to which they are transferring for requirements.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Laboratory Science (4CR)
- MATH 1000 - Problem Solving (3CR)
or
- MATH 1400 - Pre-Calculus Algebra (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- POLS 1000 - American and Wyoming Government (3CR)
- PSYC 1000 - General Psychology (3CR)
- Cultural Environment (3CR)

4. General Education Electives (9CR)

- Must be chosen from areas 1, 2, or 3 above; should include one additional four-credit lab science; MATH, STAT, CO/M recommended; recommend eight-credits in one world language; no more than 15 credits in any one area.

5. Physical Education (1CR)

Major Requirements

- EDFD 2020 - Foundations of Education (3CR)
- EDFD 2100 - Educational Psychology (3CR)
- EDUC 2100 - Public School Practicum (4CR)
- ITEC 2360 - Teaching with Technology (3CR)
- PSYC 2300 - Developmental Psychology (3CR)
- EDEX 2484 - Introduction to Special Education (3CR)
- ECON 1010 - Principles of Macroeconomics (3CR)
- ECON 1020 - Principles of Microeconomics (3CR)

Five courses (15 credits) from the following list:

- ANTH 1100 - Introduction to Physical Anthropology (3CR)
- ANTH 1200 - Introduction to Cultural Anthropology (3CR)
- ANTH 2210 - North American Indian (3CR)
- GEOG 1000 - World Regional Geography (3CR)
- GEOG 1010 - Introduction to Physical Geography (4CR)
- HIST 1110 - Western Civilization I (3CR)
- HIST 1120 - Western Civilization II (3CR)
- HIST 1211 - United States to 1865 (3CR)
- HIST 1221 - United States from 1865 (3CR)
- HIST 1251 - History of Wyoming (3CR)
- POLS 1200 - Non-Western Political Cultures (3CR)
- POLS 2200 - Politics of Europe (3CR)
- POLS 2310 - Introduction to International Relations (3CR)
- POLS 2410 - Introduction to Public Administration (3CR)
- POLS 2460 - Introduction to Political Philosophy (3CR)
- SOC 1000 - Introduction to Sociology (3CR)

- SOC 1100 - Social Problems (3CR)
- SOC 2200 - Sociology of Human Sexuality (3CR)
- SOC 2325 - Marriage and Family (3CR)
- SOC 2400 - Criminology (3CR)

Secondary Education

Secondary Education majors at Casper College who intend to transfer to the University of Wyoming and most accredited secondary education programs need to complete the following courses prior to entering Phase 2:

- EDEX 2484 - Introduction to Special Education (3CR)
- EDFD 2020 - Foundations of Education (3CR)
- EDFD 2100 - Educational Psychology (3CR)
- EDUC 2100 - Public School Practicum (4CR)
- ITEC 2360 - Teaching with Technology (3CR)
- PSYC 2300 - Developmental Psychology (3CR)

Note:

Some bachelor degrees require Adolescent Psychology.

Student advisement for secondary education is done by the department which offers the subject area that the student wants to teach.

The University of Wyoming requires a major core area of 15 credits in one subject. Nine credits of U.S. history (if history is not the major core). Six to nine credits in the five remaining areas.

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Electrical Apprenticeship Programs

An electrical apprenticeship is an occupational training program that combines on-the-job experience with classroom instruction in electrical theory, code and application designed to meet government and/or industry regulations. Casper College provides formalized training for the electrical apprenticeship programs shown below.

Certificate Requirements:

Independent electrical apprenticeship training is provided for electricians by Casper College. The classes are scheduled in an evening format and meet the state requirements and content for electrical training based upon the State of Wyoming Department of Fire Prevention and Electrical Safety standards. The following classes are offered on either a yearly or biyearly basis. Students must meet the requirements of Casper College. Students must meet the class prerequisites or have department head approval to register for any of the independent electrical apprenticeship classes with the exception of ELAP 151

- ELAP 1515 - Independent Electrical Apprentice I (5CR)
- ELAP 1525 - Independent Electrical Apprentice II (5CR)
- ELAP 1535 - Independent Electrical Apprentice III (5CR)
- ELAP 1545 - Independent Electrical Apprentice IV (5CR)
- ELAP 1555 - Independent Electrical Apprentice V (5CR)
- ELAP 1565 - Independent Electrical Apprentice VI (5CR)
- ELAP 1575 - Independent Electrical Apprentice VII (5CR)
- ELAP 1585 - Independent Electrical Apprentice VIII (5CR)

Note: For more information on independent apprenticeship training contact: Casper College at 1-800-442-2963 extension 2494 Wyoming Electrical Joint Apprenticeship and Training Council Casper College partners with the Wyoming Electrical Joint Apprentice and Training Council (JATC) to provide classroom training designed to complement on-the-job training received by electrical apprentices. Classes meet several times a year, for a week at a time, over the 4-year apprenticeship program duration. The combination of coursework and training prepare an apprentice electrician to take the journeyman electrician exam administered by the State of Wyoming Department of Fire Prevention and Electrical Safety.

Note: For more information contact: Casper College at 1-800-442-2963 extension 2494 or the Wyoming Electrical JATC office at 307-234-8311

Electronics

The electronics technology department offers courses that are designed to provide students with the knowledge and skills that lead to employment and advancement in the electronics industry. The electronics technology degree will also transfer to a four-year college for additional training in electronics technology.

Electronics Technology, A.A.S.

The electronics technology department offers courses that are designed to provide students with the knowledge and skills that lead to employment and advancement in the electronics industry. The electronics technology degree will also transfer to a four-year college for additional training in electronics technology.

Recommended Curriculum

General Education (Minimum 17 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

(One course minimum)

- Laboratory Science
or
- Mathematics

2. Communication

- Written or Oral Communication (3CR)

3. Relationship with the World

(One course minimum)

- Human Behavior
- U.S. and Wyoming constitutions (3CR) required
- Cultural Environment

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- ELTR 1535 - Electrical Power (3CR)
- ELTR 1570 - Electric Circuits (4CR)
- ELTR 1605 - Process Control (3CR)
- ELTR 1620 - Electrical Concepts Laboratory (1.5CR)
- ELTR 1700 - Introduction to Solid State Electronics (4CR)
- ELTR 1750 - Electronic Design and Fabrication (2CR)
- ELTR 1760 - Introduction to Digital Electronics (4.5CR)
- ELTR 1770 - Microprocessor Fundamentals (4.5CR)
- ELTR 2600 - Electronic Communication (4.5CR)
- ELTR 2610 - Advanced Microprocessors (3CR)
- ELTR 2815 - Programmable Logic Controllers (4CR)
- ELTR 2870 - CCD Cameras and Security Systems (2CR)
- ELTR 2910 - Computer Networking (2CR)
- ELTR 2925 - Fiber Optics (4CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Computer Electronics Certificate

Certificate Requirements (30CR Minimum)

- ELTR 1750 - Electronic Design and Fabrication (2CR)
- ELTR 1760 - Introduction to Digital Electronics (4.5CR)
- ELTR 1770 - Microprocessor Fundamentals (4.5CR)
- ELTR 2610 - Advanced Microprocessors (3CR)
- ELTR 2870 - CCD Cameras and Security Systems (2CR)
- ELTR 2910 - Computer Networking (2CR)
- ELTR 2925 - Fiber Optics (4CR)

Optional Courses

Electives in Cisco courses, Computer Security or Electronics (8CR)

Note:

The normal length of this program is nine months.

Graduation Requirements For specific graduation requirements see "Degree Requirements".

Industrial Electronics Certificate

Certificate Requirements

(Minimum 30 credits)

- ELTR 1535 - Electrical Power (3CR)
- ELTR 1570 - Electric Circuits (4CR)
- ELTR 1605 - Process Control (3CR)
- ELTR 1620 - Electrical Concepts Laboratory (1.5CR)
- ELTR 1700 - Introduction to Solid State Electronics (4CR)
- ELTR 1750 - Electronic Design and Fabrication (2CR)
- ELTR 1770 - Microprocessor Fundamentals (4.5CR)
- ELTR 2815 - Programmable Logic Controllers (4CR)
- ELTR 2925 - Fiber Optics (4CR)

Optional Courses

- DESL 1850 - Basic Hydraulics (3CR)
- ELTR 2910 - Computer Networking (2CR)

Note:

The normal length of this program is nine months.

Graduation Requirements For specific graduation requirements see "Degree Requirements".

Engineering

Computer Science, A.S.

- Business Concentration

The Associate of Science in Computer Science is designed to accommodate students interested in the first two years of a four-year degree program in computer science or management information systems (MIS). Students should consult the four-year college curriculum of the college or university to which they plan to transfer to see which electives best fit their needs.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- MATH 2200 - Calculus I (4CR)

Lab Science (8CR)

Recommended: CHEM 1025 with CHEM 1028, CHEM 1035 with CHEM 1038; BIOL 1000 or BIOL 1010 with either BIOL 2023 or ZOO 2040; or PHYS 1310 with PHYS 1320.

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives (3 credits)

- Must be chosen from areas 1, 2, or 3 above

5. Physical Education (1CR)

Major Requirements

- COSC 1030 - Computer Science I (4CR)
- COSC 2030 - Computer Science II (4CR)
- COSC 2150 - Computer Organization (3CR)
- COSC 2300 - Discrete Structures (3CR)
- COSC 2406 - Object-oriented Programming (4CR)
- Electives - (15CR)

At least two Credits from the following:

- COSC 2418 - Web App Development
- COSC 2405 - User Interface Design (2CR)
- COSC 2409 - Programming: Topic
- ES 1000 - Orientation to Engineering Study (1CR)

Computer Science, A.S.: Business Concentration

The Associate of Science in Computer Science specializing in business is designed to accommodate students interested in the first two years of a four-year degree program in computer science to specialize in business or management information systems (MIS). Students should consult the four-year college curriculum of the college or university to which they plan to transfer to see which electives best fit their needs.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- MATH 2200 - Calculus I (4CR)
or
- MATH 2350 - Business Calculus I (4CR)

Lab science (8CR)

Recommended: CHEM 1025 with CHEM 1028, CHEM 1035 with CHEM 1038; BIOL 1000 or BIOL 1010 with either BIOL 2023 or ZOO 2040; or PHYS 1310 with PHYS 1320.

2. Communication

- ENGL 1010 - English I: Composition (3CR)

- AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives (3CR)

- Must be chosen from areas 1, 2, or 3 above

5. Physical Education (1CR)

Major Requirements

- COSC 1030 - Computer Science I (4CR)
- COSC 2030 - Computer Science II (4CR)
- COSC 2150 - Computer Organization (3CR)
- COSC 2300 - Discrete Structures (3CR)
- COSC 2406 - Object-oriented Programming (4CR)
- IMGT 2400 - Introduction to Information Management (3CR)
- STAT 2050 - Fundamentals of Statistics (4CR)

At least two credits from the following:

- COSC 2418 - Web App Development
- COSC 2405 - User Interface Design (2CR)
- COSC 2409 - Programming: Topic
- ES 1000 - Orientation to Engineering Study (1CR)

Note:

The normal length of this program is two academic years at 16-18 credit hours per semester.

To obtain a degree in computer science, a student must obtain a grade of "C" or better in all major requirements.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Engineering, A.S.

Recommended Curriculum

The engineering department offers courses in engineering science required for the first two years of the four-year degree. Students should consult the curriculum of the institution to which transfer is intended.

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Included in the major requirements below

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming Constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- CHEM 1025 - Chemistry I (3CR)
- CHEM 1028 - Chemistry Laboratory I (1CR)

- ES 1060 - Introduction to Engineering Problem Solving (3CR)
- ES 2110 - Statics (3CR)
- ES 2120 - Dynamics (3CR)
- MATH 2200 - Calculus I (4CR)
- MATH 2205 - Calculus II (4CR)
- MATH 2210 - Calculus III (4CR)
- PHYS 1310 - College Physics I (4CR)

Electives (2 Courses from following courses)

- CE 2070 - Engineering Surveying (3CR)
- ES 2210 - Electric Circuit Analysis (4CR)
- ES 2310 - Thermodynamics (3CR)
- ES 2330 - Fluid Dynamics (3CR)
- ES 2410 - Mechanics of Materials I (3CR)
- COSC 1030 - Computer Science I (4CR)
- PHYS 1320 - College Physics II (4CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

To obtain a degree in engineering, a student must obtain a grade of "C" or better in all major requirements.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Engineering Technology

This program is designed to provide the graduate with the education necessary for job opportunities in industry and the curricular flexibility to allow students to take course work that should, with proper planning, transfer to a bachelor's degree program in an allied area. Common allied areas would be architecture, engineering, technology, and industrial arts teaching.

Engineering Technology and Design, A.A.S.

The degree in drafting and design technology requires a core of technical courses in the areas of engineering

drafting, residential and commercial architecture, computer-aided drafting, and surveying. This core can provide the preparation necessary for a variety of assignments that may be available in industry. In addition, course work in the areas of science, mathematics, communications, social and behavioral sciences, and humanistic studies provide the general education basis to a productive career and effective citizenship.

Recommended Curriculum

General Education (Minimum 17 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- MATH 1400 - Pre-Calculus Algebra (4CR)
- PHYS 1050 - Concepts of Physics (4CR)
or
- CHEM 1025 - Chemistry I (3CR)
and
- CHEM 1028 - Chemistry Laboratory I (1CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)

3. Relationship with the World

(One course minimum)

- Human Behavior
- U.S. and Wyoming constitutions (3CR)
required
- Cultural Environment

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- ENTK 1010 - Elements of Surveying (3CR)
- ENTK 1021 - Descriptive Geometry (3CR)

- ENTK 1060 - Excel Technical Applications (3CR)
- ENTK 1510 - Drafting I (4CR)
- ENTK 1650 - Mechanical Drafting and Design I (4CR)
- ENTK 2625 - Mechanical Drafting and Design II (4CR)
- ENTK 1710 - Architectural Drafting I (4CR)
- ENTK 1720 - Architectural Drafting II (4CR)
- ENTK 1750 - Commercial Architectural Drafting (4CR)
- ENTK 2510 - CAD-3D Modeling (4CR)
- ENTK 2550 - Civil Drafting I (4CR)
- GEOG 1100 - Introduction to GIS (4CR) 4
- Approved electives (3CR): ENTK, ART, CNTK, ELTR, MCHT, ROBO, WELD, computer component, and business component.

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

All classes in the major must be passed with a "C" or better.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Architectural Graphics and Design Certificate

Certificate Requirements

This certificate is for students wanting to specialize in architectural graphics and design. All classes included in the certificate may be taken concurrently while pursuing the AAS in Drafting and Design Technology.

- ENTK 1510 - Drafting I (4CR) *
- ENTK 1021 - Descriptive Geometry (3CR)
- ENTK 1710 - Architectural Drafting I (4CR) *
- ENTK 1720 - Architectural Drafting II (4CR)
- ENTK 1750 - Commercial Architectural Drafting (4CR)
- CNTK 2510 - Construction Estimating (3CR)

Two additional courses from below:

- CNTK 1700 - Introduction to Construction (4CR)
- CNTK 1870 - Building Materials and Systems (3CR)
- CNTK 1905 - Carpentry (4CR)
- CNTK 2520 - Architectural and Construction Planning (3CR)
- CNTK 2525 - Construction Project Management (3CR)

Note:

The normal length of this program is nine months.

*These courses are often completed by students previous to being a degree seeking student at Casper College and are included in the Engineering Technology and Design, A.A.S. degree as well.

Graduation Requirements For specific graduation requirements see "Degree Requirements".

Engineering Technology and Design Certificate

A certificate in Engineering Technology and Design will prepare students who plan to pursue an entry level position working within the engineering technology fields such as manufacturing, construction and civil design. This certificate will also serve as a stackable credit for students pursuing an AS or BS in any of the Engineering Sciences.

Certificate Requirements (33 Credit Minimum)

- ENTK 1060 - Excel Technical Applications (3CR)
- ENTK 1510 - Drafting I (4CR)
- ENTK 2510 - CAD-3D Modeling (4CR)
- ENTK 2525 - Design and Manufacturing Methods I (4CR)
- ES 1000 - Orientation to Engineering Study (1CR)
- MATH 1400 - Pre-Calculus Algebra (4CR)
- PHYS 1050 - Concepts of Physics (4CR)
- Approved electives (minimum 6 Credits)
- **Approved elective course prefix's: MATH, CHEM, CNTK, PHYS, ENTK, ES, CE, ELTR, MCHT, WELD

Mechanical Graphics and Design Certificate

Certificate Requirements

This certificate is for students wanting to specialize in mechanical graphics and design. All classes included in the certificate may be taken concurrently while pursuing the AAS in Drafting and Design Technology.

- ENTK 1510 - Drafting I (4CR) *
- ENTK 1021 - Descriptive Geometry (3CR)
- ENTK 2510 - CAD-3D Modeling (4CR) *
- ENTK 1650 - Mechanical Drafting and Design I (4CR)
- ENTK 2525 - Design and Manufacturing Methods I (4CR)
- ENTK 2625 - Mechanical Drafting and Design II (4CR)
- 2 additional courses from below:
MCHT 2780, MCHT 2790, MCHT 2800.

Note:

*These courses are often completed by students previous to being a degree seeking student at Casper College and are included in the Engineering Technology and Design, A.A.S. degree as well.

The normal length of this program is nine months.

Graduation Requirements For specific graduation requirements see "Degree Requirements".

English and Literature

English, A.A.: Literature Emphasis

An undergraduate degree in English is valuable preparation for a future in many professional areas including business, federal service, law, medicine, and education. Students with specific professional plans should consult advisors in those areas.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study

1. Exploration and Participation

- Laboratory Science (4CR)
- MATH 1000 - Problem Solving (3CR)
or
- MATH 1400 - Pre-Calculus Algebra (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)

AND

- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)*
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

*For Secondary Education Emphasis, PSYC 1000 - General Psychology

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- ENGL 2210 - English Literature I (3CR)
- ENGL 2310 - American Literature I (3CR)
- ENGL 2220 - English Literature II (3CR)
or
- ENGL 2320 - American Literature II (3CR)
- Writing course (2000-level or above) (3CR)
- Three additional literature courses (9CR)
- World language (8CR)
- Communication course (3CR)

Any course from the following areas (3 credits):

ANTH, ADDN, ART, ASTR, BIOL, CHEM, CO/M, CRMJ, ECON, ENTO, FREN, GEOG, GERM, HIST, HUMN, JAPN, MATH, MOLB, MUSC, PEAC, PHIL, PHYS, POLS, PSYC, RELI, RUSS, SOC, SPAN, STAT, THEA, WMST, ZOO

English, A.A.: Writing Emphasis

The writing emphasis is recommended for anyone who is interested in being a professional free-lance writer or

a technical writer, or in working in public relations, journalism, communication or teaching. It also is appropriate for pre-law, pre-medicine or business majors and for anyone who wants to strengthen communication skills.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study

1. Exploration and Participation

- Laboratory Science (4CR)
- MATH 1000 - Problem Solving (3CR)
or
- MATH 1400 - Pre-Calculus Algebra (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- CO/M 2100 - Media Writing I (3CR) 3
or
- ENGL 1040 - Introduction to Creative Writing
or
- ENGL 2050 - Creative Writing: Intro to Fiction (3CR)

- or
- ENGL 2055 - Creative Writing: Writing in the Wild (3CR)
or
- ENGL 2060 - Creative Writing: Introduction to Nonfiction (3CR)
or
- ENGL 2080 - Creative Writing: Introduction to Poetry (3CR)
- ENGL 2210 - English Literature I (3CR)
- ENGL 2310 - American Literature I (3CR)
- ENGL 2220 - English Literature II (3CR)
or
- ENGL 2320 - American Literature II (3CR)
- One additional literature or writing course (above 2000 level) (3CR)
- Communication course (3CR)
- World language (8CR)

Any course from the following areas (3 credits):

ANTH, ADDN, ART, ASTR, BIOL, CHEM, CO/M, CRMJ, ECON, ENTO, FREN, GEOG, GERM, HIST, HUMN, JAPN, MATH, MOLB, MUSC, PEAC, PHIL, PHYS, POLS, PSYC, RELI, RUSS, SOC, SPAN, STAT, THEA, WMST, ZOO

English, A.A.: Secondary Education Emphasis

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Laboratory Science (4CR)
- MATH 1000 - Problem Solving (3CR)
or
- MATH 1400 - Pre-Calculus Algebra (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR

- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- PSYC 1000 - General Psychology (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives (9-10CR)

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- EDEX 2484 - Introduction to Special Education (3CR)
- EDFD 2020 - Foundations of Education (3CR)
- EDFD 2100 - Educational Psychology (3CR)
- EDUC 2100 - Public School Practicum (4CR)
- ENGL 2210 - English Literature I (3CR)
- ENGL 2310 - American Literature I (3CR)
- ENGL 2220 - English Literature II (3CR)
or
- ENGL 2320 - American Literature II (3CR)
- ITEC 2360 - Teaching with Technology (3CR)
- One additional literature course (3CR)
- World language (8CR)
- PSYC - 2300 - Developmental Psychology (3CR)

Any course from the following areas (3 credits):

ANTH, ADDN, ART, ASTR, BIOL, CHEM, CO/M, CRMJ, ECON, ENTO, FREN, GEOG, GERM, HIST, HUMN, JAPN, MATH, MOLB, MUSC, PEAC, PHIL, PHYS, POLS, PSYC, RELI, RUSS, SOC, SPAN, STAT, THEA, WMST, ZOO

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science,

Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Environmental Science

Environmental Science, A.S.

The environmental science degree is intended to provide students with a broad range of knowledge needed to create citizen awareness, environmental leadership, and environmental specialists. Completion of an Environmental Science degree will help the student to find entry level work in a variety of environmental disciplines. The degree may also be used to fulfill the first two years of a four year degree. Students should consult the catalogs and curricula of the institutions they are considering transferring.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Included in the major requirements below

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements (Minimum 28 credits)

Students are required to take the following. These courses count for the Exploration and Participation part of the General Education requirements listed above.

- CHEM 1005 - Basic Chemistry I (3CR)
and
- CHEM 1006 - Basic Chemistry Laboratory I (1CR)
or
- CHEM 1025 - Chemistry I (3CR)
and
- CHEM 1028 - Chemistry Laboratory I (1CR)
- ENR 1200 - Environment (4CR)
or
- ENR 1500 - Water, Dirt, and Earth's Environment (4CR)
or
- GEOL 1500 - Water, Dirt, and Earth's Environment (4CR)
- MATH 1400 - Pre-Calculus Algebra (4CR)
or higher

Foundations in Values and Management

Choose at least one from the list below:

- BADM 1000 - Introduction to Business (3CR)
- ECON 1020 - Principles of Microeconomics (3CR)
- ENR 2000 - Environment and Society (3CR)
- ENR 2450 - Principles of Fish and Wildlife Management (3CR)
or
- ZOO 2450 - Principles of Fish and Wildlife Management (3CR)
- GEOG 1100 - Introduction to GIS (4CR) 4
- POLS 2000 - Current Issues in American Government (3CR)
- POLS 2310 - Introduction to International Relations (3CR)
- POLS 2410 - Introduction to Public Administration (3CR)
- REWM 2000 - Principles of Range Management (3CR)
- SOC 1000 - Introduction to Sociology (3CR)
- SOC 2112 - Environmental Sociology (3CR)

Areas of Concentration

Choose from list below or in consultation with advisor for a total of 18 credits in addition to the 32 General Education requirements listed above. Areas of

concentration may be Geology, Chemistry, Life Science or other area based on the desires of the student.

- Any course in AGRI, AGECE, AGTK, ANSC, ANTH, ATSC, BIOL, CHEM, CO/M, ECON, ENR, ENVT, EXTR, GEOG, LIFE, MATH (1400 or higher), MOLB, PHYS, POLS, REWM, SOC, SOIL, PHYS and ZOO.
- ATSC 2000 - Introduction to Meteorology (4CR)
- BIOL 1010 - General Biology I (4CR)
- CHEM 1025 - Chemistry I (3CR)
- CHEM 1028 - Chemistry Laboratory I (1CR)
- CO/M 2010 - Public Speaking (3CR)
- GEOG 1010 - Introduction to Physical Geography (4CR)
- GEOG 1080 - Introduction to GPS and Maps (3CR)
- GEOL 2000 - Geochemical Cycles and the Earth System (4CR)
- LIFE 2400 - General Ecology (3CR)
- LIFE 2410 - Field Ecology I (2CR)
- PHYS 1110 - General Physics I (4CR)
- STAT 2050 - Fundamentals of Statistics (4CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Fire Science

The fire science technology program is designed to provide the student with the knowledge and skills necessary for fire service employment or job advancement within the profession, or for transfer to a four-year school for additional training in fire science management.

Fire Science Technology, A.A.S.

Recommended Curriculum

General Education (Minimum 17 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

(One course minimum)

- Science
or
- Mathematics- 1000 level or higher

2. Communication

(One course minimum)

- Written or Oral Communication

3. Relationship with the World

(One course minimum)

- Human Behavior
- U.S. and Wyoming constitutions (3CR) required
- Cultural Environment

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements (Minimum 30 credits fire science)

- FIRE 1500 - Introduction to Fire Science (3CR)
- FIRE 1510 - Fire Fighting Strategy and Tactics I (3CR)
- FIRE 1520 - Fire Fighting Strategy and Tactics II (3CR)
- FIRE 1550 - Causes and Investigation (3CR)
- FIRE 1670 - Basic Emergency Care/First Responder (3CR)
- FIRE 1700 - Fundamentals of Fire Prevention (3CR)
- FIRE 1760 - Building Construction (3CR)
- FIRE 1810 - Introduction to Wildland Fire Fighting (3CR)
- FIRE 1818 - Wildland Leadership (3CR)
- FIRE 1830 - Intermediate Wildland Fire Behavior (3CR)
- FIRE 2515 - Advanced Firefighting (3CR)

- FIRE 2525 - Rescue Practices for the Fire Service (3CR)
- FIRE 2530 - Hazardous Materials (3CR)
- FIRE 2560 - Apparatus and Procedures (3CR)
- FIRE 2570 - Managing Fire Service (3CR)
- FIRE 2960 - Firefighter Development (3CR)
- FIRE 2970 - Fire Service Field Internship (3CR)
- Electives (13CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Fire Science Technology Certificate

Certificate Requirements

A minimum of 30 credits is required from the list below.

- FIRE 1500 - Introduction to Fire Science (3CR)
- FIRE 1510 - Fire Fighting Strategy and Tactics I (3CR)
- FIRE 1520 - Fire Fighting Strategy and Tactics II (3CR)
- FIRE 1550 - Causes and Investigation (3CR)
- FIRE 1670 - Basic Emergency Care/First Responder (3CR)
- FIRE 1700 - Fundamentals of Fire Prevention (3CR)
- FIRE 1760 - Building Construction (3CR)
- FIRE 1810 - Introduction to Wildland Fire Fighting (3CR)
- FIRE 1818 - Wildland Leadership (3CR)
- FIRE 1830 - Intermediate Wildland Fire Behavior (3CR)
- FIRE 2515 - Advanced Firefighting (3CR)
- FIRE 2525 - Rescue Practices for the Fire Service (3CR)
- FIRE 2530 - Hazardous Materials (3CR)
- FIRE 2560 - Apparatus and Procedures (3CR)

- FIRE 2570 - Managing Fire Service (3CR)
- FIRE 2960 - Firefighter Development (3CR)
- FIRE 2970 - Fire Service Field Internship (3CR)

Note:

The normal length of this program is nine months.

Graduation Requirements For specific graduation requirements see "Degree Requirements".

General Studies

The general studies degree is designed for those students who have not yet decided upon a specific field of study. It can also be earned by students who plan to pursue a specialized curriculum at a transfer institution or by those interested in earning an associate degree via distance education media.

General Studies, A.A.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Laboratory Science (4CR)
- Mathematics (3CR) - 1000 level or higher

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming Constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements (Minimum 28 credits)

- General studies courses (28CR) - should be chosen in consultation with an academic advisor. Consider the requirements of the institution to which you will transfer, and your personal goals. 9 of the required 28 credits must be selected from the areas of Human Behavior, Cultural Environment, and/or Communication.

Note:

The normal length of this program is two academic years at 15 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

General Studies, A.S.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Laboratory Science (4CR)
- 1 additional course (3CR) to be chosen from ADDN, ANSC, ASTR, BIOL, CHEM, COSC, FCSC, GEOG, GEOL, MOLB, PHYS, POLS, PSYC, SOC, or ZOO
- Mathematics (3CR) - 1400 level or higher

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR

- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming Constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements (Minimum 28 credits)

- General studies courses (28 CR) - Should be chosen in consultation with an academic advisor. Consider the requirements of the institution to which you will transfer, and your personal goals.

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Geography

Students may obtain either the one-year certificate in Geographic Information Systems (GIS), or the Associate of Science in GIS. Additionally, students in many fields may obtain a minor concentration (equivalent to the certificate curriculum) in the course of obtaining their associate's degree.

The certificate program is designed for persons wishing to obtain GIS training in order to enhance their academic degree or current career choice.

Students seeking either the certificate or the associate of science degree must complete a minimum of 32 credits in the major requirements listed. These 32

credits are split between the categories of basic skills, core requirements, and area of expertise. Consideration toward satisfying some of the requirements will be given to students entering the program who have had documented work experience, equivalent course work at another institution, or completion of workshops from recognized providers such as ESRI. Students should consult with their advisor early in the application process to determine eligibility of previous work. Students wanting credit for work experience or workshop participation will be asked to supply a portfolio of work which will be evaluated by program faculty.

Geographic Information Systems, A.S.

Students may obtain either the one-year certificate in Geographic Information Systems (GIS), or the Associate of Science in GIS. Additionally, students in many fields may obtain a minor concentration (equivalent to the certificate curriculum) in the course of obtaining their associate's degree.

The certificate program is designed for persons wishing to obtain GIS training in order to enhance their academic degree or current career choice.

Students seeking the associate of science degree must complete a minimum of 32 credits in the major requirements listed. These 32 credits are split between the 5 core GIS classes (GEOG 1080, GEOG 1100, GEOG 1110, GEOG 2100 and GEOG 2150) and the list of approved GIS electives. Consideration toward satisfying some of the requirements will be given to students entering the program who have had documented work experience, equivalent course work at another institution, or completion of workshops from recognized providers such as ESRI. Students should consult with their advisor early in the application process to determine eligibility of previous work. Students wanting credit for work experience or workshop participation will be asked to supply a portfolio of work which will be evaluated by program faculty.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Laboratory Science (4CR)
- Mathematics (3-4CR) - 1000 level or higher

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives (8-11CR)

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements (Minimum 32 credits)

Students must have a "C" or better in all major required coursework.

- GEOG 1080 - Introduction to GPS and Maps (3CR)
- GEOG 1100 - Introduction to GIS (4CR) 4
- GEOG 1110 - Management and Implementation of GIS (4CR) 4
- GEOG 2100 - Advanced GIS (4CR)
- GEOG 2150 - Map Use and Analysis (3CR)

Additional Requirements (14 credits)

Students should select a minimum of 14 credits from the following list of courses to satisfy their area of expertise. Electives to be selected in consultation with advisor.

- AGRI 1020 - GPS and GIS in Agriculture (2CR)
- CMAP 1815 - Database Applications (3CR)
- COSC 1010 - Introduction to Computer Science (4CR)
- COSC 1030 - Computer Science I (4CR)
- COSC 2030 - Computer Science II (4CR)
- COSC 2405 - User Interface Design (2CR)
- COSC 2406 - Object-oriented Programming (4CR)
- ES 1060 - Introduction to Engineering Problem Solving (3CR)

- ENTK 1010 - Elements of Surveying (3CR)
- ENTK 1510 - Drafting I (4CR)
- ENTK 2550 - Civil Drafting I (4CR)
- EXTR 1500 - Geology of Extractive Resources (3CR)
- EXTR 2520 - Introduction to Well Logging (3CR)
- EXTR 2550 - Geologic Computing Methods (3CR)
- EXTR 2560 - Energy Policy and Economics (3CR)
- EXTR 2570 - Introduction to Seismic Interpretation (3CR)
- GEOG 1000 - World Regional Geography (3CR)
- GEOG 1050 - Introduction to Environmental and Natural Resources (3CR)
- GEOG 2480 - GIS Cooperative Work Experience
- GEOG 2490 - Topics: Subtitle
- GEOL 1100 - Physical Geology (4CR)
- GEOL 2150 - Geomorphology (4CR)
- RETK 2500 - Basic Site Planning (3CR)
- Any BIOL or FIRE course may be taken with advisor approval.

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Geographic Information Systems Certificate

Certificate Requirements

Students must have a "C" or better in all major required coursework.

- GEOG 1080 - Introduction to GPS and Maps (3CR)
- GEOG 1100 - Introduction to GIS (4CR) 4
- GEOG 1110 - Management and Implementation of GIS (4CR) 4
- GEOG 2100 - Advanced GIS (4CR)
- GEOG 2150 - Map Use and Analysis (3CR)

Note:

The normal length of this program is 9 months.

Graduation Requirements For specific graduation requirements see "Degree Requirements".

Geology

The geology department offers courses of general interest and many courses that meet requirements of laboratory physical sciences. Many of the advanced geology classes (generally sophomore level) will transfer to four-year institutions and count toward a degree in geology; however, it is incumbent upon the student to check with the school to which they will eventually transfer to determine applicability and transferability. Sophomore-level geology classes will be offered only if there is sufficient student interest and demand.

The transfer school of choice and anticipated specialty are considerations in selecting mathematics courses and electives. At least two semesters each of calculus and physics are required at most schools. In addition, many schools require a minimum of two semesters of world language. World language will count toward the general education humanistic requirements at Casper College and at many four-year schools. Consult the transfer school's catalog and your advisor to work out a program.

Geology, A.S.

The geology department offers courses of general interest and many courses that meet requirements of laboratory physical sciences. Many of the advanced geology classes (generally sophomore level) will transfer to four-year institutions and count toward a degree in geology; however, it is incumbent upon the student to check with the school to which they will eventually transfer to determine applicability and transferability. Sophomore-level geology classes will be offered only if there is sufficient student interest and demand.

The transfer school of choice and anticipated specialty are considerations in selecting mathematics courses and electives. At least two semesters each of calculus and physics are required at most schools. In addition, many schools require a minimum of two semesters of world language. World language will count toward the general education humanistic requirements at Casper College and at many four-year schools. Consult the transfer school's catalog and your advisor to work out a program.

Completion of this degree can be used to either gain immediate employment as a geological technician or demonstrates fulfillment of the first half of

requirements for transfer students planning to complete a bachelor's degree in geology.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study

1. Exploration and Participation

- GEOL 1100 - Physical Geology (4CR)
or
- GEOL 1500 - Water, Dirt, and Earth's Environment (4CR)
- MATH 1400 - Pre-Calculus Algebra (4CR)
(or higher)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming Constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements (Minimum 32 credits)

All of the following:

- CHEM 1025 - Chemistry I (3CR)
- CHEM 1028 - Chemistry Laboratory I (1CR)
- GEOL 2000 - Geochemical Cycles and the Earth System (4CR)
or
- GEOL 2050 - Principles of Paleontology (3CR)

- GEOL 2005 - Introduction to Geophysics (4CR)
- GEOL 2010 - Mineralogy and Petrography I (5CR)
- GEOL 2100 - Stratigraphy and Sedimentation (4CR)
- Math - Additional 3CR (1400 level or higher)

Electives (choose 11 credits from the following):

- ATSC 2000 - Introduction to Meteorology (4CR)
- CHEM 1035 - Chemistry II (3CR)
- CHEM 1038 - Chemistry Laboratory II (1CR)
- GEOG - Any geography course
- GEOL - Any geology course
- MATH 2200 - Calculus I (4CR)
- MATH 2205 - Calculus II (4CR)
- MATH 2210 - Calculus III (4CR)
- MATH 2250 - Elementary Linear Algebra (3CR)
- PHYS 1110 - General Physics I (4CR)
or
- PHYS 1310 - College Physics I (4CR)
- STAT - Any statistics course
- Other appropriate courses approved by advisor

Note:

The normal length of this program is two academic years at 16-18 credit hours per semester.

To obtain a degree in geology, a student must obtain a grade of "C" or better in all major requirements.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Health Science

The Associate of Science in Health Science supports degree work that can be accomplished during the time a student may be waiting for admission to a specific program. Only one health science degree may be earned while enrolled at Casper College. Students will be

advised by faculty who are involved in the program of interest and will assist with the selection of additional electives that are required to graduate.

Health Science, A.S.

- Athletic Training Emphasis
- Pre-Medical Lab Technician Training Emphasis
- Pre-Nursing Emphasis
- Pre-Occupational Therapy Assistant Emphasis
- Pre-Paramedic Technology Emphasis
- Pre-Pharmacy Technology Emphasis
- Pre-Radiography Emphasis
- Pre-Respiratory Therapy Emphasis

Recommended Curriculum

General Education: (Minimum of 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Laboratory Science (8CR)
- MATH 1000 - Problem Solving (3CR)
or
- MATH 1400 - Pre-Calculus Algebra (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming Constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements (Minimum of 28 credits)

Allied Health Courses (2CR)

- HLTK 1500 - Introduction to Health Care and Services (2CR)

Major Emphasis (Minimum 26 credits)

See a program director or faculty for specific prerequisites for entry into a health science program. Additional courses of choice will need to be taken to complete the remaining 26 hours for major emphasis.

Athletic Training Emphasis

- BIOL 1000 - Introduction to Biology I (4CR)
or
- BIOL 1010 - General Biology I (4CR)
- FCSC 1141 - Principles of Nutrition (3CR)
- KIN 1020 - Taping and Wrapping for Orthopedic Injuries (1CR)
- KIN 1052 - Introduction to Athletic Training (3CR)
- KIN 2050 - Functional Kinesiology (3CR)
- MATH 1400 - Pre-Calculus Algebra (4CR)
- ZOO 2040 - Human Anatomy (3CR)
- ZOO 2041 - Human Anatomy Lab (1CR)
- Approved Electives (4CR)

Pre-Medical Lab Technician Training Emphasis

- BIOL 1000 - Introduction to Biology I (4CR)
or
- BIOL 1010 - General Biology I (4CR)
- CMAP 1505 - Introduction to Computers (1CR) *
- MLTK 1800 - Principles of Phlebotomy (3CR) *
- MLTK 1970 - Clinical Practicum: Phlebotomy (2CR) *
- MOLB 2210 - General Microbiology (4CR)
or
- MOLB 2240 - Medical Microbiology (4CR)
- PSYC 1000 - General Psychology (3CR)
- SOC 1000 - Introduction to Sociology (3CR) *
- Approved Electives (6CR)

*Students may successfully complete these courses to become eligible to sit for the Phlebotomy Technician national certification examination through the American Society of Clinical Pathology.

Pre-Nursing Emphasis

- HLTK 1300 - Nursing Boot Camp (1CR)
 - HMDV 1300 - On Course (2CR)
 - PSYC 1000 - General Psychology (3CR)
 - MATH 1400 - Pre-Calculus Algebra (4CR)
 - ZOO 2040 - Human Anatomy (3CR)
 - ZOO 2041 - Human Anatomy Lab (1CR)
 - ZOO 2110 - Human Physiology (4CR)
 - Approved Electives (8CR)
- * Moving to another emphasis or Casper College program may necessitate additional general education requirements.

Pre-Occupational Therapy Assistant Emphasis

- COTA 2300 - Fieldwork Integration I (2CR)
- KIN 2050 Functional Kinesiology (3CR)
- OOTH 2000 - Introduction to Occupational Therapy (2CR)
- PSYC 1000 - General Psychology (3CR)
- ZOO 2040 - Human Anatomy (3CR)
- ZOO 2041 - Human Anatomy Lab (1CR)
- ZOO 2110 - Human Physiology (4CR)
- Approved Electives (8CR)

Pre-Paramedic Technology Emphasis

- EMT 1500 - Emergency Medical Technician (9CR) *
 - HLTK 1200 - Medical Terminology (3CR)
 - HLTK 1625 - American Heart Association BLS for the Provider (.33CR) *
 - PSYC 1000 - General Psychology (3CR)
 - ZOO 2040 - Human Anatomy (3CR)
 - ZOO 2041 - Human Anatomy Lab (1CR)
 - ZOO 2110 - Human Physiology (4CR)
 - Approved Electives (3CR)
- * Completion of these courses is required to sit for the Emergency Medical Technician Examination.

Pre-Pharmacy Technology Emphasis

- CHEM 1005 - Basic Chemistry I (3CR)

- CHEM 1006 - Basic Chemistry Laboratory I (1CR)
- HLTK 1200 - Medical Terminology (3CR)
- HLTK 1625 - American Heart Association BLS for the Provider (.33CR)
- MATH 1400 - Pre-Calculus Algebra (4CR)
- ZOO 2040 - Human Anatomy (3CR)
- ZOO 2041 - Human Anatomy Lab (1CR)
- Approved Electives (11CR)

Pre-Radiography Emphasis

- COSC 1200 - Computer Information Systems (3CR)
- HLTK 1200 - Medical Terminology (3CR) *
- HLTK 1500 Introduction to Health Care and Services (2CR)
- MATH 1400 - Pre-Calculus Algebra (4CR)
- PSYC 1000 - General Psychology (3CR)
or
- SOC 1000 - Introduction to Sociology (3CR)
- ZOO 2040 - Human Anatomy (3CR)
- ZOO 2041 - Human Anatomy Lab (1CR)
- ZOO 2110 - Human Physiology (4CR)
- Approved Electives (5CR)

Pre-Respiratory Therapy Emphasis

- CHEM 1005 - Basic Chemistry I (3CR)
and
- CHEM 1006 - Basic Chemistry Laboratory I (1CR)
or
- PHYS 1050 - Concepts of Physics (4CR)
- HLTK 1200 - Medical Terminology (3CR)
- PSYC 1000 - General Psychology (3CR)
or
- SOC 1000 - Introduction to Sociology (3CR)
- ZOO 2040 - Human Anatomy (3CR)
- ZOO 2041 - Human Anatomy Lab (1CR)
- ZOO 2110 - Human Physiology (4CR)
- Approved Electives (8CR)

General Health Science Emphasis

- HLTK 1200 - Medical Terminology (3CR)
- HLTK 2560 - The Interprofessional Health Care Team (3CR)
- ZOO 2040 - Human Anatomy (3CR)

- ZOO 2041 - Human Anatomy Lab (1CR)
- Approved Electives (16CR)

Approved Electives

- ANTH 1100 - Introduction to Physical Anthropology (3CR)
or
- SOC 1000 - Introduction to Sociology (3CR)
- BIOL 1000 - Introduction to Biology I (4CR)
or
- BIOL 1010 - General Biology I (4CR)
- CHEM 1005 - Basic Chemistry I (3CR)
and
- CHEM 1006 - Basic Chemistry Laboratory I (1CR)
or
- CHEM 1025 - Chemistry I (3CR)
and
- CHEM 1028 - Chemistry Laboratory I (1CR)
- CMAP 1505 - Introduction to Computers (1CR)
- CMAP 1550 - E-Portfolio Development (1CR)
- FCSC 1141 - Principles of Nutrition (3CR)
- HLED 1006 - Personal and Community Health (3CR)
- HLTK 1000 - Principles of Healthcare Calculations (2CR)
- HLTK 1200 - Medical Terminology (3CR)
- HLTK 1625 - American Heart Association BLS for the Provider (.33CR)
- HLTK 1855 - Assistive Technology Practicum (3CR)
- HLTK 1860 - Introduction to Human Disease (3CR)
- HLTK 1865 - Equine Assisted Therapy Practicum (3CR)
- HLTK 1870 - Professionalism in Healthcare (3CR)
- HLTK 1875 - Gerontology Practicum (3CR)
- HLTK 1975 - Spanish for Health Care Workers (3CR)
- HLTK 2400 - Complementary and Alternative Therapies (CAT) and Nursing (3CR)
- HLTK 2550 - Understanding the Economics, Ethics, and Policies Influencing Health Care (3CR)
- HLTK 2560 - The Interprofessional Health Care Team (3CR)
- HLTK 2990 - Topics: (Subtitle)
- HMDV 1300 - On Course (2CR)

- KIN 1052 - Introduction to Athletic Training (3CR)
- KIN 2135 - Directed Study in Human Prosection (3CR)
- MOLB 2210 - General Microbiology (4CR) or
- MOLB 2240 - Medical Microbiology (4CR)
- PEPR 1005 - Introduction to Physical Education and Sport (2CR)
- PEPR 1052 - Care and Prevention of Athletic Injuries (3CR)
- PEPR 2030 - Motor Learning (3CR)
- PEPR 2090 - Foundations of Athletic Coaching (3CR)
- PEPR 2091 - Athletic Officiating I (2CR)
- PEPR 2100 - Theory of Coaching: Volleyball (2CR)
- PEPR 2135 - Personal Trainer Education (3CR)
- PEPR 2136 - Sports Nutrition (3CR)
- PEPR 2150 - Theory of Coaching: Basketball (2CR)
- PSYC 2300 - Developmental Psychology (3CR)
- RDTK 1500 - Introduction to Radiologic Technology (1CR)
- STAT 2050 - Fundamentals of Statistics (4CR) or
- STAT 2070 - Introductory Statistics for Social Science (4CR)
- ZOO 2140 - Cadaver Anatomy (4CR)
- ZOO 2110 - Human Physiology (4CR)

DISCLAIMER

Completion of the health science degree does not guarantee admission to a specific program.

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing

History

The study of history at Casper College is designed to prepare students for further work in the discipline or in other fields in the humanities and social sciences, and to give perspective on the issues and problems of the contemporary world. Undergraduate work in history can prepare the student for graduate study in the field and careers in government, the law, archive and museum management, and a number of other areas in the private sector. The skills of critical thinking and analysis which are honed by historical study are essential for all educated individuals and are useful in a wide variety of career applications.

History, A.A.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Laboratory Science (4CR)
- Mathematics (3CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR) AND
- ENGL 1020 - English II: Composition (3CR) OR
- ENGL 2005 - Technical Writing (3CR) OR
- ENGL 2020 - Introduction to Literature (3CR) OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- Cultural Environment (3CR)
- POLS 1000 - American and Wyoming Government (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- HIST 1110 - Western Civilization I (3CR)
- HIST 1120 - Western Civilization II (3CR)
- HIST 1211 - United States to 1865 (3CR)
- HIST 1221 - United States from 1865 (3CR)
- HIST 1251 - History of Wyoming (3CR)
- World language (all in same language) (8CR)
- Electives (9CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Hospitality Management

Hospitality and Tourism Management, A.A.S.

The hospitality management degree focuses on one of the fastest growing industries in the world. Hospitality includes, among others, focus areas in food and restaurant operations and management, the lodging industry and operations, parks and recreation, management, entrepreneurship, and conference centers. Students majoring in this area typically have an interest in owning or managing an enterprise or organization in the hospitality industry.

This is a nontransfer degree.

Recommended Curriculum

General Education (Minimum 17 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- BADM 1005 - Business Mathematics I (3CR)
- or
- MATH 1400 - Pre-Calculus Algebra (4CR)

2. Communication

- CO/M 1030 - Interpersonal Communication (3CR)
- or
- CO/M 2010 - Public Speaking (3CR)
- ENGL 1010 - English I: Composition (3CR)
- ENGL 1020 - English II: Composition (3CR)
- or
- BADM 1020 - Business Communications (3CR)

3. Relationship with the World

(One course minimum)

- Human Behavior
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- BADM 2010 - Business Law I (3CR)
- COSC 1200 - Computer Information Systems (3CR)
- HOSP 1520 - Introduction to Hospitality and Tourism Management (3CR)
- HOSP 1540 - Hotel Operations Management (3CR)
- HOSP 1560 - Convention Sales and Management (3CR)
- HOSP 2320 - Food and Beverage Management (3CR)
- HOSP 2525 - Recreation and Tourism Planning and Development (3CR)
- HOSP 2530 - Tourism Management (3CR)
- HOSP 2535 - Planning and Control for Food and Beverage Operations (3CR)
- IMGT 2400 - Introduction to Information Management (3CR)
- MGT 2100 - Principles of Management (3CR)
- MKT 1010 - Sales and Customer Relationship Management (3CR)
- MKT 2100 - Principles of Marketing (3CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

International Studies

The international studies program offers a broad interdisciplinary curriculum leading to an associate of arts degree. This program draws on courses from anthropology, economics, world language, geography, history, political science, and sociology. The curriculum provides a strong substantive background in world affairs along with analytic and language skills to prepare the student who wishes to pursue additional study and a career in government services, business, law or education.

International Studies, A.A.

This recommended curriculum is geared toward those students who are transferring to the University of Wyoming. Students who are planning to transfer to out-of-state institutions should refer to the requirements of their transfer institution.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Laboratory Science (biological and physical) (8CR)
- MATH 1000 - Problem Solving (3CR)
or
- MATH 1400 - Pre-Calculus Algebra (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR

- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- POLS 1000 - American and Wyoming Government (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- ANTH 1200 - Introduction to Cultural Anthropology (3CR)
- ECON 1010 - Principles of Macroeconomics (3CR)
- GEOG 1000 - World Regional Geography (3CR)
- HIST 1110 - Western Civilization I (3CR)
or
- HIST 1120 - Western Civilization II (3CR)
- INST 2350 - Introduction to Global Studies (3CR)
- POLS 1200 - Non-Western Political Cultures (3CR)
- POLS 2310 - Introduction to International Relations (3CR)
- SOC 1000 - Introduction to Sociology (3CR)
- World Language (all in same language) (8CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Liberal Arts

Liberal arts places special emphasis on multidisciplinary studies. This broad approach is beneficial for the student who wishes freedom to pursue intellectual curiosity and to become broadly knowledgeable.

This course of study appeals to students who may wish a good foundation of liberal studies to carry forward to an advanced or professional program or to students who have not yet identified for themselves a major course of study.

Liberal Arts, A.A.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Laboratory Science (4CR)
- MATH 1000 - Problem Solving (3CR)
or
- MATH 1400 - Pre-Calculus Algebra (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- Communication (3CR)
- PHIL 2300 - Ethics in Practice (3CR)
or
- PHIL 2420 - Critical Thinking (3CR)
- Literature (6CR)
- World language (8CR)
- Electives (12CR) - A variety of courses from departments the student has not used to fulfill general education requirements are strongly recommended. For example, courses in communication, computer/Internet skills, creative writing, fine arts, social science, business, philosophy, or other courses approved by the advisor.

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Machine Tool Technology

Machine Tool Technology, A.A.S.

Recommended Curriculum

General Education (Minimum 17 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

(One course minimum)

- Science
or
- Mathematics- 1000 level or higher

2. Communication

(One course minimum)

- Written or Oral Communication

3. Relationship with the World

(One course minimum)

- Human Behavior
- U.S. and Wyoming constitutions (3CR) required
- Cultural Environment

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- ENTK 1510 - Drafting I (4CR)
- MCHT 1570 - Machine Trades Computations (2CR)
- MCHT 1640 - Basic Machining Practice (10CR)
- MCHT 1650 - Intermediate Machining Practice (10CR)
- MCHT 1680 - Blueprint Reading (2CR)
- MCHT 1980 - Cooperative Work Experience (Machine Shop) (5CR needed for degree) or
- MCHT 2650 - Advanced Machining Practice (5CR)
- MCHT 2680 - Metallurgy (3CR)
- MCHT 2780 - Computer Numerical Control (CNC) Machining Center (4CR)
- MCHT 2790 - Computer Numerical Control (CNC) Turning Center (4CR)
- MCHT 2800 - Computer Assisted Manufacturing (3CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

To graduate with a certificate or degree, students must earn a "C" or better in all major requirements.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Machine Tool Technology Certificate

Certificate Requirements (35 credits)

- ENTK 1510 - Drafting I (4CR)
- MCHT 1570 - Machine Trades Computations (2CR)
- MCHT 1640 - Basic Machining Practice (10CR)
- MCHT 1650 - Intermediate Machining Practice (10CR)
- MCHT 1680 - Blueprint Reading (2CR)
- MCHT 2680 - Metallurgy (3CR)
- MCHT 2780 - Computer Numerical Control (CNC) Machining Center (4CR) or
- MCHT 2790 - Computer Numerical Control (CNC) Turning Center (4CR)

Note:

The normal length of this program is nine months.

Graduation Requirements

For specific graduation requirements see "Degree Requirements".

Manufacturing Technology

Manufacturing and Automation Technology, A.A.S.

The Manufacturing and Automation Technology program offers students the skills needed to enter the automated manufacturing industry that is rapidly implementing automation.

- *use CAD (Computer Aided Drafting) programs to design parts for the manufacturing process*
- *build parts using 3-D printers, CNC (Computer Numerical Control) machining and welding processes*
- *install, maintain, and repair automated systems*
- *program PLC (Programmable Logic Control) system to control an automated process*
- *Implement machine vision systems for quality control*
- *Implement and program a robot welder*

Recommended Curriculum
General Education (Minimum 17 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

Mathematics or Laboratory Science

- minimum 3 credits

2. Communication (3CR)

Written or Oral Communication

- minimum 3 credits

3. Relationship with the World

(One course minimum)

- POLS 1000 - American and Wyoming Government (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above. (7CR)

5. Physical Education (1CR)

Major Requirements

- ELTR 1515 - Basic AC/DC Electronics (2CR)
- ELTR 2815 - Programmable Logic Controllers (4CR)
- ENTK 1060 - Excel Technical Applications (3CR)
- ENTK 1650 - Mechanical Drafting and Design I (4CR)
- ENTK 2510 - CAD-3D Modeling (4CR)
- ENTK 2525 - Design and Manufacturing Methods I (4CR)
- MANF 2550 - Automation Control (3CR)
- MANF 2690 - Robot Welding (3CR)
- MCHT 1610 - Machine Tool Technology I (2CR)
- MCHT 1620 - Machine Tool Technology II (2CR)
- MCHT 2780 - Computer Numerical Control (CNC) Machining Center (4CR)
- MCHT 2790 - Computer Numerical Control (CNC) Turning Center (4CR)

- WELD 1820 - GMAW and GTAW Welding (2.5CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Manufacturing Technology Certificate

Certificate Requirements (Minimum 30 credits)

- ENTK 1510 - Drafting I (4CR)
- ENTK 1650 - Mechanical Drafting and Design I (4CR)
- ENTK 2510 - CAD-3D Modeling (4CR)
- ENTK 2525 - Design and Manufacturing Methods I (4CR)
- MCHT 1640 - Basic Machining Practice (10CR)
- MCHT 2780 - Computer Numerical Control (CNC) Machining Center (4CR)
- MCHT 2790 - Computer Numerical Control (CNC) Turning Center (4CR)
- WELD 1700 - General Welding (2.5CR needed for certificate)
- WELD 1820 - GMAW and GTAW Welding (2.5CR)
- WELD 1910 - Specialized Welding and Joining (3CR)

Note:

The normal length of this program is nine months.

Graduation Requirements For specific graduation requirements see "Degree Requirements".

Marketing

Retail Merchandising, A.A.S.

The Associate of Applied Science in Retail Merchandising is designed to provide students with a foundation in merchandising, management, and retailing principles. The core courses combined with the general education classes enable students to pursue a career in a variety of retail and merchandising outlets. The degree also prepares students to become part of a manager trainee program with major retailers.

This is a nontransfer degree.

Recommended Curriculum

General Education (Minimum 17 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- BADM 1005 - Business Mathematics I (3CR)
or
- MATH 1400 - Pre-Calculus Algebra (4CR)

2. Communication

- BADM 1020 - Business Communications (3CR)
- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

(One course minimum)

- Human Behavior
- U.S. and Wyoming constitutions (3CR) required
- Cultural Environment

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- BADM 2010 - Business Law I (3CR)
- BADM 2340 - Business Organizations and Government Regulations (3CR)
- COSC 1200 - Computer Information Systems (3CR)
- IMGT 2400 - Introduction to Information Management (3CR)
- MGT 1200 - Human Resources Management (3CR)
- MGT 2100 - Principles of Management (3CR)
- MKT 1010 - Sales and Customer Relationship Management (3CR)
- MKT 1100 - Retailing (3CR)
- MKT 2000 - E-Marketing (3CR)
- MKT 2100 - Principles of Marketing (3CR)
- MKT 2480 - Cooperative Work Experience (Marketing) or electives (1-9CR)
- Electives - (3CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Marketing, A.S.

The Associate of Science in Marketing is designed for those students majoring in marketing who wish to transfer to four year institutions within the region. Students should research the institution where they plan to obtain their bachelor's degree to determine business course requirements and should choose from Casper College course offerings accordingly.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study

1. Exploration and Participation

- Laboratory Science (4CR)
- MATH 1400 - Pre-Calculus Algebra (4CR)
- STAT 2050 - Fundamentals of Statistics (4CR)
or
- STAT 2070 - Introductory Statistics for Social Science (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- BADM 2010 - Business Law I (3CR)
- IMGT 2400 - Introduction to Information Management (3CR)
- MGT 2100 - Principles of Management (3CR)
- MKT 1300 - Advertising (3CR)
- MKT 2100 - Principles of Marketing (3CR)
- MKT 2200 - Consumer Behavior (3CR)

In addition, select six credits from the list below:

- BADM 2195 - Entrepreneurship (3CR)
- MKT 1010 - Sales and Customer Relationship Management (3CR)
- MKT 1100 - Retailing (3CR)

- MKT 2000 - E-Marketing (3CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

All classes in the major must be passed with a "C" or better.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Marketing Certificate

The recommended curriculum will prepare students for various entry level positions in marketing including retailing, direct sales, customer service, etc.

Certificate Requirements

General Education

- CO/M 1030 - Interpersonal Communication (3CR)
- ENGL 1010 - English I: Composition (3CR)

Major Requirements

- BADM 1005 - Business Mathematics I (3CR)
or
- MATH 1400 - Pre-Calculus Algebra (4CR)
- BADM 2010 - Business Law I (3CR)
- MGT 2100 - Principles of Management (3CR)
- MKT 1010 - Sales and Customer Relationship Management (3CR)
- MKT 1300 - Advertising (3CR)
- MKT 2000 - E-Marketing (3CR)
- MKT 2100 - Principles of Marketing (3CR)
- MKT 2200 - Consumer Behavior (3CR)

Note:

The normal length of this program is nine months.

Graduation Requirements For specific graduation requirements see "Degree Requirements".

Retail Management Certificate

The retail management certificate is designed for individuals with career interests in the retail management field. It is especially appropriate for those individuals employed in retailing who are seeking skills and knowledge that may prepare them for career advancement. This certificate is endorsed by the Western Association of Food Chains.

Certificate Requirements

- BADM 1005 - Business Mathematics I (3CR)
- BADM 1020 - Business Communications (3CR)
or
- ENGL 1010 - English I: Composition (3CR)
- CO/M 1030 - Interpersonal Communication (3CR)
or
- CO/M 2010 - Public Speaking (3CR)
- COSC 1200 - Computer Information Systems (3CR)
- MGT 2100 - Principles of Management (3CR)
- MKT 1100 - Retailing (3CR)
- MKT 2100 - Principles of Marketing (3CR)

Note:

The normal length of this program is nine months.

Graduation Requirements For specific graduation requirements see "Degree Requirements".

Mathematics

The mathematics department offers courses to prepare the student for advanced work, courses required in other programs, and courses that contribute to a general studies program.

Twenty or more credits may be earned toward a major in mathematics.

All initial placement in mathematics is established by the appropriate ACT or COMPASS exam score.

Credit by examination may be awarded if the procedures as described under "Credit by Examination" are followed.

A grade of "C" or better must be attained in a mathematics course in order for it to qualify as a prerequisite for another mathematics course.

Mathematics — Secondary Education, A.S.

This degree is for those who plan to teach high school mathematics.

The Casper College education program provides the first two years of a baccalaureate degree program, which leads to certification of elementary and secondary public school teachers. Students who follow the recommended curriculum may also receive an associate of arts or an associate of science degree from Casper College.

Students should consult the catalogs of the colleges or universities to which they are transferring for requirements.

Notice of background check: All education students are subject to background checks and fingerprinting for selected educational coursework involving student contact and future employment as professionals in education and related fields.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Laboratory Science (4CR)
- Math requirement included in the major requirements.

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- PSYC 1000 - General Psychology (3CR)

- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- EDCI 1500 - Introduction to Teaching (1CR)
- EDEX 2484 - Introduction to Special Education (3CR)
- EDFD 2020 - Foundations of Education (3CR)
- EDFD 2100 - Educational Psychology (3CR)
- EDUC 2100 - Public School Practicum (4CR)
- ITEC 2360 - Teaching with Technology (3CR)
- MATH 2200 - Calculus I (4CR)
- MATH 2205 - Calculus II (4CR)
- MATH 2210 - Calculus III (4CR)
- MATH 2250 - Elementary Linear Algebra (3CR)
- MATH 2800 - Math Majors Seminar (2CR)
- PSYC 2300 - Developmental Psychology (3CR)
- STAT 2050 - Fundamentals of Statistics (4CR)

Secondary Education

Secondary Education majors at Casper College who intend to transfer to the University of Wyoming and most accredited secondary education programs need to complete the following courses prior to entering Phase 2:

- EDEX 2484 - Introduction to Special Education (3CR)
- EDFD 2020 - Foundations of Education (3CR)
- EDFD 2100 - Educational Psychology (3CR)
- EDUC 2100 - Public School Practicum (4CR)
- ITEC 2360 - Teaching with Technology (3CR)
- PSYC 2300 - Developmental Psychology (3CR)

Note:

Some bachelor degrees require Adolescent Psychology.

Student advisement for secondary education is done by the department which offers the subject area that the student wants to teach.

The normal length of this program is two academic years at 16-18 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Mathematics, A.S.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Included in the major requirements below

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements (Minimum 28 credits)

- MATH 2200 - Calculus I (4CR)
- MATH 2205 - Calculus II (4CR)
- MATH 2210 - Calculus III (4CR)
- MATH 2250 - Elementary Linear Algebra (3CR)
- COSC 1010 - Introduction to Computer Science (4CR)
- COSC 2300 - Discrete Structures (3CR)
or
- MATH 2310 - Applied Differential Equations I (3CR)
- MATH 2800 - Math Majors Seminar (2CR)
- STAT 2050 - Fundamentals of Statistics (4CR)
- Laboratory sciences (8CR)
- Electives (6CR)

Note:

The normal length of this program is two academic years at 17-19 credit hours per semester.

To obtain a degree in mathematics, a student must obtain a grade of "C" or better in all major requirements.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Medical Lab Technician

Casper College offers an Associate of Science in Medical Laboratory Technician (MLT) and a certificate of completion for phlebotomy training. Both options consist of non-MLT as well as MLT courses, and students are integrated into all aspects of college life. In addition to the Casper College application for admission, a student must complete and submit to the director a departmental application prior to clinical training when all eligibility requirements are met.

Background check and drug/alcohol policy

Students enrolled in the MLT program will participate in clinical experiences in a variety of agencies. Prior to participating in the clinical experiences, students will be subject to that agency's requirements for a

background check, drug testing and/or drug abuse prevention policies. Students are then subject to the random drug testing policy of that agency.

Clinical accessibility policy

The MLT program utilizes a variety of health care agencies in the local community and throughout Wyoming for student clinical experiences. If you have been employed in one or more of the agencies and are not eligible for rehire as an employee, that agency may not permit you to participate in the essential clinical component of the program.

Please contact the human resources department of the affected agency and request documentation that states the agency position on your participation in the clinical component of the program. If you receive a negative response from that agency, you are automatically ineligible to apply to that agency and may have to select an alternate training site located in another city. A response indicating you will be permitted to attend clinicals at that agency will be given to the program director prior to the selection process for admission to the program. If you are unable to fulfill clinical requirements due to a previous employer issue and have not complied with the above, you could be dismissed from the program or may not be able to obtain a clinical training opportunity.

Your signature on the application indicates you have read the above and will comply as indicated.

An additional resource for information regarding MLT program curriculum and student training can be obtained from:

National Accrediting Agency for
Clinical Laboratory Science (NAACLS)
5600 N. River Road, Suite 720
Rosemont, IL, 60018
Phone: (773) 714-8880
Internet at <http://www.naacls.org>.

Core Performance Standards for Admission and Progression

Critical thinking: Critical thinking ability to exercise non-clinical and clinical judgment in a timely manner.

Interpersonal: Interpersonal abilities sufficient to interact professionally and therapeutically with peers, faculty, staff, administrators, patients/clients, families, and groups from a variety of social, emotional, cultural, and intellectual backgrounds.

Communication: Communication skills sufficient for interaction with peers, faculty, staff, administrators, patients/clients, families, and groups in verbal, nonverbal and written form.

Mobility: Physical abilities sufficient to move from room to room, safely perform treatments/procedures, and assist patients/clients; lift and transfer patients/clients; manipulate equipment; walk and/or stand for extended periods of time.

Motor skills: Gross and fine motor skills sufficient to provide safe and effective patient/client care.

Hearing: Auditory ability sufficient to monitor and safely assess health needs.

Visual: Visual ability with or without corrective lenses sufficient for observation and assessment necessary in safe patient/client care.

Tactile: Tactile ability sufficient for physical assessment of patient/client care.

Professionalism: The ability to understand and demonstrate sufficient respect for others in non-verbal, verbal, and written communications in the classroom, laboratory, clinical settings, in the Casper College community, and in related public settings. The ability to demonstrate sufficient understanding of the cumulative effect that behavior, appearance, and communication has on the health science professional image.

Eligibility requirements

To be considered for admission into the associate of science MLT program, the applicant must:

1. Have graduated from high school or have earned a GED;
2. Submit a completed application form with all high school and college transcripts and GED certification (if applicable) to the admissions office.
3. Have a composite score of 18 or better on the ACT if out of high school less than two years, and have completed courses recommended by the test with a "C" or better, or
4. Have taken the COMPASS test and have completed courses recommended by the test with a "C" or better, or successfully completed college courses;
5. Students admitted to the MLT Program must be students in good standing at Casper College, must have earned a "C" or better in prerequisite and MLTK coursework, and have an overall GPA of 2.0.
6. An application to the MLT Program must be submitted to the Program Director once all prerequisite coursework has been completed and the student has successfully completed the entrance competency exam. Applications for the MLT Program are due in the semester prior to the clinical practice. Obtaining a clinical practice site is competitive and

students will undergo an interview/ selection process to determine and assign clinical practicum locations. Since training opportunities cannot be guaranteed, if students are not initially placed they will be placed on an alternate list for the next available training session.

7. Health Requirements: You will need to obtain proof of the following health requirements to train in phlebotomy and MLT student laboratory or clinical practice: Health Insurance; Health Provider BLS certification; Tuberculosis skin testing; Hepatitis B vaccination; Measles, Mumps Rubella and Tetanus vaccinations. To maintain ongoing enrollment in the MLT program curriculum you may be required to meet annual requirements as specified by the clinical agency. For example, some agencies may require current certification in BLS for the Provider Cardiopulmonary Resuscitation (CPR). Students may take HLTK 1625 to meet this requirement.
8. Students who have appropriate experience or certification as a phlebotomist may receive credit for Principles of Phlebotomy (MLTK 1800) and Phlebotomy Practicum (MLTK 1970). Credit will be determined by the Registrar and the Director of the MLT Program.
9. Applicants must meet certain essential functions as defined by NAACLS. If you feel that you do not meet these essential functions, careful consideration should be made and advisement received before entering the MLT Program. Essential functions are the abilities and essential functions that a student must be able to perform to be successful in the learning experiences and completion of the program. Please obtain a MLT Program Student Handbook from the director of the MLT Program or visit the following Web site (http://www.caspercollege.edu/medical_lab_tech/index.html) to review these essential functions.

Certification eligibility or phlebotomy examination

Upon completion of the MLT program, students are eligible for and expected to write a certification examination given by the ASCP Board of Certification. Other agencies are available.

Certification:

ASCP Board of Certification • 33 West Monroe, Suite 1600
Chicago, IL 60603
Phone: 312-541-4999

Medical Laboratory Technician, A.S.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Included in the major requirements below

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- ANTH 1200 - Introduction to Cultural Anthropology (3CR)
or
- SOC 1000 - Introduction to Sociology (3CR)
or
- PSYC 1000 - General Psychology (3CR)
- U.S. and Wyoming constitutions (1-3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- BIOL 1000 - Introduction to Biology I (4CR)
or
- BIOL 1010 - General Biology I (4CR)

- CHEM 1005 - Basic Chemistry I (3CR)
and
- CHEM 1006 - Basic Chemistry Laboratory I (1CR)
or
- CHEM 1025 - Chemistry I (3CR)
and
- CHEM 1028 - Chemistry Laboratory I (1CR)
- MATH 1000 - Problem Solving (3CR)
or
- MATH 1400 - Pre-Calculus Algebra (4CR)
- CMAP 1505 - Introduction to Computers (1CR)
- MLTK 1500 - Clinical Hematology and Hemostasis (3CR)
- MLTK 1600 - Clinical Immunohematology (3CR)
- MLTK 1700 - Microscopy: Urinalysis and Body Fluids (2CR)
- MLTK 1800 - Principles of Phlebotomy (3CR)
- MLTK 2500 - Clinical Chemistry (3CR)
- MLTK 2600 - Clinical Microbiology I (2CR)
- MLTK 2650 - Clinical Microbiology II (2CR)
- MLTK 2700 - Immunology (4CR)
- MLTK 2800 - Clinical Pathophysiology (4CR)
- MLTK 2971 - Clinical Practicum: Hematology (2CR)
- MLTK 2972 - Clinical Practicum: Chemistry (2CR)
- MLTK 2973 - Clinical Practicum: Immunohematology (2CR)
- MLTK 2974 - Clinical Practicum: Microbiology (2CR)
- MLTK 2976 - Clinical Practicum: Serology (1CR)
- MLTK 2977 - Clinical Practicum: Urinalysis and Body Fluids (1CR)
- MOLB 2210 - General Microbiology (4CR)
or
- MOLB 2240 - Medical Microbiology (4CR)

Note:

Courses listed are consistent with the required curriculum for Baccalaureate Medical Technology programs. Additional credit hours beyond the AS degree may be required to meet prerequisite coursework requirements for the BS programs.

The normal length of this program is two academic years at 16-18 credit hours per semester.

Graduation Requirements A minimum of 71 approved semester credits are required for graduation.

For specific graduation requirements see "Degree Requirements".

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, and Associate of Applied Science degrees.

Phlebotomy Technician Training Certificate

This curriculum is designed to prepare students for employment as a phlebotomist in a hospital, private laboratory, or physicians' office. Students may complete the following coursework to become eligible to sit for Phlebotomy Technician national certification examination through the American Society of Clinical Pathology.

Certificate Requirements

- CMAP 1505 - Introduction to Computers (1CR)
- MLTK 1800 - Principles of Phlebotomy (3CR)
- MLTK 1970 - Clinical Practicum: Phlebotomy (2CR)
- CO/M 1505 - Communication for Professional Success (3CR) or
- ENGL 1010 - English I: Composition (3CR) and one of the following:
- SOC 1000 - Introduction to Sociology (3CR)
- ANTH 1200 - Introduction to Cultural Anthropology (3CR)
- PSYC 1000 - General Psychology (3CR)

Note:

The normal length of this program is 16 weeks.

Graduation Requirements For specific graduation requirements see "Degree Requirements".

Music

Music Program Mission Statement

The Music Department shall prepare students with a foundation for a career in music, while providing educational enrichment and cultural opportunities for the college and the greater community.

Music department offerings are not limited to music majors. Students in other programs are encouraged to

participate in music department courses, studio lessons, and performing ensembles.

The music department offers three curricula for majors: the Associate of Arts in Music, the Associate of Fine Arts in Music Education, and the Associate of Fine Arts in Instrumental or Vocal Performance.

Casper College is an accredited institutional member of the National Association of Schools of Music [www.arts-accredit.org].

The music department collaborates with the department of theatre and dance in offering the Associate of Arts in Musical Theatre Performance. (The recommended curriculum is located in the Theatre and Dance portion of the catalog.) Casper College is an accredited institutional member of the National Association of Schools of Theatre [www.arts-accredit.org].

Music majors must:

1. Declare a major instrument;
2. Enroll in one- or two-credit hours of music studio in the declared instrument and curriculum, which includes studio classes and a final jury;
3. Perform in at least one major ensemble (usually Concert Band, MUSC 1378; Collegiate Chorale, MUSC 1400; or Chamber Orchestra, MUSC 1440). All students expecting to enroll in "audition only" music ensemble courses must contact the appropriate instructor for permission;
4. Pass the Piano Proficiency Examination (MUSC 2395), normally at the conclusion of Class Piano IV (MUSC 2303). All music majors enroll in the Class Piano sequence, and are placed at the appropriate level as determined by the piano faculty;
5. Successfully complete a minimum of four semesters of Convocation (MUSC 0200).
6. Prior to registering for the music theory course sequence, all prospective music majors must complete the Theory Placement Exam. Students who do not demonstrate entry-level proficiency in music reading and/or aural theory rudiments will enroll in Music Fundamentals (MUSC 1010), which is offered concurrently with Written Theory I, Aural Theory I, and Class Piano I, the three courses that form the core of the music theory sequence.

The recommended music curriculum is designed to concentrate on the broad discipline of music within the liberal arts framework. The offerings are also available to those who plan to transfer to a Bachelor of Arts program, as well as those who are interested in enriching their musical experiences.

Music, A.A.

The Casper College Music Department provides students with a comprehensive and individualized education to prepare them for lifelong music-making as professional and non-professional musicians while enriching the cultural life of our community.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Laboratory Science (4CR)
- Mathematics (3CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- MUSC 0200 - Convocation (0CR) (each semester)
- MUSC 1020 - Music Technology (1CR)
- MUSC 1030 - Written Theory I (3CR)
- MUSC 1035 - Aural Theory I (1CR)

- MUSC 1040 - Written Theory II (3CR)
- MUSC 1045 - Aural Theory II (1CR)
- MUSC 1300 - Class Piano I (1CR)
- MUSC 1301 - Class Piano II (1CR)
- MUSC 2030 - Written Theory III (3CR)
- MUSC 2035 - Aural Theory III (1CR)
- MUSC 2040 - Written Theory IV (3CR)
- MUSC 2045 - Aural Theory IV (1CR)
- MUSC 2050 - Music History Survey I (3CR)
- MUSC 2055 - Music History Survey II (3CR)
- MUSC 2302 - Class Piano III (1CR)
- MUSC 2303 - Class Piano IV (1CR)
- MUSC 2395 - MUSC 2395-01: Piano Proficiency Exam
- MUSC 1xxx Music Studio (2CR)
- MUSC 2xxx Music Studio (2CR)
- Major ensemble (4CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Music Education, A.F.A.

Recommended Curriculum

The recommended curriculum is designed for the music major who plans to transfer to a Bachelor of Music program. The offerings are also available to those who are interested in enriching their musical experiences.

General Education (Minimum 17 credits)

General education coursework can be completed from within or outside of the major field of study. One course minimum in the following general education listings.

1. Exploration and Participation (3-4CR)

- Science
- MATH 1000 - Problem Solving (3CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World (3-4 CR)

- Human Behavior
- U.S. and Wyoming Constitutions (3CR)
- Cultural Environment
- PSYC 1000 - General Psychology (3CR)

4. General Education Electives (6-7CR)

- Must be chosen from areas 1, 2, or 3 above.
- UW-bound students should take POLS 1000
- UW-bound students should take PSYC 2300
- POLS 1000 - American and Wyoming Government (3CR)
- PSYC 2300 - Developmental Psychology (3CR)

5. Physical Education (1CR)

Major Requirements – Music Education (47-51 credits)

- MUSC 0200 - Convocation (0CR)
- MUSC 1003 - Introduction to Life as a Music Major (3CR)
- MUSC 1025 - Introduction to Music Education (2CR)
- MUSC 1030 - Written Theory I (3CR)
- MUSC 1035 - Aural Theory I (1CR)
- MUSC 1040 - Written Theory II (3CR)
- MUSC 1045 - Aural Theory II (1CR)
- MUSC 1300 - Class Piano I (1CR)
- MUSC 1301 - Class Piano II (1CR)
Students are to select 2 credits of methods classes from MUSC PSM courses.
- MUSC 1310 - Public School Methods: Brass Methods I (1CR)
- MUSC 1315 - Public School Methods: Brass Methods II (1CR)
- MUSC 1330 - PSM: String Methods I (1CR)
- MUSC 1335 - PSM: String Methods II (1CR)

- MUSC 1350 - PSM: Woodwind Methods I (1CR)
- MUSC 1355 - PSM: Woodwind Methods II (1CR)
- MUSC 2030 - Written Theory III (3CR)
- MUSC 2035 - Aural Theory III (1CR)
- MUSC 2040 - Written Theory IV (3CR)
- MUSC 2045 - Aural Theory IV (1CR)
- MUSC 2050 - Music History Survey I (3CR)
- MUSC 2055 - Music History Survey II (3CR)
- MUSC 2302 - Class Piano III (1CR)
- MUSC 2303 - Class Piano IV (1CR)
- MUSC 2395 - MUSC 2395-01: Piano Proficiency Exam
- MUSC 1xxx Music Studio (2CR)
- MUSC 2xxx Music Studio (2CR)
- Major ensemble (4CR)

If vocal emphasis, add these two credits:

- MUSC 2320 - Diction for Singers I (2CR)

Note:

The normal length of this program is two academic years at 17-19 credits hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Music Performance, A.F.A.

Associate of Fine Arts Vocal Music Performance

The recommended curriculum is designed for the music major who plans to transfer to a Bachelor of Music program. The offerings are also available to those who are interested in enriching their musical experiences.

Recommended Curriculum

General Education (Minimum 17 credits)

General education coursework can be completed from within or outside of the major field of study. One course minimum in the following general education listings.

1. Exploration and Participation (3-4CR)

- Science
- Mathematics - 1000 level or higher

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World (7 CR)

- Human Behavior (3CR)
- U.S. and Wyoming Constitutions (3CR)
- World Languages (4CR) - one of the following:
 - FREN 1010
 - GERM 1010

4. General Education Electives (2-3CR)

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements — Vocal Music Performance (49 credits)

- MUSC 0200 - Convocation (0CR) (each semester)
- MUSC 1020 - Music Technology (1CR)
- MUSC 1030 - Written Theory I (3CR)
- MUSC 1035 - Aural Theory I (1CR)
- MUSC 1040 - Written Theory II (3CR)
- MUSC 1045 - Aural Theory II (1CR)
- MUSC 1300 - Class Piano I (1CR)
- MUSC 1301 - Class Piano II (1CR)
- MUSC 1400 - Collegiate Chorale (1CR) (each sem., min. 4)
- MUSC 2030 - Written Theory III (3CR)
- MUSC 2035 - Aural Theory III (1CR)
- MUSC 2040 - Written Theory IV (3CR)
- MUSC 2045 - Aural Theory IV (1CR)
- MUSC 2050 - Music History Survey I (3CR)

- MUSC 2055 - Music History Survey II (3CR)
- MUSC 2302 - Class Piano III (1CR)
- MUSC 2303 - Class Piano IV (1CR)
- MUSC 2320 - Diction for Singers I (2CR)
- MUSC 2325 - Diction for Singers II (2CR)
- MUSC 2395 - MUSC 2395-01: Piano Proficiency Exam
- MUSC 1270 - Studio: Voice I (2CR) required
- MUSC 2270 - Studio: Voice II (4CR) required
- MUSC Recommended Elective (3CR) (World Music, Rock History, or Jazz History)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Associate of Fine Arts Instrumental Performance

The recommended curriculum is designed for the music major who plans to transfer to a Bachelor of Music program. The offerings are also available to those who are interested in enriching their musical experiences.

Recommended Curriculum

General Education (Minimum 17 credits)

General education coursework can be completed from within or outside of the major field of study. One course minimum in the following general education listings.

1. Exploration and Participation (3-4CR)

- Science
- Mathematics - 1000 level or higher

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World (3-4 CR)

- Human Behavior

- U.S. and Wyoming Constitutions (3CR)
- Cultural Environment

4. General Education Electives (6-7CR)

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements — Instrumental Music Performance (42 credits)

- MUSC 0200 - Convocation (0CR) (each semester)
- MUSC 1020 - Music Technology (1CR)
- MUSC 1030 - Written Theory I (3CR)
- MUSC 1035 - Aural Theory I (1CR)
- MUSC 1040 - Written Theory II (3CR)
- MUSC 1045 - Aural Theory II (1CR)
- MUSC 1300 - Class Piano I (1CR)
- MUSC 1301 - Class Piano II (1CR)
- MUSC 2030 - Written Theory III (3CR)
- MUSC 2035 - Aural Theory III (1CR)
- MUSC 2040 - Written Theory IV (3CR)
- MUSC 2045 - Aural Theory IV (1CR)
- MUSC 2050 - Music History Survey I (3CR)
- MUSC 2055 - Music History Survey II (3CR)
- MUSC 2302 - Class Piano III (1CR)
- MUSC 2303 - Class Piano IV (1CR)
- MUSC 2395 - MUSC 2395-01: Piano Proficiency Exam
- MUSC 1xxx Music Studio, major instrument (4CR)
- MUSC 2xxx Music Studio, major instrument (4CR)
- Major ensemble, instrumental (4CR)
- MUSC Recommended Elective (8CR) (World Music, Rock History, or Jazz History)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Nursing

In the past, Casper College has offered two associate degrees in the Nursing Studies (NRST) curriculum: the Associate of Applied Science and Associate of Science in Nursing which are two-year degrees. The Casper College H.E. Stuckenhoff Department of Nursing has joined with the other Community Colleges and the University of Wyoming to adopt the statewide ReNEW curriculum (Revolutionizing Nursing Education in Wyoming). ReNEW is a baccalaureate curriculum with an associate degree benchmark at community colleges awarding the Associate Degree in Nursing (ADN), allowing the graduate to take the NCLEX –RN, become a Registered Nurse, and then continue on toward a BSN through the University of Wyoming. As the ReNEW curriculum NURS courses are offered beginning in Fall 2016 through Spring 2018, the corresponding NRST course in the Associate of Science (AS) and the Associate of Applied Science (AAS) will no longer be available.

All options consist of non-nursing as well as nursing courses, and nursing students are integrated into all aspects of college life. In addition to the Casper College application for admission, a student desiring admission to the nursing program must complete and submit to the director a departmental application when all eligibility requirements are met.

An additional resource for information regarding the program can be obtained from:

Accreditation Commission for Education in Nursing
(ACEN)
3343 Peachtree Road, NE
Suite 850
Atlanta, GA 30326
1-404-975-5000
www.ACENursing.org

Background check and drug/alcohol policy

Students enrolled in any of the health science programs will participate in clinical experiences in a variety of agencies. Prior to participating in the clinical experiences, students will be subject to that agency's requirements for a background check, drug testing and/or drug abuse prevention policies. Students are then subject to the random drug testing policy of that agency.

Following graduation, several of the state and/or national licensing or certification (registry) boards, including the Wyoming State Board of Nursing, may refuse to allow a graduate to sit for the required exam or issue a license or certification to a person who has a prior felony conviction or proven history of drug or alcohol abuse. Applicants to whom this applies should consult the program director for further information.

Clinical accessibility policy

The nursing program utilizes a variety of health care agencies in the community for clinical experience for the students. If you have been employed in one or more of the agencies and are not eligible for rehire as an employee, the agency may not permit you to participate in the essential clinical component of the program.

Please contact the human resources department of the affected agency and request documentation that states the agency position on your participation in the clinical component of the program. If you receive a negative response from the agency, you are automatically ineligible to apply. A response indicating you will be permitted to attend clinical in the agency will be given to the program director prior to the selection process for admission to the program. If you are unable to fulfill clinical requirements due to a previous employment issue and have not complied with the above, you could be dismissed from the program.

Core Performance Standards for Admission and Progression

Critical thinking: Critical thinking ability to exercise non-clinical and clinical judgment in a timely manner.

Interpersonal: Interpersonal abilities sufficient to interact professionally and therapeutically with peers, faculty, staff, administrators, patients/clients, families, and groups from a variety of social, emotional, cultural, and intellectual backgrounds.

Communication: Communication skills sufficient for interaction with peers, faculty, staff, administrators, patients/clients, families, and groups in verbal, nonverbal and written form.

Mobility: Physical abilities sufficient to move from room to room, safely perform treatments/procedures, and assist patients/clients; lift and transfer patients/clients; manipulate equipment; walk and/or stand for extended periods of time.

Motor skills: Gross and fine motor skills sufficient to provide safe and effective patient/client care.

Hearing: Auditory ability sufficient to monitor and safely assess health needs.

Visual: Visual ability with or without corrective lenses sufficient for observation and assessment necessary in safe patient/client care.

Tactile: Tactile ability sufficient for physical assessment of patient/client care.

Professionalism: The ability to understand and demonstrate sufficient respect for others in non-verbal, verbal, and written communications in the classroom,

laboratory, clinical settings, in the Casper College community, and in related public settings. The ability to demonstrate sufficient understanding of the cumulative effect that behavior, appearance, and communication has on the health science professional image.

Practical Nursing Certificate

Upon successful completion of all requirements of the first two semesters of the nursing program, Casper College nursing students will be awarded the PN certificate. Students who receive this certificate are eligible to take the NCLEX-PN and apply for licensure as a Practical Nurse.

In order to qualify for the PN Certificate, students must:

1. Be admitted to the Casper College nursing program;
2. Successfully complete the requirements of the first two semesters of the Casper College nursing program.

Certificate Requirements

General Education

- ENGL 1010 - English I: Composition (3CR)
- MATH 1400 - Pre-Calculus Algebra (4CR)
- PSYC 1000 - General Psychology (3CR)
- ZOO 2040 - Human Anatomy (3CR)
- ZOO 2041 - Human Anatomy Lab (1CR)
- ZOO 2110 - Human Physiology (4CR)

Major Requirements

- HMDV 1300 - On Course (2CR)
- HLTK 1300 - Nursing Boot Camp (1CR)
- NURS 1100 - Professional Nursing Care in Health Promotion (10CR)
- NURS 1200 - Professional Nursing Care of the Patient with Chronic Illness (10CR)

Note:

Upon admission to the Nursing Program, the normal length of this certificate is 9-11 months.

Graduation Requirements For specific graduation requirements see "Degree Requirements".

Nursing A.D.N.

This two-year program is approved by the Wyoming State Board of Nursing and accredited by the Accrediting Commission for Education in Nursing (ACEN). Graduates of this program are eligible to take the examination for licensure as registered nurses.

Eligibility Requirements

To be considered for admission into the Associate Degree Nursing (ADN) Program, the applicant must:

1. Have graduated from high school or have earned a GED.
2. Submit a completed application form with all college transcripts to the Admissions and Student Records Office and a departmental application form to the nursing director by the admission deadline.
3. Have a composite score of 18 or better on the ACT if out of high school less than two years, and have completed courses recommended by the test with a "C" or better, OR
4. Have taken the required English and Math placement tests and have completed courses recommended by the test with a "C" or better. If students have successfully completed college-level Math or English courses, they will not be required to retake them.
5. Currently enrolled or have completed ENGL 1010 with a "C" or better.
6. Currently enrolled or have completed ZOO 2040/ZOO 2041 (or their equivalents), and current within the last five years, with a "C" or better.
7. Currently enrolled or have completed MATH 1400 with a "C" or better.
8. Currently enrolled or have completed HMDV 1300 with a "C" or better.
9. Currently enrolled or have completed HLTK 1300 with a "C" or better.
10. Have a degree grade point average of 2.5 or higher for admission, or readmission.
11. Achieve a "Proficient" level on the ATI Test of Essential Skills (TEAS ®) as required for the application process.

Other Information:

1. Students are admitted twice a year.
2. Withdrawal from one or more courses without advisor input may delay program admission and/or progression.
3. There are requirements the first semester nursing students must meet (insurance, vaccinations/proof of immunity, etc.). The DON will provide that information upon admission to the program.
4. It is the policy of the H.E. Stuckenhoff Department of Nursing to minimize the risk of an allergic/anaphylactic reaction to latex, identify those at risk and provide a latex safe environment.
5. There will be no admission/readmission to the nursing program when a student has any of the following:
 - Failure to meet course outcomes based on clinical performance.

- Two failures and/or withdrawals in nursing courses. Nursing Department re-admission and re-entry policies apply.
- Demonstrated violation of professional ethics by being under the influence of alcohol and/or in violation of the Controlled Substance Act when on duty (documented by appropriate attestations of observations filed with the program director).
- Demonstrated violation of the Casper College or Nursing Student Code of Conduct
- Inability to meet Health Science Core Performance Standards or clinical accessibility requirement.

To maintain ongoing enrollment in the nursing program, you must meet the following requirements:

1. Provide evidence of immunizations/immunity as required by the program or agencies providing clinical experiences;
2. Test negative on any drug or alcohol screening required by agencies providing clinical experiences;
3. Provide evidence of current health insurance and maintain the health insurance while in the nursing program;
4. Complete specified background check prior to the first semester of the program, and repeat if requested during the program;
5. If driving to clinical sites, provide evidence of current car insurance and maintain care insurance while in the nursing program;
6. Have evidence of American Heart Association Healthcare Provider Cardiopulmonary Resuscitation (CPR) certification beginning the first semester of classes, and maintain current certification throughout the nursing program.
7. Must have a 2.0 or better grade point average for each semester and a "C" or better in all nursing, allied health, and laboratory science courses to progress in the Associate Degree Nursing Program.

Optional PN Certificate:

Upon successful completion of all requirements of the first two semesters of the nursing program, students will be awarded the PN Certificate. Students who receive this certificate are eligible to take the NCLEX-PN and apply for licensure as a Licensed Practical Nurse. Prerequisite for the PN Certificate is admission to the Casper College nursing program.

Each applicant who is admitted to the ADN program will be sent information concerning

uniforms and other items necessary prior to entrance. Students are responsible for their own transportation to and from clinical facilities.

Transfer into the Associate Degree Nursing Program is dependent upon space available and the congruence between the previous program and Casper College's ADN Program. Transfer status will only be considered into the third semester of the nursing program. Students interested in transferring must notify the director of nursing prior to March 1 for fall transfer and October 1 for spring transfer. The student evaluation will be sent to the student's previous nursing program to be completed by the director or a nursing faculty member.

Generally, Casper College will accept general education courses from accredited colleges. Refer questions about specific courses to the registrar. Nursing courses will be evaluated on an individual basis by the nursing faculty and director. Students interested in pursuing this option should submit course syllabi and outlines to the director for consideration as early as possible. Applicants will be required to fulfill all recommendations made at the time of applying for transfer. This includes attaining the required score on the departmental entry and math competency exams. Following completion of the entry and math competency exams, applicants may be required to demonstrate proficiency of selected technical nursing skills. Applicants not meeting the passing score on exams/checkouts will not be eligible for transfer.

Recommended Curriculum General Education (24CR)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- MATH 1400 - Pre-Calculus Algebra (4CR)
- ZOO 2040 - Human Anatomy (3CR)
- ZOO 2041 - Human Anatomy Lab (1CR)
- ZOO 2110 - Human Physiology (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR

- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- PSYC 1000 - General Psychology (3CR)
- POLS 1000 - American and Wyoming Government (3CR)

Major Requirements

- CMAP 1550 - E-Portfolio Development (1CR)
- HMDV 1300 - On Course (2CR)
- HLTK 1300 - Nursing Boot Camp (1CR)
- NURS 1100 - Professional Nursing Care in Health Promotion (10CR)
- NURS 1200 - Professional Nursing Care of the Patient with Chronic Illness (10CR)
- NURS 2300 - Professional Nursing Care of the Patient with Acute Illness (10CR)
- NURS 2400 - Professional Nursing Care of the Patient with Complex Illness (10CR)

Note:

The normal length of this program is two academic years at 13-14 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

LPN Advanced Placement

Licensed practical nurses who wish to enter the ADN Program as Advanced Placement LPNs at the second level of the program must submit their application to the Director of Nursing. Application dates are posted on the Nursing Program Website. Advanced placement admission will be contingent on space available. Further information on the program and the application process can be found in the Guide to Advanced Placement Education for the LPN, also found on the website.

Preference for advanced placement will be given first to qualified LPNs who received Casper College's PN certificate, then to LPNs from Wyoming or other programs. Transfer students are given preference following advanced placement students.

To be eligible for advanced placement, students must:

Have completed a state-approved practical nursing program;

Provide the director with a copy of their LPN license;

Be actively employed as an LPN for 12 months or longer;

Meet all of the admission requirements for the nursing program as listed in the current catalog;

Meet the departmental and community agency requirements as listed in the Nursing Student Handbook.

Have completed the following courses or their equivalents:

For admission into the third semester of the Nursing Studies -NRST curriculum through spring 2017:

ZOO 2040 - Human Anatomy /ZOO 2041 Human Anatomy Lab

ZOO 2110 Human Physiology

PSYC 1000 General Psychology

For admission into the third semester of the ReNEW - NURS curriculum, beginning fall 2017, must have completed the following courses or their equivalents:

ENGL1010 English I: Composition

MATH 1400 Pre-Calculus Algebra

ZOO 2040 Human Anatomy and ZOO 2041 Human Anatomy Lab

HMDV1300 On Course

HLTK 1300 Nursing Boot Camp

ZOO 2110 Human Physiology

PSYC1000 General Psychology

Made an appointment with Director to discuss transcripts and determine general education courses necessary for degree attainment.

There will be no admission/readmission to the nursing program when a student has any of the following:

Failure to meet course outcomes based on clinical performance.

Two failures in required NURS, NRST (nursing), or HLTK courses. Nursing Department re-admission and re-entry policies apply.

Demonstrated violation of professional ethics by being under the influence of alcohol and/or in violation of the Controlled Substance Act when on duty (documented by appropriate attestations of observations filed with the program director).

Demonstrated violation of the Casper College or Nursing Student Code of Conduct

Inability to meet Health Science Core Performance Standards or clinical accessibility requirement.

Submit the Application for Admission as Advanced Placement LPN to the director of nursing. Application dates and are posted on the Nursing website.

Make arrangements with the Director of Nursing to take two the following tests:

The ATI PN Comprehensive Predictor This 180-item test offers an assessment of the LPN Advanced Placement candidate's comprehension and mastery of basic principles. Candidates have three (3) hours to complete this assessment. The PN Comprehensive Predictor can be taken twice in one application cycle. It is recommended that the candidate review and/or remediate content areas falling below the application standard prior to retaking the exam.

The departmental math competency exam, which takes about one-half hour and is free.

The Skills test.

Pass the required background check and drug and alcohol screen testing.

Further information on testing and the passing standards for application to the program can be found in the Guide to Advanced Placement Education for the LPN on the Nursing website.

Admission to advanced placement standing is dependent upon space available in the third semester of the nursing program. Therefore, the number of applicants selected each year will vary.

General Education

- ENGL 1010 - English I: Composition (3CR)
- ENGL 1020 - English II: Composition (3CR)
- MATH 1400 - Pre-Calculus Algebra (4CR)
- POLS 1000 - American and Wyoming Government (3CR)
- PSYC 1000 - General Psychology (3CR)
- ZOO 2040 - Human Anatomy (3CR)
- ZOO 2041 - Human Anatomy Lab (1CR)
- ZOO 2110 - Human Physiology (4CR)

Major Requirements

- CMAP 1550 - E-Portfolio Development (1CR)
- HMDV 1300 - On Course (2CR)
- HLTK 1300 - Nursing Boot Camp (1CR)
- NURS 1100 - Professional Nursing Care in Health Promotion (10CR)
(or equivalent)
- NURS 1200 - Professional Nursing Care of the Patient with Chronic Illness (10CR)
- NURS 2300 - Professional Nursing Care of the Patient with Acute Illness (10CR)
- NURS 2400 - Professional Nursing Care of the Patient with Complex Illness (10CR)
(or equivalent)

Nutrition

This course of study is designed to provide students with the necessary coursework to transfer to UW or similar nutrition baccalaureate programs at the entering junior level.

Nutrition, A.S.

This curriculum is designed to provide students with foundational knowledge in the fields of nutrition and/or dietary management. The curriculum offers students the necessary coursework to transfer, at the junior level, to dietetics or other nutrition programs.

This program of study can also be used to meet the eligibility criteria required to sit the Certified Dietary Manager (CDM) examination.

Students should consult with their academic adviser to select appropriate electives required for their individual academic goals.

Recommended Curriculum

General Education (Minimum 32 hours)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Included in the major requirements below

2. Communication

- ENGL 1010 - English I: Composition (3CR)
- ENGL 2005 - Technical Writing (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- BIOL 1000 - Introduction to Biology I (4CR)
or
- BIOL 1010 - General Biology I (4CR)
(recommended)
- FCSC 1141 - Principles of Nutrition (3CR)
- MATH 1400 - Pre-Calculus Algebra (4CR)
- PSYC 1000 - General Psychology (3CR)
- CHEM 1025 - Chemistry I (3CR)
- CHEM 1028 - Chemistry Laboratory I (1CR)
- CHEM 1035 - Chemistry II (3CR)
- CHEM 1038 - Chemistry Laboratory II (1CR)
- CHEM 2300 - Introductory Organic Chemistry (4CR)
- SOC 1000 - Introduction to Sociology (3CR)
- FCSC 1150 - Scientific Study of Food (3CR)
- FCSC 2141 - Nutrition Controversies (2CR)
- ANSC 1160 - Issues in Agriculture (3CR)

Electives (choose at least 6 credits from the following)

- HOSP 2320 - Food and Beverage Management (3CR)
- HOSP 2330 - Food and Beverage Services (3CR)
- STAT 2050 - Fundamentals of Statistics (4CR)

- MOLB 2210 - General Microbiology (4CR)
- MOLB 2240 - Medical Microbiology (4CR)
- ZOO 2040 - Human Anatomy (3CR)
- ZOO 2041 - Human Anatomy Lab (1CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

To obtain a degree in nutrition, a student must obtain a grade of "C" or better in all major requirements

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Occupational Therapy Assistant

Occupational therapy (OT) is the use of purposeful activity with individuals who are limited by physical injury or illness, psychosocial dysfunction, developmental or learning disabilities, poverty and cultural differences or the aging process, in order to maximize independence, prevent disability, and maintain health. Specific OT services include: teaching daily living skills; developing motor skills and sensory functioning; developing play/leisure skills and work capacities; designing, fabricating, or applying selected devices or adaptive equipment; using specifically designed crafts and exercises to enhance functional performance; administering assessments; and adapting environments for the handicapped. These services are provided individually, in groups, or through social systems. (Adopted from the American Occupational Therapy Association.)

The occupational therapy assistant program is an associate of science degree major designed to prepare students to obtain employment as a Certified Occupational Therapy Assistant (COTA); or a related field. The occupational therapy assistant program at Casper College is six semesters in length in which students complete five consecutive semesters of required academic course work, plus two eight-week fieldwork placements. The sequence begins with the fall semester and progresses through two years including one summer session. The courses build on information from previous semesters. After completion of academic course work, fieldwork is completed.

The OTA program is not a distance education program. Two prerequisite courses are offered completely online, face to face, or hybrid, a combination of the two, including OETH 2000 OETH 2000 - Introduction to Occupational Therapy (2CR) and COTA 2300 COTA 2300 - Fieldwork Integration I (2CR). This gives students flexibility to explore the OTA program. Once a student is admitted into the OTA program, there are several hybrid classes including: COTA 2020 COTA 2020 - Human Occupations and Life Roles (2CR), COTA 2100 COTA 2100 - Psychosocial Aspects (3CR), and COTA 2160 COTA 2160 - Leadership Skills (2CR). Distance Education courses are also offered to include COTA 2420 and COTA 2450 courses. Upon academic completion students will complete COTA 2500 COTA 2500 - Fieldwork A (3CR), COTA 2550 COTA 2550 - Fieldwork B (3CR) and COTA 2600 COTA 2600 - Fieldwork Options, using Moodle, the Learning Management System, in conjunction with the field work assignments to facilitate communication between the academic fieldwork coordinator and students. The faculty also utilizes Moodle to house learning materials for students and enhance classroom instruction. Technical support and training are available to any student using Moodle.

Students are admitted provisionally the fall semester. At the end of this first semester, applications are completed for full acceptance. At this time, students are granted full acceptance to the program, if requirements are met. The coursework is primarily laboratory experience designed to accommodate 12 students. The top 12 students in the admission process will be admitted. If more than 12 students are prepared to enter the program, they may be placed on a waiting list. A student must maintain at least a 2.5 GPA in each of the behavioral and biological sciences, English composition, and all occupational therapy course work. (Check with Program Director, many years two sections are admitted allowing the program to accommodate 24 students.)

The developmental themes of the curriculum are sequenced in a simple to complex continuum. These themes are developed over the course of the program through experiential, graded exploration of a variety of environments, collaboration with others, and creative thinking. These themes are also identified in levels of development one through four with one being introduction to knowledge, two beginning application of knowledge, three being advanced application of skills, and the fourth being the implementation of levels one through three with clients in a fieldwork setting. In the view of the Program, learning is the active development of knowledge through experience, practice, and interaction.

The Casper College occupational therapy assistant program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, Suite 200,

Bethesda, MD, 20824-1220. AOTA's phone number is 301- 652-AOTA and website is www.acoteonline.org. Graduates of the program will be able to sit for the national certification examination for the occupational therapy assistant administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be a Certified Occupational Therapy Assistant (COTA). Most states require licensure in order to practice; however state licenses are usually based on the results of the NBCOT Certification Examination.

Background check and drug/alcohol policy

Students enrolled in any of the health science programs will participate in clinical experiences in a variety of agencies. Prior to participating in the clinical experiences, students will be subject to that agency's requirements for a background check, drug testing and/or drug abuse prevention policies. Students are then subject to the random drug testing policy of that agency. Due to most sites requiring background checks, all occupational therapy assistant students are required to complete background checks.

NOTE: To ensure that occupational therapy practitioners meet ethical and professional standards prior to entering the professions, all applicants for initial certification are required to provide information and documentation related to any illegal, unethical or incompetent behavior. Persons with a felony history may not be eligible to sit for the certification examination. When you apply to write the certification examination with the National Board for Certification in Occupational Therapy, you will be asked to answer questions related to the topic of felonies. For further information on these limitations, you can contact NBCOT at: Nation Board of Certification of Occupation Therapy, 800 S. Frederick Avenue, Suite 200, Gaithersburg, Maryland, 20877-4150.

Clinical accessibility policy

The occupational therapy assistant program utilizes a variety of health care agencies in the community for clinical experience for the students. If you have been employed in one or more of the agencies and are not eligible for rehire as an employee, the agency may not permit you to participate in the essential clinical component of the program.

Please contact the human resources department of the affected agency and request documentation that states the agency position on your participation in the clinical component of the program. If you receive a negative response from the agency, you may be ineligible to apply. A response indicating you will be permitted to attend clinicals in the agency will be given to the program director prior to the selection process for admission to the program. If you are unable to fulfill

clinical requirements due to a previous employer issue and have not complied with the above, you could be dismissed from the program.

Core performance standards for admission and progression

Critical thinking: Critical thinking ability to exercise non-clinical and clinical judgment in a timely manner.

Interpersonal: Interpersonal abilities sufficient to interact professionally and therapeutically with peers, faculty, staff, administrators, patients/clients, families, and groups from a variety of social, emotional, cultural, and intellectual backgrounds.

Communication: Communication skills sufficient for interaction with peers, faculty, staff, administrators, patients/clients, families, and groups in verbal, nonverbal and written form.

Mobility: Physical abilities sufficient to move from room to room, safely perform treatments/procedures, and assist patients/clients; lift and transfer patients/clients; manipulate equipment; walk and/or stand for extended periods of time.

Motor skills: Gross and fine motor skills sufficient to provide safe and effective patient/client care.

Hearing: Auditory ability sufficient to monitor and safely assess health needs.

Visual: Visual ability with or without corrective lenses sufficient for observation and assessment necessary in safe patient/client care.

Tactile: Tactile ability sufficient for physical assessment of patient/ client care.

Professionalism: The ability to understand and demonstrate sufficient respect for others in non-verbal, verbal, and written communications in the classroom, laboratory, clinical settings, in the Casper College community, and in related public settings. The ability to demonstrate sufficient understanding of the cumulative effect that behavior, appearance, and communication has on the health science professional image.

Fieldwork is an important part of the occupational therapy assistant program curriculum and is required to complete the program. There are two levels of fieldwork, plus the initial community experiences;

1. Have evidence of American Heart Association BLS for the Provider Cardiopulmonary Resuscitation (CPR) certification beginning the first semester of classes, and maintain current certification throughout the Occupational Therapy

Assistant Program. This requirement may be met by successfully completing HLTK 1625.

2. Community Experiences: These placements provide the students exposure to a variety of service programs and clientele within the community. The student is required to complete 20 hours each of the first two semesters.
3. Level I fieldwork is completed as an integrated part of course work. These placements are completed the fall and spring semesters of the second year. During this time, the students will spend consecutive days in an assigned facility, which has agreed to work with the occupational therapy assistant program as a training site. Placements will include psychosocial, physical disabilities, geriatric, pediatric, and developmental disability facilities.
4. Level II fieldwork consists of two eight-week clinical experiences. During this time the student will spend 40 hours per week at a contracted facility. Additional hours are frequently required to complete assignments at the various contracted fieldwork sites. Level II fieldwork is completed after all academic course work is completed.

For information contact:

Cassady Hoff, OTR/L, MSOT

Director, Occupational Therapy Assistant Program

Phone: 307-268-2867

E-mail: choff@caspercollege.edu

Occupational Therapy Assistant, A.S.

Students are admitted provisionally the fall semester. During October applicants who meet the program admission requirements can apply for full acceptance. Applicants to the OTA program must have a GPA of 2.5 and receive a "C" or higher in all required classes for Occupational Therapy Assistant A.S. degree upon completion of the first fall semester. The top 24 candidates that meet program requirements are fully admitted to the program and placed in a 12 student cohort. These cohorts are established as the OTA laboratory coursework is designed to accommodate 12 students. If more than 24 students have met the requirements to enter the program they may be placed on a waiting list. Upon acceptance and for the duration of the OTA program the students must maintain a "C" or higher in all required classes in the OTA degree.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- MATH 1000 - Problem Solving (3CR)
- ZOO 2040 - Human Anatomy (3CR)
- ZOO 2041 - Human Anatomy Lab (1CR)
- ZOO 2110 - Human Physiology (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- PSYC 1000 - General Psychology (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives (5CR)

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- OTH 2000 - Introduction to Occupational Therapy (2CR)
- COTA 2020 - Human Occupations and Life Roles (2CR)
- COTA 2100 - Psychosocial Aspects (3CR)
- COTA 2150 - Group Dynamics (1CR)
- COTA 2160 - Leadership Skills (2CR)
- COTA 2200 - Therapeutic Approaches and Media I (2CR)
- COTA 2210 - Therapeutic Approaches and Media II (2CR)
- COTA 2220 - Therapeutic Approaches and Media III (3CR)
- COTA 2300 - Fieldwork Integration I (2CR)
- COTA 2310 - Fieldwork Integration II (1CR)
- COTA 2320 - Fieldwork Integration III (1CR)

- COTA 2330 - Fieldwork Integration IV (1CR)
- COTA 2350 - Clinical Theory and Practice I (3CR)
- COTA 2400 - Clinical Theory and Practice II (3CR)
- COTA 2420 - Clinical Conditions (3CR)
- COTA 2450 - Health Care Systems (3CR)
- COTA 2500 - Fieldwork A (3CR)
- COTA 2550 - Fieldwork B (3CR)
- COTA 2600 - Fieldwork Options
- KIN 2050 - Functional Kinesiology (3CR)

Suggested Curriculum Sequence

Fall I

- ENGL 1010 - English I: Composition (3CR)
- COTA 2300 - Fieldwork Integration I (2CR)
- OOTH 2000 - Introduction to Occupational Therapy (2CR)
- PSYC 1000 - General Psychology (3CR)
- ZOO 2040 - Human Anatomy (3CR)
- ZOO 2041 - Human Anatomy Lab (1CR)
- Elective-General Education (2CR)

Total (16CR)

Spring I

- COTA 2020 - Human Occupations and Life Roles (2CR)
- COTA 2200 - Therapeutic Approaches and Media I (2CR)
- COTA 2310 - Fieldwork Integration II (1CR)
- Humanities (Suggested: ART 1000) (3CR)
- KIN 2050 - Functional Kinesiology (3CR)
- ZOO 2110 - Human Physiology (4CR)
- Elective (1CR)

Total (16CR)

Summer I

- COTA 2150 - Group Dynamics (1CR)
- COTA 2420 - Clinical Conditions (3CR)
- ENGL 1020 - English II: Composition (3CR)

Total (7CR)

Fall II

- COTA 2100 - Psychosocial Aspects (3CR)

- COTA 2160 - Leadership Skills (2CR)
- COTA 2210 - Therapeutic Approaches and Media II (2CR)
- COTA 2320 - Fieldwork Integration III (1CR)
- COTA 2350 - Clinical Theory and Practice I (3CR)
- MATH 1000 - Problem Solving (3CR)
- Elective-General Education (3CR)

Total (16CR)

Spring II

- COTA 2220 - Therapeutic Approaches and Media III (3CR)
- COTA 2330 - Fieldwork Integration IV (1CR)
- COTA 2400 - Clinical Theory and Practice II (3CR)
- COTA 2450 - Health Care Systems (3CR)
- POLS 1000 - American and Wyoming Government (3CR)
- PEAC Physical education class (1CR)

Total (15CR)

Field Work

- COTA 2500 - Fieldwork A (3CR)
- COTA 2550 - Fieldwork B (3CR)
- COTA 2600 - Fieldwork Options

Electives

- COTA 2975 - Independent Study in OT

Curriculum Total (76CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Assistive Technology Certificate

This curriculum is designed to prepare students for employment in working with various age groups and disabilities who experience challenges in life skills and could benefit from Assistive Technology to maximize function and independence. Students will become eligible to assist personnel who incorporate Assistive Technology in identifying general considerations for various diagnoses, populations and safety and ethics in working with people with disabilities utilizing this specialized approach. Program Prerequisite: HLTK 1625, HLTK 1620 or an equivalent CPR certification.

Certificate Requirements

- HLTK 1855 - Assistive Technology Practicum (3CR)
- HLTK 1860 - Introduction to Human Disease (3CR)
- HLTK 1870 - Professionalism in Healthcare (3CR)
- SOC 1000 - Introduction to Sociology (3CR)

Note:

The normal length of this program is 16 weeks.

Graduation Requirements For specific graduation requirements see "Degree Requirements".

Equine Assisted Therapy Certificate

This curriculum is designed to prepare students for employment in working with various age groups and disabilities utilizing equine assisted therapy. Students will become eligible to assist personnel who use equine assisted therapy in identifying general considerations for various diagnoses, populations and safety and ethics in working with people with disabilities utilizing this specialized approach. Program Prerequisite: HLTK 1625, HLTK 1620 or an equivalent CPR certification.

Certificate Requirements

- HLTK 1860 - Introduction to Human Disease (3CR)
- HLTK 1865 - Equine Assisted Therapy Practicum (3CR)
- HLTK 1870 - Professionalism in Healthcare (3CR)
- SOC 1000 - Introduction to Sociology (3CR)

Note:

The normal length of this program is 16 weeks.

Graduation Requirements For specific graduation requirements see "Degree Requirements".

Gerontology Certificate

This curriculum is designed to prepare students for employment to work with geriatric clients. Throughout the course work, students learn about the effects of aging, therapeutic interactions, common diagnoses, and the importance of health and wellness when working with older adults. Students will become eligible to assist personnel who work with older adults in identifying general considerations for various diagnoses, safety and ethics in working with older adults utilizing this specialized approach. Program Prerequisite: HLTK 1625 or an equivalent CPR certification.

Certificate Requirements

- SOC 1000 - Introduction to Sociology (3CR)
- HLTK 1860 - Introduction to Human Disease (3CR)
- HLTK 1870 - Professionalism in Healthcare (3CR)
- HLTK 1875 - Gerontology Practicum (3CR)

Note:

The normal length of this program is 16 weeks.

Graduation Requirements For specific graduation requirements see "Degree Requirements".

Paralegal

Casper College offers two degrees in the paralegal department that are approved by the American Bar Association. Our paralegal program prepares its students for transfer to bachelor programs. We also offer a post-bachelor's certificate. Our research courses provide our students with legal research skills, fact investigation skills, and computer assisted legal research skills with Westlaw and the Internet. Other courses provide students with skills in digesting depositions, organizing case files, drafting discovery documents, wills, contracts, corporation forms, and family law documents. Students also organize a trial notebook, interview expert witnesses, fact witnesses and clients, research evidentiary issues, draft a demand letter, prepare a medical chronology, and draft jury instructions. Our students are assisted in job placement through a job search seminar and internships.

Students are encouraged to take the C.L.A. Exam (Certified Legal Assistant Exam), which is offered three times a year at Casper College. A review course is offered each fall to prepare for this exam. The C.L.A.

credential is a requirement for many jobs and is a nationally recognized credential.

The American Bar Association defines a paralegal as "a person, qualified by education, training, or work experience, who is employed or retained by a lawyer, law office, corporation, government agency or other entity and who performs specifically delegated substantive legal for which a lawyer is responsible."

Objectives of the paralegal program

1. Train students for employment as a paralegal in law offices, under the supervision of a licensed lawyer, where the paralegal can assist in the economical and efficient delivery of legal services in both the local job market and throughout the United States.
2. Train students with skills that are transferable to other jobs such as social work, police work, government administrative positions, insurance, business and banking positions.
3. Prepare students with the academic skills and courses necessary to transfer to bachelor programs.
4. Assist students in studying for the Certified Legal Assistant (C.L.A.) exam.
5. Provide opportunities for continuing education and upgrading of existing skills for paralegals already gainfully employed in the local job market.

NOTE: Graduates are not authorized to provide direct legal services to the public. The paralegal program provides training for paralegals who are authorized to perform substantive legal work under the supervision of a lawyer. A paralegal cannot establish the relationship with a client, set fees, represent a client in court or give legal advice. Students with felony convictions may not be able to obtain traditional paralegal positions. Transfer students may only transfer nine (9) hours of legal specialty courses.

Paralegal Studies, A.A.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Lab Science (4CR)
- MATH 1000 - Problem Solving (3CR)
or
- MATH 1400 - Pre-Calculus Algebra (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- PHIL 1000 - Introduction to Philosophy (3CR)
or
- PHIL 2420 - Critical Thinking (3CR)
- PSYC 1000 - General Psychology (3CR)
- U.S. and Wyoming constitutions (3CR)

4. General Education Electives (6CR)

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- CMAP 1715 - Word Processing (3CR)
or
- CMAP 1700 - Word Processing I (1CR)
and
- CMAP 1705 - Word Processing II (1CR)
and
- CMAP 1710 - Word Processing III (1CR)
- CRMJ 2120 - Introduction to Criminal Justice (3CR)
- CRMJ 2230 - Law of Evidence (3CR)
- LEGL 1610 - Introduction to the Paralegal Profession (3CR)
- LEGL 1620 - Transactional Law (3CR)
- LEGL 1700 - Legal Analysis (3CR)
- LEGL 1710 - Legal Research and Writing I (3CR)
- LEGL 1720 - Legal Research and Writing II (3CR)
- LEGL 2500 - Civil Procedure (3CR)
- LEGL 2550 - Litigation Support (3CR)
- LEGL 2610 - Family Law (3CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Paralegal Certificate

Certificate Requirements

- CMAP 1715 - Word Processing (3CR)
or
- CMAP 1700 - Word Processing I (1CR)
and
- CMAP 1705 - Word Processing II (1CR)
and
- CMAP 1710 - Word Processing III (1CR)
- CRMJ 2120 - Introduction to Criminal Justice (3CR)
- CRMJ 2210 - Criminal Law I (3CR)
or
- Elective approved by director (3CR)
- CRMJ 2230 - Law of Evidence (3CR)
- LEGL 1610 - Introduction to the Paralegal Profession (3CR)
- LEGL 1620 - Transactional Law (3CR)
- LEGL 1700 - Legal Analysis (3CR)
- LEGL 1710 - Legal Research and Writing I (3CR)
- LEGL 1720 - Legal Research and Writing II (3CR)
- LEGL 2500 - Civil Procedure (3CR)
- LEGL 2610 - Family Law (3CR)
- LEGL 2550 - Litigation Support (3CR)

Note:

The certificate program is only available to students who have a bachelor's degree.

The normal length of this program is nine months.

Graduation Requirements For specific graduation requirements see "Degree Requirements".

Paramedic Technology

The two year calendar paramedic technology associate degree is designed to prepare persons to provide immediate primary emergency care to people in health crises. The graduate will be able to provide basic and

advanced life support under the direction of a physician to all age groups and populations. Extensive didactic instruction, skills, practicum and internship experiences will be completed to provide the student with the foundational knowledge and skills to successfully attain national registry of Emergency Medical Technicians-Paramedic certification. The primary goal of the program will be to produce competent, entry level paramedics to serve in career and volunteer positions.

The program has specific admission requirements in addition to general Casper College requirements. Students must maintain a GPA of at least 2.0 and must earn a grade of "C" or better in all paramedic courses in order to progress to the subsequent semester.

Background check and drug/alcohol policy

Students enrolled in any of the health science programs will participate in clinical experiences in a variety of agencies. Prior to participating in the clinical experiences, students will be subject to that agency's requirements for a background check, drug testing and/or drug abuse prevention policies. Students are then subject to the random drug testing policy of that agency.

Following graduation, several of the state and/or national licensing or certification (registry) boards, may refuse to allow a graduate to sit for the required exam or issue a license or certification to a person who has a prior felony conviction or proven history of drug or alcohol abuse. Applicants to whom this applies should consult the program director for further information.

Clinical accessibility policy

The paramedic technology program utilizes a variety of health care agencies for clinical experience for the students. If you have been employed in one or more of the agencies and are not eligible for rehire as an employee, the agency may not permit you to participate in the essential clinical component of the program.

Negative responses will be evaluated on an individual basis; however, this could severely impact your ability to complete the program of study. A response indicating you will be permitted to attend clinical in the agency will be given to the program director prior to the selection process for admission to the program. If you are unable to fulfill clinical requirements due to a previous employer issue and have not complied with the above, you could be dismissed from the program.

Core performance standards for admission and progression

Critical thinking: Critical thinking ability to exercise non-clinical and clinical judgment in a timely manner.

Interpersonal: Interpersonal abilities sufficient to interact professionally and therapeutically with peers, faculty, staff, administrators, patients/clients, families, and groups from a variety of social, emotional, cultural, and intellectual backgrounds.

Communication: Communication skills sufficient for interaction with peers, faculty, staff, administrators, patients/clients, families, and groups in verbal, nonverbal and written form.

Mobility: Physical abilities sufficient to move from room to room, safely perform treatments/procedures, and assist patients/clients; lift and transfer patients/clients; manipulate equipment; walk and/or stand for extended periods of time.

Motor skills: Gross and fine motor skills sufficient to provide safe and effective patient/client care.

Hearing: Auditory ability sufficient to monitor and safely assess health needs.

Visual: Visual ability with or without corrective lenses sufficient for observation and assessment necessary in safe patient/client care.

Tactile: Tactile ability sufficient for physical assessment of patient/client care.

Professionalism: The ability to understand and demonstrate sufficient respect for others in non-verbal, verbal, and written communications in the classroom, laboratory, clinical settings, in the Casper College community, and in related public settings. The ability to demonstrate sufficient understanding of the cumulative effect that behavior, appearance, and communication has on the health science professional image.

Eligibility Requirements

To be considered for admission into the program, the applicant must:

1. Submit a completed application form with all high school and college transcripts and GED certification (if applicable) to the Office of Admissions and Student Records;
2. Have a composite score of 18 or better on the ACT if out of high school less than two years, and have completed courses recommended by the test with a "C" or better; or
3. Have taken the COMPASS test and have completed courses recommended by the test with a "C" or better, or successfully completed college courses;
4. Have completed ENGL 1010, HLTK 1200, ZOO 2040/ZOO 2041 and ZOO 2110 (or their equivalents) with a "C" or better;
5. Current EMT-Basic with minimum of 1-year experience.

6. Have a college cumulative GPA of 2.0 or better for admission or readmission;
7. Have evidence of American Heart Association BLS for the Provider Cardiopulmonary Resuscitation (CPR) certification beginning the first semester of classes, and maintain current certification throughout the paramedic technology program. This requirement may be met by successfully completing HLTK 1625;
8. Submit two (2) professional letters of recommendation to include one from the student's current medical director.

Paramedic Technology, A.S.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- MATH 1000 - Problem Solving (3CR)
- ZOO 2040 - Human Anatomy (3CR)
- ZOO 2041 - Human Anatomy Lab (1CR)
- ZOO 2110 - Human Physiology (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- POLS 1000 - American and Wyoming Government (3CR)
- PSYC 1000 - General Psychology (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- HLTK 1200 - Medical Terminology (3CR)
- PTEP 2500 - Introduction to Paramedic Technology (8CR)
- PTEP 2610 - Paramedic Practical 1 (2CR)
- PTEP 2600 - Paramedic Technology Medical Emergencies (8CR)
- PTEP 2910 - Paramedic Practical 3 (3CR)
- PTEP 2800 - Paramedic Technology Trauma (7CR)
- PTEP 2900 - Paramedic Technology Advanced Cardiology and Special Considerations (8CR)
- PTEP 2950 - Paramedic Capstone (10CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Pharmacy Technology

Casper College offers a choice of two options for the student interested in assisting the pharmacist in health care agencies and retail settings, the Pharmacy Technician Certificate and the Associate of Science in Pharmacy Technology. Both options consist of pharmacy technician as well as non-pharmacy technician courses, and students are integrated into all aspects of college life. In addition to the Casper College application for admission, a student desiring admission to either program must complete and submit to the director a departmental application when all eligibility requirements are met.

Background check and drug/alcohol policy

Students enrolled in any of the health science programs will participate in clinical experiences in a variety of agencies. Prior to participating in the clinical experiences, students will be subject to that agency's requirements for a background check, drug testing and/or drug abuse prevention policies. Students are then subject to the random drug testing policy of that agency.

Following graduation, several of the state and/or national licensing or certification (registry) boards, including the Wyoming State Board of Pharmacy, may refuse to allow a graduate to sit for the required exam or issue a license or certification to a person who has a prior felony conviction or proven history of drug or alcohol abuse. Applicants to whom this applies should consult the program director for further information.

Clinical accessibility policy

The pharmacy technology program utilizes a variety of health care agencies in the community for clinical experience for the students. If you have been employed in one or more of the agencies and are not eligible for rehire as an employee, the agency may not permit you to participate in the essential clinical component of the program.

Please contact the human resources department of the affected agency and request documentation that states the agency position on your participation in the clinical component of the program. If you receive a negative response from the agency, you are automatically ineligible to register for PHTK courses. A response indicating you will be permitted to attend clinicals in the agency will be given to the program director prior to the selection process for admission to the program. If you are unable to fulfill clinical requirements due to a previous employer issue and have not complied with the above, you could be dismissed from the program.

Core performance standards for admission and progression

Critical thinking: Critical thinking ability to exercise non-clinical and clinical judgment in a timely manner.

Interpersonal: Interpersonal abilities sufficient to interact professionally and therapeutically with peers, faculty, staff, administrators, patients/clients, families, and groups from a variety of social, emotional, cultural, and intellectual backgrounds.

Communication: Communication skills sufficient for interaction with peers, faculty, staff, administrators, patients/clients, families, and groups in verbal, nonverbal and written form.

Mobility: Physical abilities sufficient to move from room to room, safely perform treatments/procedures, and assist patients/clients; lift and transfer patients/clients; manipulate equipment; walk and/or stand for extended periods of time.

Motor skills: Gross and fine motor skills sufficient to provide safe and effective patient/client care.

Hearing: Auditory ability sufficient to monitor and safely assess health needs.

Visual: Visual ability with or without corrective lenses sufficient for observation and assessment necessary in safe patient/client care.

Tactile: Tactile ability sufficient for physical assessment of patient/ client care.

Professionalism: The ability to understand and demonstrate sufficient respect for others in non-verbal, verbal, and written communications in the classroom, laboratory, clinical settings, in the Casper College community, and in related public settings. The ability to demonstrate sufficient understanding of the cumulative effect that behavior, appearance, and communication has on the health science professional image.

Pharmacy Technology, A.S.

Recommended Curriculum
General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- BIOL 1000 - Introduction to Biology I (4CR)
or
- ZOO 2040 - Human Anatomy (3CR)
and
- ZOO 2041 - Human Anatomy Lab (1CR)
and
- ZOO 2110 - Human Physiology (4CR)
- CHEM 1005 - Basic Chemistry I (3CR)
- CHEM 1006 - Basic Chemistry Laboratory I (1CR)
- MATH 1000 - Problem Solving (3CR)
or
- MATH 1400 - Pre-Calculus Algebra (4CR)
(*16 credits allowed in this field of study)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- PSYC 1000 - General Psychology (3CR)
- Cultural Environment (3CR)
- POLS 1000 - American and Wyoming Government (3CR)

4. General Education Electives (2CR)

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- HLTK 1200 - Medical Terminology (3CR)
- HLTK 1625 - American Heart Association BLS for the Provider (.33CR)
- PHTK 1000 - Pharmacy Calculations I (1CR)
- PHTK 1600 - Pharmacy Simulation Laboratory I (4CR) *
- PHTK 1610 - Pharmacy Simulation Laboratory II (4CR) *
- PHTK 1630 - Pharmacy Calculations II (2CR) *
- PHTK 1650 - Pharmacy Law and Ethics (2CR) *
- PHTK 1710 - Pharmacology I (3CR) *
- PHTK 1720 - Pharmacology II (3CR) *
- PHTK 2971 - Pharmacy Experiential Training I (5CR) *
- PHTK 2972 - Pharmacy Experiential Training II (5CR) *

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

* Enrollment limited to pharmacy technology majors.

In order to successfully complete either curriculum, the student must have a cumulative GPA of 2.0 and a "C" or better in all of the major courses, and a satisfactory rating in all experiential rotations.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Pharmacy Technology Certificate

Certificate Requirements

General Education

- CO/M 1030 - Interpersonal Communication (3CR)
or
- CO/M 2010 - Public Speaking (3CR)

Major Requirements

- BIOL 1000 - Introduction to Biology I (4CR)
or
- ZOO 2040 - Human Anatomy (3CR)
and
- ZOO 2041 - Human Anatomy Lab (1CR)
and
- ZOO 2110 - Human Physiology (4CR)
- CHEM 1005 - Basic Chemistry I (3CR)
- CHEM 1006 - Basic Chemistry Laboratory I (1CR)
- HLTK 1200 - Medical Terminology (3CR)
- HLTK 1625 - American Heart Association BLS for the Provider (.33CR)
- PHTK 1000 - Pharmacy Calculations I (1CR)
- PHTK 1600 - Pharmacy Simulation Laboratory I (4CR) *
- PHTK 1610 - Pharmacy Simulation Laboratory II (4CR) *
- PHTK 1630 - Pharmacy Calculations II (2CR) *
- PHTK 1650 - Pharmacy Law and Ethics (2CR) *
- PHTK 1710 - Pharmacology I (3CR) *
- PHTK 1720 - Pharmacology II (3CR) *
- PHTK 2971 - Pharmacy Experiential Training I (5CR) *
- PHTK 2972 - Pharmacy Experiential Training II (5CR) *

Note:

* Enrollment limited to pharmacy technology majors.

The normal length of this program is 10 months.

Graduation Requirements:

For specific graduation requirements see "Degree Requirements".

Physical Education

The physical education department offers activity classes for all able bodied students. All students are required to complete at least one semester hour in physical education activity classes to satisfy graduation requirements. A maximum of four semester credits in physical education activity classes may be applied toward the 64 semester credits needed for graduation. The physical education major may apply a maximum of eight semester credits toward graduation. These credits must come from each of four different areas of physical education activity classes: aquatic, fitness, outdoor and individual sport.

The physical education department prepares students for transfer to higher level institutions and provides activities in the basic education program that instill the knowledge, values, and skills necessary to promote an active and healthy lifestyle throughout life.

The physical education major program offers areas of concentration in teaching, exercise science (nonteaching), and health.

Core performance standards for admission and progression

Critical thinking: Critical thinking ability to exercise non-clinical and clinical judgment in a timely manner.

Interpersonal: Interpersonal abilities sufficient to interact professionally and therapeutically with peers, faculty, staff, administrators, patients/clients, families, and groups from a variety of social, emotional, cultural, and intellectual backgrounds.

Communication: Communication skills sufficient for interaction with peers, faculty, staff, administrators, patients/clients, families, and groups in verbal, nonverbal and written form.

Mobility: Physical abilities sufficient to move from room to room, safely perform treatments/procedures, and assist patients/clients; lift and transfer patients/clients; manipulate equipment; walk and/or stand for extended periods of time.

Motor skills: Gross and fine motor skills sufficient to provide safe and effective patient/client care.

Hearing: Auditory ability sufficient to monitor and safely assess health needs.

Visual: Visual ability with or without corrective lenses sufficient for observation and assessment necessary in safe patient/client care.

Tactile: Tactile ability sufficient for physical assessment of patient/ client care.

Professionalism: The ability to understand and demonstrate sufficient respect for others in non-verbal, verbal, and written communications in the classroom, laboratory, clinical settings, in the Casper College community, and in related public settings. The ability to demonstrate sufficient understanding of the cumulative effect that behavior, appearance, and communication has on the health science professional image.

Athletic Training, A.S.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Included in the major requirements below

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- PSYC 1000 - General Psychology (3CR)
- U.S. and Wyoming Constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- BIOL 1000 - Introduction to Biology I (4CR)
or
- BIOL 1010 - General Biology I (4CR)
- CO/M 2010 - Public Speaking (3CR)
- FCSC 1141 - Principles of Nutrition (3CR)

or

- PEPR 2136 - Sports Nutrition (3CR)
- KIN 1020 - Taping and Wrapping for Orthopedic Injuries (1CR)
- KIN 1052 - Introduction to Athletic Training (3CR)
- KIN 1058 - Emergency Management of Athletic Injury/Illness (3CR)
- KIN 2050 - Functional Kinesiology (3CR)
- KIN 2057 - Assessment and Evaluation of Athletic Injuries/Illness I (3CR)
- KIN 2058 - Assessment and Evaluation of Athletic Injuries/Illness II (3CR)
- KIN 2068 - Athletic Training Clinical I (1CR)
- KIN 2078 - Athletic Training Clinical II (1CR)
- KIN 2098 - Athletic Training Clinical III (1CR)
- MATH 1400 - Pre-Calculus Algebra (4CR)
- PEPR 1005 - Introduction to Physical Education and Sport (2CR)
- PHYS 1050 - Concepts of Physics (4CR)
or
- PHYS 1110 - General Physics I (4CR)
or
- CHEM 1005 - Basic Chemistry I (3CR)
and
- CHEM 1006 - Basic Chemistry Laboratory I (1CR)
or
- CHEM 1025 - Chemistry I (3CR)
and
- CHEM 1028 - Chemistry Laboratory I (1CR)
- ZOO 2040 - Human Anatomy (3CR)
- ZOO 2041 - Human Anatomy Lab (1CR)
- ZOO 2110 - Human Physiology (4CR)
- Electives (as indicated by advisor)

Recommended:

- HLED 1006 - Personal and Community Health (3CR)
- HLTK 1200 - Medical Terminology (3CR)
- PEPR 2030 - Motor Learning (3CR)

Note:

Students who plan to transfer to the University of Wyoming are advised that UW requires CHEM 1005 Basic Chemistry and CHEM 1006 Basic Chemistry Lab.

Major courses listed are designed to fit a variety of transfer programs. Students transferring to specific Baccalaureate programs at other institutions should provide their academic advisor with a copy of that

program to ensure proper transfer of courses (some substitution of courses will be allowed).

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Kinesiology and Health Promotion, A.S.

The Associate of Science degree in Kinesiology and Health Promotion will allow students a foundation to explore many areas of health promotion, clinical exercise physiology, biomechanics, nutrition, basic science, behavior science, sports and physical education. The A.S. in Kinesiology and Health Promotion is an excellent pre-professional degree for students who plan to transfer to earn a bachelor's degree and eventually enter the field of medicine, specifically to become a physician, physician assistant, occupational therapist, physical therapist, dentist, optometrist, ophthalmologist, chiropractor, or other related occupation in medicine or health science.

Recommended Curriculum
General Education (Minimum 32 credits)

1. Exploration and Participation

- BIOL 1000 - Introduction to Biology I (4CR) or Higher
- MATH 1400 - Pre-Calculus Algebra (4CR) or Higher
- ZOO 2040 - Human Anatomy (3CR)
- ZOO 2041 - Human Anatomy Lab (1CR)
- ZOO 2110 - Human Physiology (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR) AND
- ENGL 1020 - English II: Composition (3CR) OR
- ENGL 2005 - Technical Writing (3CR) OR

- ENGL 2020 - Introduction to Literature (3CR) OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- US and Wyoming Constitutions (3CR)
- Cultural Environment (3CR)
- PSYC 1000 - General Psychology (3CR)

4. General Education Electives

Physical Education (1CR)

Major Requirements

- CHEM 1005 - Basic Chemistry I (3CR) or Higher
- CHEM 1006 - Basic Chemistry Laboratory I (1CR) or Higher
- FCSC 1141 - Principles of Nutrition (3CR) OR
- PEPR 2136 - Sports Nutrition (3CR)
- HLED 1006 - Personal and Community Health (3CR)
- HLTK 1625 - American Heart Association BLS for the Provider (.33CR)
- KIN 2050 - Functional Kinesiology (3CR)
- PEPR 1005 - Introduction to Physical Education and Sport (2CR)
- PEPR 1052 - Care and Prevention of Athletic Injuries (3CR)
- PEPR 2030 - Motor Learning (3CR)
- PEPR 2135 - Personal Trainer Education (3CR)
- PSYC 2230 - Sports and Exercise Psychology (3CR)
- STAT 2050 - Fundamentals of Statistics (4CR) OR
- STAT 2070 - Introductory Statistics for Social Science (4CR)

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts,

Associate of Applied Science and Associate Degree in Nursing.

Physical Education, A.S.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- BIOL 1000 - Introduction to Biology I (4CR)
- MATH 1400 - Pre-Calculus Algebra (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- PSYC 1000 - General Psychology (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- CO/M 1030 - Interpersonal Communication (3CR)
- EDFD 2020 - Foundations of Education (3CR)
- EDFD 2100 - Educational Psychology (3CR)
- FCSC 1141 - Principles of Nutrition (3CR)
- HLED 1006 - Personal and Community Health (3CR)
- HLTK 1625 - American Heart Association BLS for the Provider (.33CR)

- ITEC 2360 - Teaching with Technology (3CR)
- PEPR 1005 - Introduction to Physical Education and Sport (2CR)
- PEPR 2012 - Physical Education for Elementary School (3CR)
- PEPR 2030 - Motor Learning (3CR)
- PEPR 2460 - Field Experience (Physical Education)(2CR)
- ZOO 2040 - Human Anatomy (3CR)
- ZOO 2041 - Human Anatomy Lab (1CR)
- ZOO 2110 - Human Physiology (4CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Coaching Certificate

The coaching certificate provides students with the knowledge and skills necessary to become an endorsed coach through the Wyoming Professional Teachers Standards Board. First aid and CPR, which also require renewals, may be completed at Casper College.

Certificate Requirements

- PEPR 1052 - Care and Prevention of Athletic Injuries (3CR)
- PEPR 2090 - Foundations of Athletic Coaching (3CR)
- PEPR 2091 - Athletic Officiating I (2CR)
- PEPR 2100 - Theory of Coaching: Volleyball (2CR)
or
- PEPR 2150 - Theory of Coaching: Basketball (2CR)
- PSYC 1000 - General Psychology (3CR)
- PSYC 2300 - Developmental Psychology (3CR)

Note:

The normal length of this program is nine months.

Graduation Requirements For specific graduation requirements see "Degree Requirements".

Foundations of Interprofessional Health Care Certificate

The Foundations of Interprofessional Health Care Certificate Program is a two semester program available to admitted or pre-health science students. It is designed to provide leadership and development for future healthcare professionals who will be expected to work as effective team members in an interprofessional healthcare team. The program will address a local, state, and national need.

1. Expected Student learning outcomes from completion of the certificate:

- a. Understand their learning and leadership styles
- b. Understand the roles and scopes of healthcare professionals outside their discipline
- c. Understand general health care and services available in the United States
- d. Demonstrate interpersonal abilities and communication sufficient to interact professionally and therapeutically with peers, faculty, staff, administrators, patients/clients, families and groups from variety of social, emotional, and intellectual backgrounds
- e. Communicate effectively in verbal, nonverbal, and written form
- f. Understand and demonstrate sufficient respect for others in non-verbal, verbal, and written communications
- g. Understand the cumulative effect that behavior, appearance, and communication has on the health science professional image
- h. Understand team and group development, relationship-centered leadership, and collaborative interprofessional teams
- i. Participate effectively in interprofessional team activities

Certificate Requirements

- CO/M 1030 - Interpersonal Communication (3CR)
- ENGL 1010 - English I: Composition (3CR)

- HLTK 1500 - Introduction to Health Care and Services (2CR)
- HLTK 2560 - The Interprofessional Health Care Team (3CR)
- HMDV 1300 - On Course (2CR)

Approved Electives (11CR)

- ANTH 1200 - Introduction to Cultural Anthropology (3CR)
- HLTK 1000 - Principles of Healthcare Calculations (2CR)
- HLTK 1200 - Medical Terminology (3CR)
- HLTK 1860 - Introduction to Human Disease (3CR)
- HLTK 1870 - Professionalism in Healthcare (3CR)
- HLTK 1975 - Spanish for Health Care Workers (3CR)
- HLTK 2400 - Complementary and Alternative Therapies (CAT) and Nursing (3CR)
- HLTK 2550 - Understanding the Economics, Ethics, and Policies Influencing Health Care (3CR)
- HLTK 2990 - Topics: (Subtitle)
- PSYC 1000 - General Psychology (3CR)
- PSYC 2155 - Motivational Interviewing (3CR)
- SOC 1000 - Introduction to Sociology (3CR)

Personal Trainer Education Certificate

The Personal Training Certificate program prepares individuals for certification as a personal trainer that leads to employment in health and fitness clubs, wellness centers, public and private recreation facilities, hospitals and corporate fitness programs. Certified personal trainers perform a variety of instructional and administrative duties for their clients including but not limited to instruction in human anatomy and physiology, fitness techniques, exercise science, personal training, nutrition and customer service.

Certificate Requirements

- BIOL 1000 - Introduction to Biology I (4CR)
- HLED 1006 - Personal and Community Health (3CR)
- PEPR 1005 - Introduction to Physical Education and Sport (2CR)
- PEPR 1052 - Care and Prevention of Athletic Injuries (3CR)
- PEPR 2030 - Motor Learning (3CR)

- PEPR 2135 - Personal Trainer Education (3CR)
- PEPR 2136 - Sports Nutrition (3CR)
- ZOO 2040 - Human Anatomy (3CR)
- ZOO 2041 - Human Anatomy Lab (1CR)
- ZOO 2110 - Human Physiology (4CR)

Note:

The normal length of this program is nine months.

Graduation Requirements

For specific graduation requirements see "Degree Requirements".

Physics

Physics, A.S.

The Physics Department offers courses to prepare the student for advanced work in engineering and other physical sciences, courses required in other programs such as the life sciences and education, and courses that contribute to a general studies program.

Students who take more than one of the physics sequences should consider the following rules regarding credit for graduation:

1. A maximum of four semester credits may be applied toward graduation by completing PHYS 1110 and PHYS 1310.
2. A maximum of four semester credits may be applied toward graduation by completing PHYS 1120 and PHYS 1320.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Included in the major requirements below

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)

OR

- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- CHEM 1025 - Chemistry I (3CR)
- CHEM 1028 - Chemistry Laboratory I (1CR)
- MATH 2200 - Calculus I (4CR)
- MATH 2205 - Calculus II (4CR)
- MATH 2210 - Calculus III (4CR)
- MATH 2310 - Applied Differential Equations I (3CR)
or
- MATH 2250 - Elementary Linear Algebra (3CR)
- PHYS 1310 - College Physics I (4CR)
- PHYS 1320 - College Physics II (4CR)
- PHYS 2310 - Physics III: Waves and Optics (4CR)
or
- PHYS 2320 - Physics IV: Modern Physics (4CR)

Electives (13CR)

Recommended electives:

Graduation requirements for the College of Arts and Science at the University of Wyoming. Other universities may have different requirements.

- COSC 1030 - Computer Science I (4CR)
- ES 1060 - Introduction to Engineering Problem Solving (3CR)
- Biological science or earth science (4CR)
- World language (8CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

To obtain a degree in physics, a student must obtain a grade of "C" or better in all major requirements.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Political Science

Political science is the study of the formal and informal institutions and processes by which people seek to regulate themselves in civil society. Students who major in political science often seek careers in the private sector, teaching, government service and administration, and the law.

Political Science, A.A.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside the major field of study.

1. Exploration and Participation

- Laboratory Science (8CR)
- MATH 1000 - Problem Solving (3CR)
or
- MATH 1400 - Pre-Calculus Algebra (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 1005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- POLS 1000 - American and Wyoming Government (3CR)
- Cultural Environment (3CR)
- Human Behavior (3CR) (Non-POLS)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- STAT 2050 - Fundamentals of Statistics (4CR)
or
- STAT 2070 - Introductory Statistics for Social Science (4CR)
- World Language (all in same language) (8CR)
- Approved Electives (7CR)
At least 12 additional credits from the following:
- POLS 1020 - Issues in Foreign Relations I (3CR)
- POLS 1030 - Issues in Foreign Relations II (3CR)
- POLS 1200 - Non-Western Political Cultures (3CR)
- POLS 2000 - Current Issues in American Government (3CR)
- POLS 2200 - Politics of Europe (3CR)
- POLS 2290 - Governments and Politics of Latin America (3CR)
- POLS 2310 - Introduction to International Relations (3CR)
- POLS 2410 - Introduction to Public Administration (3CR)
- POLS 2460 - Introduction to Political Philosophy (3CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Pre-Professional

Pre-Professional Curricula

Pre-professional degree programs are designed to prepare students for entry into a bachelor degree program and then into their identified area of professional schooling. It is necessary for pre-professional students to work closely with an academic advisor to ensure that the requirements of the identified professional school(s) are met. For each pre-professional student, the degree program will be modified to provide the student with coursework that will best prepare them for their future studies and professional practice. Students expecting to qualify for admission into professional schools are urged to study carefully the particular requirements of the institution from which they wish to obtain a degree. Since society imposes leadership responsibilities on professionally trained people, most professional schools recommend that pre-professional training should stress 1) proficiency in language, 2) broad cultural background in the liberal arts or humanistic studies and in the social and behavioral sciences, and 3) completion of some basic science course and familiarity with the use of the scientific laboratory method.

Pre-Dentistry, A.S.

This is a transfer degree program.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major

1. Exploration and Participation

- BIOL 1000 - Introduction to Biology I (4CR)
or
- BIOL 1010 - General Biology I (4CR)
- Mathematics (7CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR

- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming Constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- BIOL 2022 - Animal Biology (4CR)
or
- BIOL 2023 - Plant and Fungal Biology (4CR)
- MOLB 2210 - General Microbiology (4CR)
- CHEM 1025 - Chemistry I (3CR)
- CHEM 1028 - Chemistry Laboratory I (1CR)
- CHEM 1035 - Chemistry II (3CR)
- CHEM 1038 - Chemistry Laboratory II (1CR)
- PHYS 1110 - General Physics I (4CR)
- PHYS 1120 - General Physics II (4CR)
- World Language (8CR)*

Note:

* Students should refer to the requirements of their professional school or transfer institution.

To obtain a degree in Pre-Dentistry or Pre-Medicine, a student must receive a grade of "C" or better in all major requirements.

The normal length of this program is two academic years at 17-19 credits hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Pre-Law (Business), A.B.

There is no prescribed or required set of courses for pre-legal work. Students must have a B.A. or B.S. degree before beginning the professional study of law. There are no restrictions as to the field in which the degree is earned.

Generally, the objective of pre-legal study is to acquire a background useful in the study and practice of law. College study should prepare the student for law school by developing language comprehension and use; understanding of political, economic, social, and cultural institutions; and the ability to think logically and creatively. Courses promoting these objectives are included in the basic requirements for most undergraduate degrees. The choice of a major should be determined by the student's academic interest and professional objectives in law. Subjects providing a valuable background for the study or practice of law include accounting, business administration, economics, English, history, language, philosophy, political science, psychology, and sociology.

There are two major directions to obtain a pre-law degree: business or social science.

This is a transfer degree.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Laboratory Science (4CR)
- MATH 2350 - Business Calculus I (4CR)
- MATH 2355 - Business Calculus II (4CR)
- STAT 2050 - Fundamentals of Statistics (4CR)
or
- STAT 2070 - Introductory Statistics for Social Science (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR

- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)
- ECON 1010 - Principles of Macroeconomics (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- BADM 2010 - Business Law I (3CR)
- BADM 2340 - Business Organizations and Government Regulations (3CR)
- IMGT 2400 - Introduction to Information Management (3CR)
- ECON 1020 - Principles of Microeconomics (3CR)
- MGT 2100 - Principles of Management (3CR)
- MKT 2100 - Principles of Marketing (3CR)
- Advisor Approved Elective from BADM, HOSP, MKT, MGT, ACCT, ECON or COSC (2CR)

Note:

The normal length of this program is two academic years at 16-18 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Pre-Medicine, A.S.

This is a transfer degree program.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- BIOL 1000 - Introduction to Biology I (4CR)
or
- BIOL 1010 - General Biology I (4CR)
- Mathematics (7CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming Constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- BIOL 2022 - Animal Biology (4CR)
or
- BIOL 2023 - Plant and Fungal Biology (4CR)
- MOLB 2210 - General Microbiology (4CR)
- CHEM 1025 - Chemistry I (3CR)
- CHEM 1028 - Chemistry Laboratory I (1CR)
- CHEM 1035 - Chemistry II (3CR)
- CHEM 1038 - Chemistry Laboratory II (1CR)
- PHYS 1110 - General Physics I (4CR)

- PHYS 1120 - General Physics II (4CR)
- World Language (8CR)*

Note:

* Students should refer to the requirements of their professional school or transfer institution.

To obtain a degree in Pre-Dentistry or Pre-Medicine, a student must receive a grade of "C" or better in all major requirements.

The normal length of this program is two academic years at 17-19 credits hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Pre-Occupational Therapy, A.S.

The pre-occupational therapy program at Casper College is designed to prepare students to transfer to a professional program at another institution and is not a certified occupational therapy assistant (COTA) program. Casper College has a partnership with the University of North Dakota providing students the opportunity to earn an entry-level Master's degree in Occupational Therapy while remaining on the Casper College Campus. Casper College students will work with a Casper College advisor prior to applying for entry to this program. The University of North Dakota MOT Program - Casper College site - is located in the Loftin Life Science Building, (307) 268-2613.

Students planning to transfer to schools other than UND should contact those schools to obtain transfer requirements, and should notify the pre-OT advisor so that appropriate course selections are made.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- BIOL 1000 - Introduction to Biology I (4CR)
- CHEM 1005 - Basic Chemistry I (3CR)

- CHEM 1006 - Basic Chemistry Laboratory I (1CR)
- MATH 1000 - Problem Solving (3CR)
or
- MATH 1400 - Pre-Calculus Algebra (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- SOC 1000 - Introduction to Sociology (3CR)
- U.S. and Wyoming Constitutions (3CR)
- Cultural Environment (9CR)*

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- OOTH 2000 - Introduction to Occupational Therapy (2CR)
- PSYC 1000 - General Psychology (3CR)
- PSYC 2300 - Developmental Psychology (3CR)
- PSYC 2340 - Abnormal Psychology (3CR)
- STAT 2050 - Fundamentals of Statistics (4CR)
- ZOO 2040 - Human Anatomy (3CR)
- ZOO 2041 - Human Anatomy Lab (1CR)
- ZOO 2110 - Human Physiology (4CR)
- World Cultures (3CR)*
- Electives (4CR)

Note:

*Although MATH 1000 fulfills the Math requirement for this degree, it is not a sequential course. Students competing this course will have to complete MATH 1400 if they desire to pursue higher level MATH courses.

**Students wishing to apply to the UND Master's of Occupational Therapy program will need to have completed 9 credit hours of fine arts/humanities courses (3 hours of which needs to be simultaneously designated as Global Studies credit) that adheres to the University of North Dakota's Essential Studies program and is transferable. Please work with a pre-OT advisor to ensure appropriate course selection.

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Pre-Optometry, A.S.

This is a transfer degree program.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- BIOL 1000 - Introduction to Biology I (4CR)
or
- BIOL 1010 - General Biology I (4CR)
- BIOL 2022 - Animal Biology (4CR)
or
- BIOL 2023 - Plant and Fungal Biology (4CR)
or
- MOLB 2210 - General Microbiology (4CR)
- Mathematics (7CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR

- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- PSYC 1000 - General Psychology (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- CHEM 1025 - Chemistry I (3CR)
- CHEM 1028 - Chemistry Laboratory I (1CR)
- CHEM 1035 - Chemistry II (3CR)
- CHEM 1038 - Chemistry Laboratory II (1CR)
- CHEM 2300 - Introductory Organic Chemistry (4CR)
or
- CHEM 2320 - Organic Chemistry I (3CR)
and
- CHEM 2325 - Organic Chemistry Laboratory I (1CR)
- MATH 2200 - Calculus I (4CR) *
- MOLB 2210 - General Microbiology (4CR)
- MOLB 2220 - Pathogenic Microbiology (4CR)
- PHYS 1110 - General Physics I (4CR)
- PHYS 1120 - General Physics II (4CR)

Note:

* Students should refer to the requirements of their professional school or transfer institution.

The normal length of this program is two academic years at 16-18 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Pre-Pharmacy, A.S.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Included in the major requirements below

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- BIOL 1010 - General Biology I (4CR)
- BIOL 2022 - Animal Biology (4CR)
or
- BIOL 2023 - Plant and Fungal Biology (4CR)
- CHEM 1025 - Chemistry I (3CR)
- CHEM 1028 - Chemistry Laboratory I (1CR)
- CHEM 1035 - Chemistry II (3CR)
- CHEM 1038 - Chemistry Laboratory II (1CR)
- CHEM 2320 - Organic Chemistry I (3CR)
- CHEM 2325 - Organic Chemistry Laboratory I (1CR)
- CHEM 2340 - Organic Chemistry II (3CR)

- CHEM 2345 - Organic Chemistry Laboratory II (1CR)
- MATH 2200 - Calculus I (4CR)
- MOLB 2210 - General Microbiology (4CR)
- MOLB 2220 - Pathogenic Microbiology (4CR)
- STAT 2050 - Fundamentals of Statistics (4CR)
- ZOO 2040 - Human Anatomy (3CR)
- ZOO 2041 - Human Anatomy Lab (1CR)
- ZOO 2110 - Human Physiology (4CR)

Note:

This degree does not guarantee that a student has met all the prerequisites for admission to any pharmacy school.

***Exact entry level course is determined by ACT or Compass scores.

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Pre-Physical Therapy, A.S.

This is a transfer degree. This course curriculum transfers to the University of North Dakota.

Recommended Curriculum

General Education (Minimum 32 hours)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Included in the major requirements below

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR

- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- PSYC 1000 - General Psychology (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- BIOL 1000 - Introduction to Biology I (4CR)
or
- BIOL 1010 - General Biology I (4CR)
- BIOL 2022 - Animal Biology (4CR)
or
- BIOL 2023 - Plant and Fungal Biology (4CR)
or
- MOLB 2210 - General Microbiology (4CR)
- CHEM 1025 - Chemistry I (3CR)
- CHEM 1028 - Chemistry Laboratory I (1CR)
- CHEM 1035 - Chemistry II (3CR)
- CHEM 1038 - Chemistry Laboratory II (1CR)
- MATH 1400 - Pre-Calculus Algebra (4CR)
- MATH 1405 - Pre-Calculus Trigonometry (3CR)
- PHYS 1110 - General Physics I (4CR)
- PHYS 1120 - General Physics II (4CR)
- PSYC 2300 - Developmental Psychology (3CR)
- PSYC 2360 - Lifespan: Adulthood and Aging (1CR)
- SOC 1000 - Introduction to Sociology (3CR)
- ZOO 2040 - Human Anatomy (3CR)
- ZOO 2041 - Human Anatomy Lab (1CR)
- ZOO 2110 - Human Physiology (4CR)

Note:

*Most Physical Therapy programs will require additional Psychology and Cultural Environment courses. Additionally, some Physical Therapy programs will require Statistics and may encourage a Calculus I course in lieu of Physics II. Students should

work with the academic advisor to confirm required pre-requisites for their intended transfer institution.

Students should work with their advisor to review the pre-requisite requirements for their intended professional school(s) or transfer institution(s). Completion of the AS degree from Casper College does not guarantee fulfillment of all pre-requisite requirements for the transfer institution. Additional pre-requisite/recommended courses for Physical Therapy programs are offered by Casper College and also UW Casper.

The normal length of this program is two academic years with coursework above the 1000 level and an average load of 15-18 credit hours per semester. Summer sessions may be encouraged for completion in 2 years.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Pre-Veterinary, A.S.

This curriculum is designed to meet the general requirements for admission into the WUE school of veterinary medicine at Colorado State University or Washington State University. Admission requirements vary with each professional school. Therefore, students should determine, as soon as possible, which school of veterinary medicine they plan to attend. Then the student's program can be planned in such a way as to meet the specific requirements of the chosen professional school.

Because of the large number of required courses, many students are taking three years to complete this program.

This is a transfer degree.

Recommended Curriculum
General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- BIOL 1000 - Introduction to Biology I (4CR)

or

- BIOL 1010 - General Biology I (4CR)
 - BIOL 2022 - Animal Biology (4CR)
- or
- BIOL 2023 - Plant and Fungal Biology (4CR)
 - MATH 1400 - Pre-Calculus Algebra (4CR)
 - MATH 1405 - Pre-Calculus Trigonometry (3CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
- AND
- ENGL 1020 - English II: Composition (3CR)
- OR
- ENGL 2005 - Technical Writing (3CR)
- OR
- ENGL 2020 - Introduction to Literature (3CR)
- OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming Constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- CHEM 2320 - Organic Chemistry I (3CR)
- CHEM 2325 - Organic Chemistry Laboratory I (1CR)
- MOLB 2210 - General Microbiology (4CR)
- MOLB 2220 - Pathogenic Microbiology (4CR)
- PHYS 1110 - General Physics I (4CR)
- PHYS 1120 - General Physics II (4CR)
- STAT 2050 - Fundamentals of Statistics (4CR)
- Electives (8CR) *

Note:

*Elective credits should come from courses that help fulfill pre-requisite requirements at the student's

intended transfer institution. These choices should be made in consultation with an academic advisor.

Prior to transfer, it is recommended that students complete CHEM 3750 - Principles of Biochemistry (University of Wyoming course offered in Casper).

The above curriculum will vary to some degree with the student's background and experience. For example, some students will not need the beginning mathematics courses and may go directly into calculus. This will save time and permit the student to complete additional courses. Recommended courses include animal production, genetics, microbiology, and comparative chordate anatomy.

The normal length of this program is two academic years at 16-18 credit hours per semester.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Psychology

Psychology is the wide-ranging scientific study and exploration of behavior and mental processes. Many psychology graduates pursue eventual graduate training in law, medicine, psychology or a related field. Critical thinking skills are emphasized and developed. Psychology courses are an excellent complement to any profession or course of training that involves human interaction.

Psychology, A.S.

The following two-year curriculum identifies courses needed to meet the general education and psychology department requirements for the Associate of Science Psychology. Students should refer to the academic policies and requirements of the intended transfer institution for further advisement.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- BIOL 1000 - Introduction to Biology I (4CR)
- MATH 1000 - Problem Solving (3CR)
or
- MATH 1400 - Pre-Calculus Algebra (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming Constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements [29 credits]

- PSYC 1000 - General Psychology (3CR)
- PSYC 2000 - Research Psychological Methods (4CR)
- STAT 2050 - Fundamentals of Statistics (4CR)
or
- STAT 2070 - Introductory Statistics for Social Science (4CR)
- PSYC 2080 - Biological Psychology (3CR)
or
- PSYC 2210 - Drugs and Behavior (3CR)
- PSYC 2300 - Developmental Psychology (3CR)
- PSYC 2340 - Abnormal Psychology (3CR)
- PSYC 2380 - Social Psychology (3CR)
- Psychology Electives [6 credits]

Note:

Courses from the departments of addictionology, anthropology, biology, chemistry, computer science, counseling, English, fine arts, world language,

humanities, mathematics, physics, sociology, statistics and zoology, chosen in consultation with a psychology department faculty advisor, are recommended as electives for psychology majors.

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Cognitive Retraining Certificate

This certificate program is designed to prepare individuals to work with individuals with acquired brain injuries. Completing this program will assist individuals to prepare and qualify for the national examination as a Certified Brain Injury Specialist through the Academy of Certified Brain Injury Specialists.

Certificate Requirements

- BIOL 1000 - Introduction to Biology I (4CR)
- HLTK 1200 - Medical Terminology (3CR)
- HLTK 1870 - Professionalism in Healthcare (3CR)
- HLTK 1625 - American Heart Association BLS for the Provider (.33CR)
- KIN 1058 - Emergency Management of Athletic Injury/Illness (3CR)
- PSYC 1000 - General Psychology (3CR)
- PSYC 2080 - Biological Psychology (3CR)
- PSYC 2300 - Developmental Psychology (3CR)
- PSYC 2340 - Abnormal Psychology (3CR)
- PSYC 2390 - Acquired Brain Injuries (3CR)
- PSYC 2970 - Cognitive Retraining Practicum (3CR)

Note:

The normal length of this program is 9 months.

Graduation Requirements

For specific graduation requirements see "Degree Requirements".

Radiography

Radiographers are experts in the art and science of diagnostic medical radiography and are valuable members of the health care team. The Associate of Science in Radiography Program at Casper College spans 24 months of continuous education which includes two summer sessions. Didactic instruction (theory), is conducted at the college where students are required to obtain 53-58 academic-technical credit hours. Clinical instruction (practicum), is conducted at the Wyoming Medical Center, the two radiology departments of Outpatient Radiology of Casper, Community Health Center of Central Wyoming, Central Wyoming Neurosurgery, Memorial Hospital of Converse County, Sheridan Memorial Hospital, Lander Valley Medical Center, Mountain View Regional Hospital, Riverton Memorial Hospital, Campbell County Memorial Hospital, Casper Orthopedics, Memorial Hospital of Carbon County, and Western Medical for a total of 1125 clinical education hours accounting for an additional 20 clinical education credits.

Mission

The Associate of Science in Radiography Program at Casper College produces competent medical radiographers eligible for immediate employment or advanced education, by offering high quality educational and clinical experiences.

Purpose

The radiography program at Casper College provides quality learning opportunities for its students in order to accomplish its mission. It also encourages and supports life-long learning. By maintaining national accreditation, the radiography program will prepare students to meet the demands of the profession. This includes technical skills, as well as their ability to be intellectually adaptive and communicate well, to think analytically, to integrate knowledge, and to appreciate cultural and social diversity. Graduates will learn to exhibit and apply high ethical values and standards of practice in regard to patient care in the healthcare field.

Program goals

1. **Clinical Performance and Competence**
Students will produce high quality images by possessing the knowledge, clinical application, radiation safety practices and patient care skills needed to meet the needs of

- the radiography community as entry level radiographers.
2. **Problem Solving and Critical Thinking**
Students will demonstrate sound problem solving and critical thinking skills necessary to function effectively in the clinical setting.
 3. **Communication**
Students will communicate effectively with patients, peers, and other members of the healthcare team. Through effective communication students will function as a productive member of the healthcare team.
 4. **Professional Growth and Development**
Students will understand the purpose and importance of professional values, ethics, continuing education, and life-long learning.
 5. **Program Effectiveness**
Graduates will fulfill the needs of the health care community. The program will provide the community with graduates who are able to function as an active member of the health care team.

Accreditation and certification

Casper College's radiography program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT), located at 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-2901. The JRCERT phone number is (312) 704-5300 and the website with program information is located at JRCERT.ORG. Graduates of this program meet eligibility requirements for taking the national certification examination in radiography administered by the American Registry of Radiologic Technologists (ARRT). Upon passing this examination, students are certified as Registered Radiologic Technologists, R.T., ARRT, with all rights and privileges. The ARRT may refuse certification to a person who has a prior felony conviction. The American Registry of Radiologic Technologists is located at 1255 Northland Drive, St. Paul, MN; and can be reached by phone at (651) 687-0048. Please consult the radiography program director for further information.

Background check and drug/alcohol policy

Students enrolled in any of the health science programs will participate in clinical experiences in a variety of agencies. Prior to participating in the clinical experiences, students will be subject to that agency's requirements for a background check, drug testing and/or drug abuse prevention policies. Students are then subject to the random drug testing policy of that agency.

Following graduation, several of the state and/or national licensing or certification (registry) boards, including the American Registry of Radiologic Technologists (ARRT), may refuse to allow a graduate

to sit for the required exam or issue a license or certification to a person who has a prior felony conviction or proven history of drug or alcohol abuse. Applicants to whom this applies should consult the program director for further information.

Clinical accessibility policy

The radiology program uses a variety of health-care agencies in the community for clinical experience for the students. If you have been employed in one or more of the agencies and are not eligible for rehire as an employee, the agency may not permit you to participate in the essential clinical component of the program.

Please contact the human resources department of the affected agency and request documentation that states the agency position on your participation in the clinical component of the program. If you receive a negative response from the agency, you are automatically ineligible to apply. A response indicating you will be permitted to attend clinicals in the agency will be given to the program director prior to the selection process for admission to the program. If you are unable to fulfill clinical requirements due to a previous employer issue and have not complied with the above, you could be dismissed from the program.

Core performance standards for admission and progression

Critical thinking: Critical thinking ability to exercise non-clinical and clinical judgment in a timely manner.

Interpersonal: Interpersonal abilities sufficient to interact professionally and therapeutically with peers, faculty, staff, administrators, patients/clients, families, and groups from a variety of social, emotional, cultural, and intellectual backgrounds.

Communication: Communication skills sufficient for interaction with peers, faculty, staff, administrators, patients/clients, families, and groups in verbal, nonverbal and written form.

Mobility: Physical abilities sufficient to move from room to room, safely perform treatments/procedures, and assist patients/clients; lift and transfer patients/clients; manipulate equipment; walk and/or stand for extended periods of time.

Motor skills: Gross and fine motor skills sufficient to provide safe and effective patient/client care.

Hearing: Auditory ability sufficient to monitor and safely assess health needs.

Visual: Visual ability with or without corrective lenses sufficient for observation and assessment necessary in safe patient/client care.

Tactile: Tactile ability sufficient for physical assessment of patient/client care.

Professionalism: The ability to understand and demonstrate sufficient respect for others in non-verbal, verbal, and written communications in the classroom, laboratory, clinical settings, in the Casper College community, and in related public settings. The ability to demonstrate sufficient understanding of the cumulative effect that behavior, appearance, and communication has on the health science professional image.

Program admission requirements

New students are selected once each year, mid-spring semester. February 15 is the deadline to apply. Students failing to complete all requirements by this time will have to wait for program selection the following year. Professional education starts at the beginning of the summer semester. A maximum of 21 students are admitted each year.

Academic requirements

Students must:

1. Contact program faculty member for program application;
2. Be admitted as a classified student to Casper College before the deadline;
3. Be 18 years of age or older;
4. Have completed the following college courses with a minimum GPA of 2.3:
ENGL 1010 - English I: Composition (3CR)
HLTK 1200 - Medical Terminology (3CR)
MATH 1400 - Pre-Calculus Algebra (4CR)
ZOO 2040 - Human Anatomy (3CR)
and
ZOO 2041 - Human Anatomy Lab (1CR)
and
ZOO 2110 - Human Physiology (4CR)
5. It is recommended that the cultural environment elective is completed prior to admission to the program.
6. Participate in an observation period (fall semester) and a personal interview if selected based on criteria and grades (spring semester);
7. Submit two letters of recommendation;
8. If accepted into the program present documentation of MMR, chicken pox, and hepatitis B vaccination, PPD test, and evidence of health insurance and current driver's license as required by the clinical affiliates. Present evidence of a recent health examination.
9. Have evidence of American Heart Association BLS for the Provider Cardiopulmonary Resuscitation (CPR)

certification beginning the first semester of classes, and maintain current certification throughout the radiography program. This requirement may be met by successfully completing HLTK 1625.

Recommended coursework

High school physics or chemistry or equivalent (PHYS 1050 or PHYS 1110).

Transfer students

Students desiring to transfer into Casper College's medical radiography program from other JRCERT accredited programs may be accepted if there is adequate space available. All transfer students are expected to meet all program requirements of Casper College's Radiography Program before they graduate. Interested students should contact the program director.

Registered Radiologic Technologists (R.T.), ARRT

Technologists currently holding certificates in radiography from the American Registry of Radiologic Technologists and who do not possess an associate degree in radiologic technology from an accredited educational institution may pursue an associate degree with a major in radiography at Casper College.

Technologists will be expected to meet academic institutional degree requirements for the associate of science degree.

A maximum of 20 clinical education credits will be awarded to all registered technologists. A maximum of 27 didactic radiography credits may be awarded if technologists can verify they are currently employed as practicing radiographers. Individuals who have been unemployed beyond one year will be required to take specific didactic radiography courses. Interested technologists should contact the program director.

Radiography, A.S.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- ZOO 2040 - Human Anatomy (3CR)
- ZOO 2041 - Human Anatomy Lab (1CR)
- ZOO 2110 - Human Physiology (4CR)

- MATH 1400 - Pre-Calculus Algebra (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- PSYC 1000 - General Psychology (3CR)
or
- SOC 1000 - Introduction to Sociology (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- COSC 1200 - Computer Information Systems (3CR)
- HLTK 1200 - Medical Terminology (3CR)
- HLTK 1625 - American Heart Association BLS for the Provider (.33CR)
- RDTK 2200 - Sectional Anatomy (3CR)
- RDTK 1500 - Introduction to Radiologic Technology (1CR)
- RDTK 1530 - Patient Care and Management (2CR)*
- RDTK 1580 - Radiographic Positioning I (2CR)*
- RDTK 1610 - Radiographic Imaging I (3CR)
- RDTK 1640 - Radiographic Imaging II (3CR)
- RDTK 1680 - Radiographic Positioning II (2CR)
- RDTK 1710 - 1st Yr-Clinical Education I (2CR)
- RDTK 1810 - 1st Yr-Clinical Education II (3CR)
- RDTK 1830 - Pharmacology for Radiographers (1CR)

- RDTK 1910 - 1st Yr-Clinical Education III (3CR)
- RDTK 2580 - Radiographic Positioning III (2CR)
- RDTK 2630 - Radiographic Pathology (2CR)
- RDTK 2640 - Radiation Biology and Protection (2CR)
- RDTK 2710 - 2nd Yr-Clinical Education IV (2CR)
- RDTK 2810 - 2nd Yr-Clinical Education V (5CR)
- RDTK 2910 - 2nd Yr-Clinical Education VI (5CR)
- RDTK 2930 - Transition from Student to Radiographer (2CR)

Note:

To continue in the Associate of Science Radiography Program, a student must maintain a cumulative GPA of 2.3 or better and earn a "C" or better in all radiography, allied health, and laboratory science courses.

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Computed Tomography Certificate

Applicants must first be approved by their preferred clinical site.

Computed Tomography (CT) Technologists are highly skilled professionals who use specialized computerized equipment to produce cross sectional images that aid radiologists in diagnosing disease and disorders. CT technologists must be knowledgeable of anatomy, physiology, patient care, communication skills, physics, equipment operation, procedure protocol and patient safety. The one year computed tomography certificate program is designed to provide advanced technical skills to graduates of an accredited radiography program who are also registered technologists. The program provides the advanced competency requirements needed to take the American Registry of Radiologic Technologists (ARRT) exam in Computed Tomography (CT). This certificate program consists of online didactic courses as well as clinical

education for the student. The clinical component is required to complete competency exams required to sit the ARRT CT post-primary certification exam.

Admissions Requirements: Must be a registered Radiologic Technologist (radiographer or radiation therapist); Registered Nuclear Medicine Technologist (ARRT or NMTCB); or be registry eligible.

Certificate Requirements: Must be a registered Radiologic Technologist (radiographer or radiation therapist); Registered Nuclear Medicine Technologist (ARRT or NMTCB); or be registry eligible.

Certificate Requirements

- RDTK 1915 - Introduction to Computed Tomography (2CR)
- RDTK 1920 - Computed Tomography Procedures I (3CR)
- RDTK 1925 - Computed Tomography Physics and Instrumentation I (3CR)
- RDTK 1930 - Computed Tomography Clinical I (3CR)
- RDTK 1935 - Computed Tomography Clinical II (3CR)
- RDTK 1941 - Computed Tomography Physics and Instrumentation II (3CR)
- RDTK 1945 - Computed Tomography Procedures II (3CR)

Note:

The normal length of this program is nine months.

Graduation Requirements

For specific graduation requirements see "Degree Requirements".

Magnetic Resonance Imaging Certificate

Clinical Accessibility Policy: Applicants must first be approved by their preferred clinical site. Magnetic Resonance Imaging (MRI) Technologists are highly skilled professionals who use specialized computerized equipment to produce cross sectional images that aid radiologists in diagnosing disease and disorders. MRI technologists must be knowledgeable of anatomy, physiology, patient care, communication skills, physics, equipment operation, procedure protocol and patient safety. The one year magnetic resonance imaging certificate program is designed to provide advanced technical skills to graduates of an accredited radiography program who are also registered technologists. The program provides the advanced competency requirements needed to take the American Registry of Radiologic Technologists (ARRT) exam in Magnetic Resonance Imaging (MRI). This certificate

program consists of online didactic courses as well as clinical education for the student. The clinical component is required to complete competency exams required to sit the ARRT MRI post-primary certification exam.

Admissions Requirements: Must be a registered Radiologic Technologist (radiographer or radiation therapist); Registered Nuclear Medicine Technologist (ARRT or NMTCB); or be registry eligible.

Certificate Requirements: Must be a registered Radiologic Technologist (radiographer or radiation therapist); Registered Nuclear Medicine Technologist (ARRT or NMTCB); registered Diagnostic Medical Sonographer (ARRT or ARDMS); or be registry eligible.

Certificate Requirements

- RDTK 1940 - Introduction to MRI (2CR)
- RDTK 1945 - MRI Clinical Education I (3CR)
- RDTK 1950 - MRI Procedures I (3CR)
- RDTK 1955 - MRI Principles I: Physics of Magnetic Resonance Imaging (3CR)
- RDTK 1915 - MRI Clinical Education II (3CR)
- RDTK 1920 - MRI Procedures II (3CR)
- RDTK 1925 - MRI Principles II: Instrumentation and Imaging (3CR)

Note:

The normal length of this program is nine months.

Graduation Requirements: For specific graduation requirements see "Degree Requirements".

Mammography Certificate

The Casper College Mammography Certificate Program is a one semester advanced certification program available to graduates of an accredited radiography program, who are ARRT Certified in Radiography.

Mammographers are highly trained professionals who work with state of the art imaging equipment to produce high quality screening and diagnostic images of the breast.

The program curriculum incorporates the standards established by the American Society of Radiologic Technologists and the guidelines set forth by the American Registry of Radiologic Technologists (ASRT). Upon successful completion of the program, students will be eligible to sit for the American Registry

of Radiologic Technologists (ARRT) national post primary certification exam in Mammography.

All didactic theory courses will be offered online. Courses will cover all content areas required by the ARRT, ASRT and meet the U.S. Food & Drug Administration (FDA) Mammography Quality Standards Act (MQSA) guidelines and requirements

American Registry of Radiologic Technologists Structured Education Requirements

Effective January 1, 2016, in order to take the Mammography Certification Exam, the ARRT will require documentation of structured education along with the required clinical experience requirements. Structured education may be in the form of formal education coursework completed at a college or university or equivalent to 16 CE hours of structured education. Candidates will need to document at least on CE credit or its equivalent of structured education at a college or university in each of the certification content categories. Both forms of structured education must meet the ARRT's current CE guidelines. The Casper College program meets these requirements. If you are not working toward the Mammography certificate, you may take the Mammography Fundamentals online course to meet some of these requirements without completing the clinical education portion of the program.

Admission Requirement: Must be a registered Radiologic Technologist or registry eligible and pass the exam prior to the start of the program.

Certificate Requirements

- RDTK 2550 - Mammography Fundamentals (3CR)
- RDTK 2555 - Mammography Clinical (2CR)

Note:

Normal length of this program is 15 weeks.

Renewable Energy Technology

Renewable Energy Technology, A.A.S.

Recommended Curriculum

General Education (Minimum 17 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation (one course minimum)

- Laboratory Science (4CR)
- Mathematics (3-4CR) - 1000 level or higher

2. Communication

- Written or Oral Communication

3. Relationship with the World

- Human Behavior
- U.S. and Wyoming constitutions (3CR) required
- Cultural Environment

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- ATSC 2000 - Introduction to Meteorology (4CR)
- DESL 1850 - Basic Hydraulics (3CR)
- ELTR 1535 - Electrical Power (3CR)
- ELTR 1570 - Electric Circuits (4CR)
- ELTR 1620 - Electrical Concepts Laboratory (1.5CR)
- ELTR 2925 - Fiber Optics (4CR)
- ENTK 1510 - Drafting I (4CR)
- ENVT 1600 - Industrial Safety (4CR)
- RETK 1500 - Solar Power Systems (2CR)
- RETK 1520 - Wind Power Systems (3CR)
- RETK 2530 - Instrumentation (3CR)
- RETK 2500 - Basic Site Planning (3CR)
- RETK 2550 - Power Distribution (3CR)
- Electives (approved) (2CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Renewable Energy Technology Certificate

Certificate Requirements

- DESL 1850 - Basic Hydraulics (3CR)
- ELTR 1535 - Electrical Power (3CR)
- ELTR 1570 - Electric Circuits (4CR)
- ELTR 1620 - Electrical Concepts Laboratory (1.5CR)
- ELTR 2925 - Fiber Optics (4CR)
- ENVT 1600 - Industrial Safety (4CR)
- RETK 1500 - Solar Power Systems (2CR)
- RETK 1520 - Wind Power Systems (3CR)
- RETK 2500 - Basic Site Planning (3CR)
- RETK 2530 - Instrumentation (3CR)
- RETK 2550 - Power Distribution (3CR)

Note:

The normal length of this program is nine months.

Graduation Requirements:

For specific graduation requirements see "Degree Requirements".

Respiratory Therapy

Respiratory therapists are health care specialists who evaluate, treat and care for patients with breathing disorders; and work under the direction of a physician and assist in the diagnosis, treatment and management of patients with pulmonary disorders. Casper College's Associate of Science program in Respiratory Therapy spans 24 months of continuous education, including two summer sessions. Clinical instruction is conducted primarily at the Wyoming Medical Center, with rotations to home health agencies in town. A summer neonatal clinical rotation will occur during the students' second year and will involve traveling out of state to a Level III nursery.

Graduates of this program will be eligible to sit for the certification and registry national exams, earning the credentials of Certified Respiratory Therapist (CRT), and Registered Respiratory Therapist (RRT).

Background check and drug/alcohol policy

Students enrolled in any of the health science programs will participate in clinical experiences in a variety of agencies. Prior to participating in the clinical experiences, students will be subject to that agency's requirements for a background check, drug testing and/or drug abuse prevention policies. Students are then subject to the random drug testing policy of that agency.

Following graduation, several of the state and/or national licensing or certification (registry) boards, including the Wyoming State Licensing Board in Respiratory Care, may refuse to allow a graduate to sit for the required exam or issue a license or certification to a person who has a prior felony conviction or proven history of drug or alcohol abuse. Applicants to whom this applies should consult the program director for further information.

Clinical accessibility policy The respiratory therapy program uses a variety of health care agencies in the community for clinical experience for the students. If you have been employed in one or more of the agencies and are not eligible for rehire as an employee, the agency may not permit you to participate in the essential clinical component of the program.

Please contact the human resources department of the affected agency and request documentation that states the agency position on your participation in the clinical component of the program. If you receive a negative response from the agency, you are automatically ineligible to apply. A response indicating you will be permitted to attend clinicals in the agency will be given to the program director prior to the selection process for admission to the program. If you are unable to fulfill clinical requirements due to a previous employer issue and have not complied with the above, you could be dismissed from the program.

Core Performance Standards for Admission and Progression

Critical thinking: Critical thinking ability to exercise non-clinical and clinical judgment in a timely manner.

Interpersonal: Interpersonal abilities sufficient to interact professionally and therapeutically with peers, faculty, staff, administrators, patients/clients, families, and groups from a variety of social, emotional, cultural, and intellectual backgrounds.

Communication: Communication skills sufficient for interaction with peers, faculty, staff, administrators, patients/clients, families, and groups in verbal, nonverbal and written form.

Mobility: Physical abilities sufficient to move from room to room, safely perform treatments/procedures, and assist patients/clients; lift and transfer patients/clients; manipulate equipment; walk and/or stand for extended periods of time.

Motor skills: Gross and fine motor skills sufficient to provide safe and effective patient/client care.

Hearing: Auditory ability sufficient to monitor and safely assess health needs.

Visual: Visual ability with or without corrective lenses sufficient for observation and assessment necessary in safe patient/client care.

Tactile: Tactile ability sufficient for physical assessment of patient/ client care.

Professionalism: The ability to understand and demonstrate sufficient respect for others in non-verbal, verbal, and written communications in the classroom, laboratory, clinical settings, in the Casper College community, and in related public settings. The ability to demonstrate sufficient understanding of the cumulative effect that behavior, appearance, and communication has on the health science professional image.

Program admission requirements New students are selected once a year, mid-spring semester (non-smokers preferred). Students failing to complete all the requirements by this time will have to wait for program selection the following year. Professional education starts at the beginning of the summer semester. A maximum of 12 students are admitted each year.

Academic requirements

Students must:

1. Contact program faculty member for program application;
2. Be admitted as a classified student to Casper College before the deadline;
3. Be 18 years of age or older;
4. Have completed the following college courses with a minimum GPA of 2.3:
ZOO 2040 - Human Anatomy (3CR)
ZOO 2041 - Human Anatomy Lab (1CR)
ZOO 2110 - Human Physiology (4CR)
MATH 1000 - Problem Solving (3CR) (minimum)
HLTK 1200 - Medical Terminology (3C)
ENGL 1010 - English I: Composition (3CR)
5. Participate in an observation period and a personal interview (spring semester);
6. Present evidence of a recent health examination completed by the applicant's physician after interview.
7. Have evidence of American Heart Association BLS for the Provider Cardiopulmonary Resuscitation (CPR) certification beginning the first semester of classes, and maintain current certification throughout the respiratory therapy program. This requirement may be met by successfully completing HLTK 1625.

Respiratory Therapy, A.S.

Recommended Curriculum

General Education coursework can be completed from within or outside of the major field of study.

General Education (Minimum 32 credits)

1. Exploration and Participation

- MATH 1000 - Problem Solving (3CR)
- PHYS 1050 - Concepts of Physics (4CR) or
- CHEM 1005 - Basic Chemistry I (3CR) and
- CHEM 1006 - Basic Chemistry Laboratory I (1CR)
- ZOO 2040 - Human Anatomy (3CR)
- ZOO 2041 - Human Anatomy Lab (1CR)
- ZOO 2110 - Human Physiology (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR) AND
- ENGL 1020 - English II: Composition (3CR) OR
- ENGL 2005 - Technical Writing (3CR) OR
- ENGL 2020 - Introduction to Literature (3CR) OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)
- PSYC 1000 - General Psychology (3CR) or
- SOC 1000 - Introduction to Sociology (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- HLTK 1200 - Medical Terminology (3CR)

- RESP 1500 - Introduction to Respiratory Therapy (3CR)
- RESP 1505 - Cardiopulmonary Anatomy & Physiology (2CR)
- RESP 1507 - Respiratory Therapy I (3CR)
- RESP 1515 - Respiratory Lab I (1CR)
- RESP 1518 - Respiratory Practicum I (3CR)
- RESP 1523 - Respiratory Pharmacology (2CR)
- RESP 1527 - Respiratory Therapy II (3CR)
- RESP 1535 - Respiratory Lab II (1CR)
- RESP 1538 - Respiratory Practicum II (4CR)
- RESP 1545 - Respiratory Pathophysiology (2CR)
- RESP 2500 - Respiratory Specialty Practicum (3CR)
- RESP 2507 - Respiratory Therapy III (3CR)
- RESP 2510 - Respiratory Pediatrics and Neonatology (2CR)
- RESP 2545 - Respiratory Lab III (1CR)
- RESP 2548 - Respiratory Practicum III (4CR)
- RESP 2557 - Respiratory Therapy IV (3CR)
- RESP 2570 - Respiratory Simulations (2CR)
- RESP 2575 - Respiratory Lab IV (1CR)
- RESP 2578 - Respiratory Practicum IV (4CR)

- RESP 2507 - Respiratory Therapy III (3CR)
- RESP 2510 - Respiratory Pediatrics and Neonatology (2CR)
- RESP 2545 - Respiratory Lab III (1CR)
- RESP 2548 - Respiratory Practicum III (4CR)

Spring II

- RESP 2557 - Respiratory Therapy IV (3CR)
- RESP 2570 - Respiratory Simulations (2CR)
- RESP 2575 - Respiratory Lab IV (1CR)
- RESP 2578 - Respiratory Practicum IV (4CR)

Note:

To continue in the Associate of Science Respiratory Therapy Program, a student must maintain a cumulative GPA of 2.3 or better and earn a "C" or better in all respiratory, allied health, and laboratory science courses.

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Social Work

Social Work, A.A.

The practice of social work requires knowledge of human development and behavior; of social, economic, and cultural institutions; and of the interaction of all these factors. Social work practice consists of the application of social work values, principles, and techniques to one or more of the following: helping individuals to obtain services; helping communities or groups to provide or improve social and health services; and participating in legislative processes.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

Suggested Course Sequence

Summer I

- RESP 1500 - Introduction to Respiratory Therapy (3CR)
- RESP 1505 - Cardiopulmonary Anatomy & Physiology (2CR)

Fall I

- RESP 1507 - Respiratory Therapy I (3CR)
- RESP 1515 - Respiratory Lab I (1CR)
- RESP 1518 - Respiratory Practicum I (3CR)
- RESP 1523 - Respiratory Pharmacology (2CR)

Spring I

- RESP 1527 - Respiratory Therapy II (3CR)
- RESP 1535 - Respiratory Lab II (1CR)
- RESP 1538 - Respiratory Practicum II (4CR)
- RESP 1545 - Respiratory Pathophysiology (2CR)

Summer II

- RESP 2500 - Respiratory Specialty Practicum (3CR)

Fall II

1. Exploration and Participation

- BIOL 1000 - Introduction to Biology I (4CR)
- MATH 1000 - Problem Solving (3CR) (or higher)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. & Wyoming Constitutions (3CR)
- Cultural Environment (3CR)

4. Physical Education (1CR)

Major Requirements

- ECON 1010 - Principles of Macroeconomics (3CR)
- PSYC 1000 - General Psychology (3CR)
- PSYC 2080 - Biological Psychology (3CR)
- SOC 1000 - Introduction to Sociology (3CR)
- SOC 1100 - Social Problems (3CR)
- SOC 1101 - Education and the Good life: A First-Year Seminar (3CR)
- SOWK 2000 - Foundations of Social Work (3CR)
- SOWK 2025 - Social Work Capstone (3CR)
- STAT 2050 - Fundamentals of Statistics (4CR)
or
- STAT 2070 - Introductory Statistics for Social Science (4CR)

At least 9 additional credits from the following:

- ANTH 1200 - Introduction to Cultural Anthropology (3CR)
- PSYC 2210 - Drugs and Behavior (3CR)
- PSYC 2340 - Abnormal Psychology (3CR)
- SOC 2325 - Marriage and Family (3CR)
- SOC 2400 - Criminology (3CR)

- SOWK 2005 - Social Work Lab (1CR)
- World language (4-8CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Sociology

Sociology, A.A.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- BIOL 1000 - Introduction to Biology I (4CR)
or
- BIOL 1010 - General Biology I (4CR)
- Lab Science (4CR)
- MATH 1000 - Problem Solving (3CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- World language (8CR)

4. Physical Education (1CR)

Major Requirements

- SOC 1000 - Introduction to Sociology (3CR)
- SOC 1100 - Social Problems (3CR)
- SOC 1101 - Education and the Good life: A First-Year Seminar (3CR)
- SOC 2325 - Marriage and Family (3CR)
- SOC 2400 - Criminology (3CR)

At least 13 additional credits from the following:

- ANTH 1200 - Introduction to Cultural Anthropology (3CR)
- ECON 1010 - Principles of Macroeconomics (3CR)
- HIST 1110 - Western Civilization I (3CR)
- HIST 1120 - Western Civilization II (3CR)
- PHIL 1000 - Introduction to Philosophy (3CR)
- POLS 2460 - Introduction to Political Philosophy (3CR)
- PSYC 1000 - General Psychology (3CR)
- STAT 2070 - Introductory Statistics for Social Science (4CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Statistics

The Applied Statistics program provides the student with the methods and procedures to properly plan and obtain data for a research project, and then correctly analyze the collected information in order to answer the question motivating the study.

Applied Statistics, A.S.

The Associate of Science in Applied Statistics will prepare the student for all further research methodology

courses in every academic discipline through the Master's level.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Laboratory Science (4CR)
- MATH 1400 - Pre-Calculus Algebra (4CR) or above

2. Communication

- ENGL 1010 - English I: Composition (3CR) AND
- ENGL 1020 - English II: Composition (3CR) OR
- ENGL 2005 - Technical Writing (3CR) OR
- ENGL 2020 - Introduction to Literature (3CR) OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- STAT 2050 - Fundamentals of Statistics (4CR) or
- STAT 2070 - Introductory Statistics for Social Science (4CR)
- STAT 2150 - Statistical Methods of Data Analysis (4CR)
- STAT 2220 - Experimental Design (5CR) *
- STAT 2120 - Fundamentals of Sampling (5CR) ** or

- STAT 2240 - Categorical Data Analysis (5CR) ***
- Electives (12CR)

Recommended Electives:

- COSC 1010 - Introduction to Computer Science (4CR)
- COSC 1030 - Computer Science I (4CR)
- ENGL 2005 - Technical Writing (3CR)
- MATH 2200 - Calculus I (4CR)
or
- MATH 2350 - Business Calculus I (4CR)
- PSYC 2000 - Research Psychological Methods (4CR)
- STAT 2120 - Fundamentals of Sampling (5CR) **
- STAT 2240 - Categorical Data Analysis (5CR) ***
- STAT 2485 - Statistics Laboratory (2CR)
- Laboratory Science (4CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

All classes in the major must be passed with a "C" or better.

* Students desiring upper division credit (UW) must register for STAT 4025 (UW/CC) and STAT 2221. Taken concurrently these courses are equivalent to STAT 2220.

**Students desiring upper division credit (UW) must register for STAT 4155 (UW/CC) and STAT 2121. Taken concurrently these courses are equivalent to STAT 2120.

***Students desiring upper division credit (UW) must register for STAT 4045 (UW/CC) and STAT 2241. Taken concurrently these courses are equivalent to STAT 2240.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Applied Statistics Certificate

The certificate program is designed for persons wishing to obtain statistical training in order to enhance their current career choice. The coursework provides the student working knowledge of all of the most commonly employed statistical designs, data gathering mechanisms, and training in the use of two different statistical computer packages for data analysis. The focus is always on application and results. Completion of the course work is equivalent to a minor concentration in statistics.

Certificate Requirements

- STAT 2050 - Fundamentals of Statistics (4CR)
or
- STAT 2070 - Introductory Statistics for Social Science (4CR)
- STAT 2120 - Fundamentals of Sampling (5CR) **
or
- STAT 2240 - Categorical Data Analysis (5CR) ***
- STAT 2150 - Statistical Methods of Data Analysis (4CR)
- STAT 2220 - Experimental Design (5CR) *

Note:

The normal length of this program is two years.

* Students desiring upper division credit (UW) must register for STAT 4025 (UW/CC) and STAT 2221. Taken concurrently these courses are equivalent to STAT 2220.

**Students desiring upper division credit (UW) must register for STAT 4155 (UW/CC) and STAT 2121. Taken concurrently these courses are equivalent to STAT 2120.

***Students desiring upper division credit (UW) must register for STAT 4045 (UW/CC) and STAT 2241. Taken concurrently these courses are equivalent to STAT 2240.

Graduation Requirements

For specific graduation requirements see "Degree Requirements".

Technical Studies

Technical Studies, A.A.S.

This degree is designed for those students who are planning to transfer to the University of Wyoming and enroll in the bachelor of applied science degree program. It is open to certificate holders who are interested in earning an associate of applied science degree either via traditional classroom instruction or via distance education.

Recommended Curriculum

General Education (Minimum 17 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- MATH 1400 - Pre-Calculus Algebra (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- POLS 1000 - American and Wyoming Government (3CR)
- Human Behavior (3CR)
or
- Cultural Environment (3CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements (Minimum 43 Credits)

- **Core Technical Studies Coursework (30CR)**

Students must choose course work from within a technical field of study in the School of Business and Industry or meet the requirements of a certificate program in the School of Business and Industry.

- **Additional Courses within or complimenting the core area to be decided in consultation with an advisor (10CR)**

*There is a 40-hour minimum for transfer to the University of Wyoming.

- **Additional Technical Studies Electives (3CR)** - Select in consultation with advisor

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and Requirements."Degree

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Theatre and Dance

The mission of the department of theatre and dance is to provide the first two years of baccalaureate coursework and production opportunities for the theatre and/or dance major; to provide cultural and artistic resources and opportunities to the general student body of Casper College; and to stimulate and be prominent in the intellectual and cultural life of the Casper community.

The curriculum is designed to provide a full range of classroom study and practical experience for the theatre and/or dance major, while allowing ample opportunity for participation in all classes and productions by general education students. Consistent with the ideal of a liberal arts education, the curriculum is designed to expose students to a wide variety of experiences within the various disciplines of theatre and dance.

Dance Performance, A.A.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- BIOL 1000 - Introduction to Biology I (4CR)
or
- BIOL 1010 - General Biology I (4CR)
- ZOO 2040 - Human Anatomy (3CR)
- ZOO 2041 - Human Anatomy Lab (1CR)
- Mathematics (3CR) - 1000 level or higher

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives (5CR)

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- THEA 1010 - Fundamentals of Theatre Arts (3CR)
- DANC 1015 - Introduction to Dance (2CR)
- DANC 1210 - Dance Ensemble I (1CR)
- DANC 1300 - Dance Improvisation I (1CR)
- DANC 1320 - Dance Improvisation II (1CR)
- DANC 1410 - Ballet I (1CR)
- DANC 1420 - Ballet II (2CR)
- DANC 1450 - Beginning Tap Dance (1CR)

- DANC 1460 - Modern Dance I (1CR)
- DANC 1470 - Modern Dance II (1CR)
- DANC 1480 - Jazz I (1CR)
- DANC 1500 - Dance Performance
- DANC 2200 - Backgrounds of Dance (3CR)
- DANC 2210 - Dance Ensemble II (1CR)
- DANC 2212 - Beginning Composition (2CR)
- DANC 2215 - Intermediate Dance Composition (3CR)
- DANC 2410 - Ballet III (2CR)
- DANC 2420 - Ballet IV (2CR)
- DANC 2450 - Tap II (1CR)
- DANC 2460 - Modern Dance III (2CR)
- DANC 2470 - Modern Dance IV (2CR)
- DANC 2480 - Jazz II (1CR)

Major electives must come from the following list:

- ART 2010 - Art History I (3CR)
- MUSC 1046 - Studio: Musical Theatre Voice (1CR)
- THEA 1100 - Acting I (3CR)
- THEA 1115 - Twentieth Century Avant Garde Theatre (3CR)
- THEA 1125 - Musical Theatre Performance Techniques I (3CR)
- DANC 1425 - Ballet Studies (1CR)
- THEA 2145 - Costume Construction (3CR)
- THEA 2155 - Movement for Acting (3CR)
- THEA 2160 - Stage Make-up (3CR)
- THEA 2230 - Stage Lighting (3CR)
- THEA 2370 - Summer Theatre

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Musical Theatre Performance, A.A.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

∇Exploration and Participation

- Lab Science (4CR)
- Mathematics (3CR) - 1000 level or higher

∇Communication

- ENGL 1010 - English I: Composition (3CR)" AND
- ENGL 1020 - English II: Composition (3CR) OR
- ENGL 2005 - Technical Writing (3CR)"OR
- ENGL 2020 - Introduction to Literature" (3CR) OR
- CO/M 2010 - Public Speaking (3CR)

∇Relationship with the World

- Cultural Environment (3CR)
- Human Behavior (3CR)
- POLS 1000 - American and Wyoming" Government (3CR)

∇General Education Electives (9CR)

- Must be chosen from areas 1, 2, or 3 above.

∇ Physical Education (1CR)

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Major Requirements

- MUSC 1033- Written Theory I hqt"O wulecrf" Vj gcvtg"(3CR)
- MUSC 1035 - Aural Theory I (1CR)
- MUSC 1043"- Written Theory II hqt"O wulecrf" Vj gcvtg"(3CR)
- MUSC 1045 - Aural Theory II (1CR)
- MUSC 1046 - Studio: Musical Theatre Voice (1CR) (4 semesters needed for degree)
- MUSC 1300 - Class Piano I (1CR)
- MUSC 1301 - Class Piano II (1CR)
- THEA 1010 - Fundamentals of Theatre Arts"(3CR)

- THEA 1100 - Acting I (3CR)
- THEA 1125 - Musical Theatre Performance Techniques I (3CR)
- DANC 1410 - Ballet I (1CR)
- DANC 1450 - Beginning Tap Dance (1CR)
- DANC 1480 - Jazz I (1CR)
- THEA 2050 - Theatre Practice (2CR needed for degree)
- THEA 2100 - Acting II (3CR)
- THEA 2350 - Musical Theatre History and" Analysis (4CR)

Additional Recommended Courses:

- THEA 2010 - Theatrical Backgrounds Drama" I (3CR)
- THEA 2020 - Theatrical Backgrounds Drama" II (3CR)
- THEA 2155 - Movement for Acting (3CR)
- THEA 2160 - Stage Make-up (3CR)
- THEA 2310 - Auditioning (3CR)
- THEA 2230 - Stage Lighting (3CR)
- THEA 2370 - Summer Theatre (1-3CR)
- THEA 2790 - Stage Management (2CR)

Note:

The normal length of this program is two academic years at 16-18 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Technical Theatre, A.A.

This degree is recommended to any student who wishes to pursue the technical areas of theatre, including technical direction, stage management, and scenic/lighting/costume/makeup design.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Laboratory Science (4CR)
- Mathematics (3CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives (9CR)

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- THEA 1005 - The Art of Sound (1CR)
or
- THEA 1471 - Technical Theatre Practicum Costuming (2CR)
or
- THEA 1472 - Technical Theatre Practicum Lighting (2CR)
or
- THEA 1473 - Technical Theatre Practicum Properties (2CR)
or
- THEA 2060 - Production: Run Crew
or
- THEA 2070 - Production: Costume Crew
or
- THEA 2080 - Production: Stage Management
- THEA 1010 - Fundamentals of Theatre Arts (3CR)
- THEA 1100 - Acting I (3CR)
- THEA 2010 - Theatrical Backgrounds Drama I (3CR)

- THEA 2020 - Theatrical Backgrounds Drama II (3CR)
- THEA 2160 - Stage Make-up (3CR)
- THEA 2220 - Stagecraft (4CR)
- THEA 2311 - Portfolio Preparation (1CR)
- THEA 2145 - Costume Construction (3CR)
- THEA 2230 - Stage Lighting (3CR)
- THEA 2235 - Introduction to Scenic Design (3CR)
or
- THEA 2240 - Costume Design (3CR)
- MUSC 2410 - Sound Reinforcement I (2CR)
or
- THEA 2790 - Stage Management (2CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Theatre Performance, A.A.

This degree is recommended to any student who wishes to pursue performance in theatre, film, or television. It also provides an appropriate foundation for directing.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Laboratory Science (4CR)
- Mathematics (3CR) - 1000 level or higher

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR

- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives (9CR)

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- THEA 1010 - Fundamentals of Theatre Arts (3CR)
- THEA 1100 - Acting I (3CR)
- THEA 2010 - Theatrical Backgrounds Drama I (3CR)
- THEA 2020 - Theatrical Backgrounds Drama II (3CR)
- THEA 2050 - Theatre Practice (2CR needed for degree)
- THEA 2100 - Acting II (3CR)
- THEA 2140 - Voice for Acting (3CR)
- THEA 2160 - Stage Make-up (3CR)
- THEA 2220 - Stagecraft (4CR)
- THEA 2310 - Auditioning (3CR)
- Theatre dance courses (1CR)
- Approved electives (3CR)

Choose from the following electives:

- MUSC 1270 - Studio: Voice I
- MUSC 1272 - Class Voice (1CR)
- THEA 2790 - Stage Management (2CR)
- Dance Courses
- Theatre Courses

Note:

The normal length of this program is two academic years at 16-18 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts,

Associate of Applied Science and Associate Degree in Nursing.

Visual Arts

Visual Art Program Mission Statement

The Visual Arts Department will provide a quality visual arts education based on a foundation of both traditional and contemporary practices and ideas. Consistent with the mission, philosophy, and institutional purposes of Casper College, this education serves as the foundation for further study and meaningful participation in contemporary society.

Art, A.A.

This course of study is intended for the liberal arts transfer student who will enter a Bachelor of Arts program.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Laboratory Science (4CR)
- Mathematics (3CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (4CR)

4. General Education Electives (9CR)

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- ART 0200 - Convocation (0CR)
- ART 1005 - Drawing I (3CR)
- ART 1110 - Foundation: Two-Dimensional (3CR)
- ART 1120 - 3D Design (3CR)
- ART 1130 - Foundation: Color Theory (3CR)
- ART 2010 - Art History I (3CR)
- ART 2020 - Art History II (3CR)
- ART 2035 - Art History III (3CR)
- ART 2210 - Painting I (3CR)
- ART 2310 - Sculpture I (3CR)
- Electives (1CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Museum/Gallery Studies, A.A.

This program is designed for students interested in pursuing a museum or gallery career. The degree is especially appropriate for students interested in working with art, history, or anthropology and allows focus in other areas such as geology or paleontology. The courses provide an understanding of basic operations of a museum or gallery, such as design, education, collections management, marketing, and an overview of the history and changing role of these facilities in society.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Laboratory Science (4CR)
- Mathematics (3CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment (3CR)

4. General Education Electives (9CR)

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- ANTH 1100 - Introduction to Physical Anthropology (3CR)
or
- ANTH 1200 - Introduction to Cultural Anthropology (3CR)
- ANTH 1300 - Introduction to Archaeology (3CR)
- ART 1300 - Museum Studies (3CR)
- ART 2010 - Art History I (3CR)
- ART 2020 - Art History II (3CR)
- ART 2023 - Collections Management (3CR)
- ART 2035 - Art History III (3CR)
- ART 2990 - Museum Training Internship (6CR)
- CO/M 2010 - Public Speaking (3CR)
- Electives (3CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation.

For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Art Education, A.F.A.

This course of study is intended for the art major transfer student who will enter a bachelor of fine arts program.

Recommended Curriculum

General Education (Minimum 17 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation (3-4 CR)

- Science
- Mathematics

(Both Recommended)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- PSYC 1000 - General Psychology (3CR)
- Cultural Environment (3CR)
- US and Wyoming Constitutions (3CR)

4. General Education Electives (1CR)

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- ART 0200 - Convocation (0CR)
- ART 1005 - Drawing I (3CR)
- ART 1110 - Foundation: Two-Dimensional (3CR)
- ART 1120 - 3D Design (3CR)
- ART 1130 - Foundation: Color Theory (3CR)
- ART 2010 - Art History I (3CR)
- ART 2020 - Art History II (3CR)
- ART 2035 - Art History III (3CR)
- ART 2073 - Introduction to Art Education (3CR)
- ART 2090 - Printmaking (3CR)
- ART 2122 - Digital Design I (3CR)
- ART 2141 - Professional Practice in the Arts I (1CR)
- ART 2210 - Painting I (3CR)
- ART 2310 - Sculpture I (3CR)
- ART 2410 - Ceramics I (3CR)
- EDFD 2020 - Foundations of Education (3CR)
- ITEC 2360 - Teaching with Technology (3CR)

Note:

The normal length of this program is two academic years at 16-18 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Fine Art, A.F.A.

This course of study is intended for the art major transfer student who will enter a bachelor of fine arts program.

Recommended Curriculum

General Education (Minimum 17 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation (3-4 CR)

- Science
- Mathematics- 1000 level or higher

(Both Recommended)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World (3CR)

- Human Behavior
- U.S. and Wyoming constitutions (3CR)
- Cultural Environment

4. General Education Electives (3CR)

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- ART 0200 - Convocation (0CR)
- ART 1005 - Drawing I (3CR)
- ART 1110 - Foundation: Two-Dimensional (3CR)
- ART 1120 - 3D Design (3CR)
- ART 1130 - Foundation: Color Theory (3CR)
- ART 1150 - Photography I (3CR)
- ART 2006 - Drawing II (3CR)
- ART 2010 - Art History I (3CR)
- ART 2020 - Art History II (3CR)
- ART 2035 - Art History III (3CR)
- ART 2050 - Life Drawing I (3CR)
- ART 2090 - Printmaking (3CR)
- ART 2122 - Digital Design I (3CR)
- ART 2141 - Professional Practice in the Arts I (1CR)
- ART 2210 - Painting I (3CR)
- ART 2310 - Sculpture I (3CR)
- ART 2410 - Ceramics I (3CR)
- Electives (1CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation.

For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Graphic Design, A.F.A.

This course of study is intended for the art major transfer student who will enter a bachelor of fine arts program.

Recommended Curriculum
General Education (Minimum 17 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation (3-4 CR)

- Lab Science
or
- MATH 1000 - Problem Solving (3CR)
(Both Recommended)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World (3CR)

- POLS 1000 - American and Wyoming Government (3CR)

4. General Education Electives (3CR)

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- ART 0200 - Convocation (0CR)
- ART 1005 - Drawing I (3CR)
- ART 1110 - Foundation: Two-Dimensional (3CR)
- ART 1120 - 3D Design (3CR)
- ART 1130 - Foundation: Color Theory (3CR)
- ART 2010 - Art History I (3CR)
- ART 2020 - Art History II (3CR)
- ART 2035 - Art History III (3CR)
- ART 2105 - Digital Design II (3CR)
- ART 2110 - Typography (3CR)
- ART 2112 - Introduction to Graphic Design (3CR)
- ART 2122 - Digital Design I (3CR)
- ART 2125 - Graphic Design Concepts (3CR)
- ART 2130 - Graphic Design Solutions (3CR)
- ART 2141 - Professional Practice in the Arts I (1CR)
- ART 2245 - Digital Photography I (3CR)

Note:

The normal length of this program is two academic years at 16-18 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Photography, A.F.A.

This course of study is intended for the art major transfer student who will enter a bachelor of fine arts program.

Recommended Curriculum

General Education (Minimum 17 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation (3-4 CR)

- Science
 - Mathematics
- (Both Recommended)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World (3CR)

- Human Behavior
- U.S. and Wyoming Constitutions (3CR)
- Cultural Environment

4. General Education Electives (3CR)

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- ART 0200 - Convocation (0CR)
- ART 1005 - Drawing I (3CR)
- ART 1110 - Foundation: Two-Dimensional (3CR)
- ART 1120 - 3D Design (3CR)
or
- ART 1130 - Foundation: Color Theory (3CR)
- ART 1150 - Photography I (3CR)
- ART 1160 - Film Photography II (3CR)
- ART 2010 - Art History I (3CR)
- ART 2020 - Art History II (3CR)
- ART 2035 - Art History III (3CR)
- ART 2122 - Digital Design I (3CR)
- ART 2141 - Professional Practice in the Arts I (1CR)
- ART 2245 - Digital Photography I (3CR)
- ART 2255 - Digital Photography II (3CR)
- Electives (9CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Welding Technology

Through the rapidly changing technology of metals joining processes, alloying materials, and a much broader spectrum of applications, we are entering a new dimension in fabrication and manufacturing. This has insured a continuing and increasing demand for well qualified welding technicians.

With persons selecting welding as a hobby, or continuing their education for a four-year degree, every effort is made to assist students in selecting a program which will fit their needs.

The major objectives of the welding technology program at Casper College are:

1. To provide comprehensive training in welding process and theory, blueprint understanding, welding symbol identification, along with codes and standards necessary for obtaining employment upon graduation;
2. To structure courses which will provide a thorough background necessary for those students continuing their education in related fields.

Note: To graduate with a certificate or degree, students must earn a "C" or better in all major requirements.

Welding, A.A.S.

Recommended Curriculum
General Education (Minimum 17 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

(One course minimum)

- Science
or
- Mathematics

2. Communication

(One course minimum)

- Written or Oral Communication

3. Relationship with the World

(One course minimum)

- Human Behavior
- U.S. and Wyoming constitutions (3CR) required
- Cultural Environment

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- WELD 1555 - Welding Technology Safety (1.5CR)
- WELD 1650 - Print Reading (2CR)
- WELD 1710 - Oxyacetylene Welding and Cutting (1.5CR)
- WELD 1755 - Shielded Metal Arc Welding (8CR)
- WELD 1770 - Gas Metal Arc Welding (GMAW) (5CR)
- WELD 1780 - Gas Tungsten Arc Welding (GTAW) (5CR)
- WELD 1860 - Welding Fabrication (5CR)
- WELD 1910 - Specialized Welding and Joining (3CR)
- WELD 2500 - Structural Welding (3CR)
- WELD 2510 - Pipe Welding I (4CR)
- WELD 2520 - Pipe Welding II (5CR)
- Approved Electives (4CR) *

Note:

*Approved electives from the departments of auto body repair technology, automotive technology, construction technology, robotics, or machine tool technology.

The normal length of this program is two academic years at 16-18 credit hours per semester.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts,

Associate of Applied Science and Associate Degree in Nursing.

Welding Certificate

Certificate Requirements

- WELD 1555 - Welding Technology Safety (1.5CR)
- WELD 1650 - Print Reading (2CR)
- WELD 1710 - Oxyacetylene Welding and Cutting (1.5CR)
- WELD 1755 - Shielded Metal Arc Welding (8CR)
- WELD 1770 - Gas Metal Arc Welding (GMAW) (5CR)
- WELD 1780 - Gas Tungsten Arc Welding (GTAW) (5CR)
- WELD 1860 - Welding Fabrication (5CR)
- WELD 1910 - Specialized Welding and Joining (3CR)
- WELD 2500 - Structural Welding (3CR)
- WELD 2510 - Pipe Welding I (4CR)
- WELD 2520 - Pipe Welding II (5CR)

Note:

*Approved electives from the departments of: auto body repair technology, automotive technology, construction technology, robotics, or machine tool technology.

The normal length of this program is 14 months.

Graduation Requirements

For specific graduation requirements see "Degree Requirements".

Women and Gender Studies

Women's and Gender Studies, A.A.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Laboratory Science (8CR)
- MATH 1000 - Problem Solving (3CR)
or
- MATH 1400 - Pre-Calculus Algebra (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- Human Behavior (3CR)
- U.S. and Wyoming constitutions (3CR)
- World language (8CR)

4. General Education Electives

- Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- CO/M 2135 - Gender, Communication and Culture (3CR)
- ENGL 2270 - Modern Women Writers (3CR)
- GNDR 1000 - Introduction to Gender Studies (3CR)
- GNDR 2000 - Gender Studies Service Learning (1-3CR)
- PSYC 2060 - Psychology of Gender (3CR)
- WMST 1080 - Introduction to Women's Studies (3CR)
- WMST 2040 - History of Women in America (3CR)
- Electives (11-13CR)

Note:

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science,

Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

Women's and Gender Studies Certificate

Certificate Requirements

- CO/M 2135 - Gender, Communication and Culture (3CR)
- GNDR 1000 - Introduction to Gender Studies (3CR)
- GNDR 2000 - Gender Studies Service Learning (1-3CR)
- PSYC 2490 - Topics: (Subtitle) (2-3CR)
- WMST 1080 - Introduction to Women's Studies (3CR)
- WMST 2040 - History of Women in America (3CR)

Note:

The normal length of this program is 16 weeks.

Graduation Requirements

For specific graduation requirements see "Degree Requirements".

World Languages

Opportunities for traveling or working abroad are increasing annually. Expanding world trade will create more and more demands for bilingual people, and America's role in international affairs requires more than ever before that we understand the cultures of all world peoples. Consequently, the study of world languages can no longer be a luxury; it has become a necessity.

Students are placed in world languages classes by the world languages instructors who evaluate their previous language experience. Students wishing to take placement and credit examinations may arrange to do so with the world languages faculty or testing center.

World languages satisfy a requirement for the Bachelor of Arts degree and the fine arts/humanistic studies requirement for the Bachelor of Science degree in many programs.

Credit may not ordinarily be earned in one's native language (mother tongue) in first year courses.

Excellent career opportunities await the student who combines world language studies with business, technology, science, vocational programs, etc. For specific information, consult the world language faculty.

American Sign Language Studies, A.A.

The American Sign Language Studies (ASL) degree is designed to provide a foundation for further work with deaf people. Students will develop their knowledge of ASL and the culture of Deafness in North America and around the world.

ASL provides a foundational curriculum within the liberal arts framework, and is designed for the student to acquire competencies necessary to transfer to ASL Studies, ASL Interpreting, or Deaf Education baccalaureate programs.

The study of American Sign Language is on the rise in America. Students learning ASL may work in careers such as a sign language interpreter, teacher of the deaf, speech language pathologist, psychologist, employment counselor, social worker, child care worker or audiologist. Some places of employment might be mental health clinics social service agencies, hearing and speech agencies, hospitals and clinics, government institutions, public and private schools. (Careers working with deaf and hard of hearing. (n.d.). Retrieved April 7, 2017 from <http://www.thebestschools.org/blog/2013/06/27/career-s-working-deaf-hard-hearing/>)

Recommended Curriculum

General Education (Minimum 32 Credits)

1. Exploration and Participation

- Laboratory Science (4CR)
- MATH 1000 - Problem Solving (3CR)
OR
- MATH 1400 - Pre-Calculus Algebra (4CR)

2. Communication

- CO/M 1030 - Interpersonal Communication (3CR)
and
- ENGL 1010 - English I: Composition (3CR)
and
- ENGL 1020 - English II: Composition (3CR)
or a second approved English composition course.

3. Relationship with the World

- Human Behavior Elective (3CR)
- Cultural Environment (3CR)
- SOC 1000 - Introduction to Sociology (3CR)
OR
- ANTH 1200 - Introduction to Cultural Anthropology (3CR)

- U.S. and Wyoming Constitutions (3CR)

4. General Education Electives (Minimum 3 Credits)

Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- ASL 1200 - American Sign Language I (4CR)
- ASL 1220 - American Sign Language II (4CR)
- ASL 2200 - American Sign Language III (4CR)
- ASL 2220 - American Sign Language IV (4CR)

Diversity in the U.S. (3CR) Choose a minimum of one course from:

- AAST 1000 - Introduction to African American Studies (3CR)
- EDCI 2250 - Diversity in Education (3CR)
- WMST 1080 - Introduction to Women's Studies (3CR)
- WMST 2020 - Women and Food (3CR)
- WMST 2040 - History of Women in America (3CR)

Diversity in the World (3CR) Choose from a minimum of one course from:

- INST 2350 - Introduction to Global Studies (3CR)
- POLS 1200 - Non-Western Political Cultures (3CR)
- POLS 2290 - Governments and Politics of Latin America (3CR)
- RELI 1000 - Introduction to Religion (3CR)
- Any other World Language (4CR)

Approved Electives (6 CR)

- THEA 1100 - Acting I (3CR)
- Communications Courses
- Gender Studies
- Women's Studies
-

Graduation Requirements:

A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts,

Associate of Applied Science and Associate Degree in Nursing.

World Languages, A.A.

Recommended Curriculum

General Education (Minimum 32 credits)

General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation

- Laboratory Science (8CR)
- MATH 1000 - Problem Solving (3CR)
or
- MATH 1400 - Pre-Calculus Algebra (4CR)

2. Communication

- ENGL 1010 - English I: Composition (3CR)
AND
- ENGL 1020 - English II: Composition (3CR)
OR
- ENGL 2005 - Technical Writing (3CR)
OR
- ENGL 2020 - Introduction to Literature (3CR)
OR
- CO/M 2010 - Public Speaking (3CR)

3. Relationship with the World

- ANTH 1200 - Introduction to Cultural Anthropology (3CR)
- U.S. and Wyoming constitutions (3CR)

4. General Education electives

Must be chosen from areas 1, 2, or 3 above.

5. Physical Education (1CR)

Major Requirements

- World Language (16CR)*
- Electives (16-17CR)

Choose from the following:

- ANTH 2000 - Introduction to Linguistic Anthropology (3CR)
- ASL 1200 - American Sign Language I (4CR)

- ASL 1220 - American Sign Language II (4CR)
- ASL 2200 - American Sign Language III (4CR)
- ASL 2220 - American Sign Language IV (4CR)
- BUSN 2000 - International Business (3CR)
- CO/M 1040 - Introduction to Human Communication (3CR)
- EDFD 2020 - Foundations of Education (3CR)
- ENGL Literature Course
- GEOG 1000 - World Regional Geography (3CR)
- GEOG 1110 - Management and Implementation of GIS (4CR) 4
- HIST 1110 - Western Civilization I (3CR)
- HIST 1120 - Western Civilization II (3CR)
- HUMN 2140 - World Literature I (3CR)
- HUMN 2150 - World Literature II (3CR)
- HUMN 2230 - Humanities in Europe: Study of the Origins of Western Culture (3CR)
- HUMN 2250 - Ideas in Ancient Literature, Greek, Roman, Hebrew (2-3CR)
- HUMN 2251 - Ideas in Medieval Literature (2-3CR)
- HUMN 2252 - Ideas in Renaissance Literature (2-3CR)
- HUMN 2253 - Ideas in Modern Literature (2-3CR)
- PHIL 1000 - Introduction to Philosophy (3CR)
- POLS 1020 - Issues in Foreign Relations I (3CR)
- POLS 1030 - Issues in Foreign Relations II (3CR)
- POLS 1200 - Non-Western Political Cultures (3CR)
- POLS 2200 - Politics of Europe (3CR)
- POLS 2290 - Governments and Politics of Latin America (3CR)
- POLS 2310 - Introduction to International Relations (3CR)

- All FREN/GERM/SPAN courses

Note:

*A student must complete 16 credits in courses numbered 1010, 1020, 2030 or 2040 in one or two world languages in order to earn an Associate of Arts degree in World Languages. At least one of these courses must be completed on the Casper College campus. A student may also complete the required 16 credits by completing a minimum of 8 credits in any two languages (1010, 1020, 2030 or 2040). American Sign Language may not count towards these 16 credits.

The normal length of this program is two academic years at 15-17 credit hours per semester.

Graduation Requirements: A minimum of 60 approved semester credits are required for graduation. For specific graduation requirements see "Academic Information" and "Degree Requirements."

Only courses numbered 1000 or above can be used toward the Associate of Arts, Associate of Science, Associate of Business, Associate of Fine Arts, Associate of Applied Science and Associate Degree in Nursing.

African American Studies

AAST 1000 - Introduction to African American Studies (3CR)

(3L) [E] This course provides a historical survey of the people of Black African heritage prior to their arrival in America and thereafter.

Accounting

ACCT 1000 - Introduction to Accounting (4CR)

(4L) This course focuses on the methods, processes, and strategies necessary to analyze and understand the data used in accounting. The student will practice skills of identifying, classifying, reporting, and interpreting accounting information. Students will work problems dealing with preparation of financial statements, adjustment of information at end-of-period accounting cycles, and interpretation of the results thereof.

ACCT 1005 - Practical Accounting I (4CR)

(3L, 2LB) Examines the fundamental concepts and procedures used in the preparation of basic financial statements of business entities. This course also covers some of the basic procedures for QuickBooks software and employer payroll taxes. This course will provide you with a good foundation for ACCT 1010. No credit will be given for ACCT 1005 if the student has previously earned credit in ACCT 1010 or its equivalent.

ACCT 1010 - Principles of Accounting I (4CR)

(4L) [E] Examines the fundamental concepts and procedures used in the preparation of the basic financial statements of business entities. Covers generally accepted accounting principles, accounting terminology, the usefulness of financial statements, and the role that judgment plays in accounting.

Prerequisites: A "C" or better in ACCT 1000, ACCT 1005 or MATH 0930, or an ACT Math Score of 23 or better, or an appropriate COMPASS exam score within the past year.

ACCT 1020 - Principles of Accounting II (4CR)

(4L) [E] A continuation of ACCT 1010. Accounting for corporations and partnerships. Examines reports and information needed by the management of a business to make good decisions. The role accounting information plays in aiding the functions of planning, budgeting, and control is examined.

Prerequisites: ACCT 1010

ACCT 1450 - CB Exam Review (3CR)

(3L) The Certified Bookkeeper Exam Review is a course that will prepare students for the Certified Bookkeeper Exam that is administered by the American Institute of Professional Bookkeepers. Topics covered include adjustments, error correction, payroll, depreciation, inventory and internal controls.

ACCT 1510 - Accounting for Bookkeepers (4CR)

(4L) This course is designed to provide a foundation in financial accounting and tax for individuals wishing to have a career in bookkeeping. It completes the financial accounting topics started in ACCT 1010.

Prerequisites: ACCT 1010

ACCT 2110 - QuickBooks Desktop and Online (3CR)

(2L, 2LB) This course combines the use of QuickBooks Desktop and the cloud based version of Quickbooks Online. QuickBooks Desktop will be used to create a company and record Sales, Receivables, Payables, and Purchases for a service type business. These files will then be converted to QuickBooks Online software and similar entries will be recorded for merchandising transactions. End of period accounting will be covered in both types of software.

Prerequisites: ACCT 1005 or ACCT 1000, or ACCT 1010 and COSC 1200, or permission of the instructor.

ACCT 2120 - Computer Spreadsheet Accounting (2CR)

(2L, 2LB) This course prepares students to interact with computerized accounting systems. Major concepts of computerized accounting will be introduced including trial balance maintenance and financial statement generation. A commonly used spreadsheet program will be used throughout the course.

Prerequisites: ACCT 1010 .

ACCT 2410 - Intermediate Accounting I (4CR)

(4L) [E] A study of accounting principles and procedures with emphasis on analysis, interpretation, and controls. Financial statements are studied in detail from both the theoretical and practical standpoints, with a critical examination and evaluation of areas covered. (Fall semester.)

Prerequisites: ACCT 1020 .

ACCT 2420 - Intermediate Accounting II (4CR)

(4L) [E] A continuation of ACCT 2410. (Spring semester.)

Prerequisites: ACCT 2410.

ACCT 2430 - Income Tax (3CR)

(3L) This course is an introduction to federal taxation of the income of individuals. Examples and problems illustrate tax laws. Computer applications may be used to illustrate specific examples.

ACCT 2460 - Payroll Accounting (3CR)

(3L) This course examines the fundamental concepts and procedures used in payroll accounting. Usually, payroll is the largest expense of most businesses and a continuing management challenge in terms of cost control. This course will explore payroll laws and recordkeeping requirements, running a payroll, payroll reporting and accounting procedures, and payroll systems and policies.

Prerequisites: ACCT 1010 , or permission of the instructor.

ACCT 2480 - Cooperative Education

(1-3CR) (Max. 6) The student is afforded the opportunity to gain practical, on-the-job experience under the supervision of the accounting program coordinator and employer. A minimum of 80 hours of on-the-job training represents one semester hour. The student must maintain 12 credit hours with a 2.0 GPA during the semester.

Prerequisites: Full-time accounting major and permission of the program coordinator.

Addiction Studies

ADDN 1020 - Foundations of Substance Use Disorders Counseling I (3CR)

(3L) The history of addictive disorders along with the contexts in which prevention and treatment evolved, provide a foundation for understanding the present conditions in the profession, and the framework for understanding future evolution. This includes the knowledge of how the profession developed from various non-professional experiences, how other disciplines succeeded or failed in dealing with addictive disorder, as well as the social and political forces that impacted upon service delivery.

ADDN 1050 - Crime and Drugs (3CR)

(3L) This course provides students with an opportunity to explore human behavior from an addiction and criminal justice perspective. This course will provide an in-depth analysis of evidence-based crime policy with coverage of drug use, crime

victimization, and incarceration trends.

ADDN 1520 - Anger, Addiction and Trauma (3CR)

(3L) This course provides students with an opportunity to explore anger and trauma from an addiction perspective.

ADDN 2005 - Group Process (3CR)

(3L) This course provides students with an opportunity for the study of groups and group process. These topics include, but are not limited to: development of groups, group work, group dynamics, group leadership, group process, groups for children, adolescents, adults and elderly, and specialty groups and theoretical perspectives of groups.

Prerequisites: PSYC 2155

ADDN 2010 - Addictions Assessment (3CR)

(3L) Provides an overview of the process of assessment of addictive behaviors including alcohol and drugs, smoking, and eating disorders. Foci are on the behavioral, psychological/cognitive-expectational, and physiological components of specific addictive behaviors.

Prerequisites: Seven credit hours of psychology.

ADDN 2015 - Ethics and Professional Issues (3CR)

(3L) Provides an opportunity for study of selected ethical and professional topics in counseling.

ADDN 2100 - Foundations of Substance Use Disorder Counseling II (3CR)

(3L) Introduces the profession of addictive disorders and the development the knowledge of the local health and social service delivery systems (especially the addiction and prevention systems), educational systems, criminal justice systems, and related professional, to better provide comprehensive services to clients/patients. Legal requirements and professional attitudes regarding these systems and the skills to accept, and make, appropriate referrals are essential for providing quality prevention and treatment services.

ADDN 2155 - Motivational Interviewing (3CR)

(3L) Behavioral change is a goal of many human service professionals. This course will examine the process of how change occurs and how to apply evidence based practices to assist clients with the change process thorough the use of motivational interviewing. Through a combination of lecture, skill practice, discussion, and personal exploration, this course will serve as a 'hands on' experience for the change process.
Cross-listed: PSYC 2155

ADDN 2970 - Addiction Practicum (3CR)

(1L, 4LB) Advanced addictionology students integrate previous academic learning in a scheduled and structured supervised experience in a cooperating treatment agency or facility under the supervision of a licensed professional. Students will serve a minimum of 150

hours during the semester and also attend one weekly 50-minute seminar class session. Students are required to document being addiction free for a minimum of 18 months prior to enrollment. S/U grading only.

Prerequisites: Permission of the instructor.

Agroecology

AECL 1000 - Agroecology (4CR)

(3L, 2LB) [E] Introduces ecological interactions that affect food producing (agricultural) systems. Lectures and laboratory exercises study the various biological components and the science of sustainable agricultural production. Features differences between developed and developing countries. Explores crises and challenges facing agriculture and global society.

Prerequisites: None

Agriculture

AGRI 1010 - Introduction to Agricultural Technology (2CR)

(1L, 2LB) [E] Introduces and familiarizes students with computer applications and programs that can practically be used in agriculture. This course exposes students to other types of technology used in agricultural practices such as UAS and precision agriculture.

AGRI 1020 - GPS and GIS in Agriculture (2CR)

(1L, 2LB) A look at applications of GIS and GPS technology as it pertains to the agricultural

industry. Students will learn basic GIS, GPS and cartographic principles and apply them to help solve problems or answer questions in the Ag industry. Also will use other technologies such as GPS collars to track livestock grazing and remote sensed satellite imagery to help ascertain the health of grazing lands and estimate AUMs.

Prerequisites: AGRI 1010 or permission of the instructor.

AGRI 2000 - Agriculture Chemicals I (3CR)

(3L) Designed to develop an understanding of agriculture chemicals, their principles and safety. Because agriculture is said to be the nation's most dangerous industry, a special emphasis will be given to chemical safety, environmental and consumer hazards, and impacts along with federal and state laws governing agriculture chemicals. (Fall semester.)

AGRI 2010 - Agriculture Chemicals II (3CR)

(3L) A course designed to develop an understanding of agriculture chemicals and their principles that are reviewed and applied to herbicides, insecticides, and fertilizers as they relate to crop and livestock production. The students become familiar with selection methods, rates, and methods of application.

AGRI 2475 - Independent Study in Agriculture

(1-3CR) (Max. 3) A comprehensive research study. Upon completing the project the student should present a paper and oral seminar to a committee selected by the project instructor. The problem and amount of

credit received must have the approval of the instructor.

Prerequisites: Permission of the instructor.

Agriculture Economics

AGEC 1010 - Agriculture Economics I (3CR)

(3L) [E] Introduces students to the field of economics and how human behavior drives markets. Key macroeconomic concepts of financial markets, inflation, unemployment, gross domestic product, and national income are evaluated. Agricultural examples are primarily utilized with some non-agricultural examples.

AGEC 1020 - Agriculture Economics II (3CR)

(3L) [E] Introduces students to how firms and households behave economically in the environment in which they operate. Key microeconomic concepts of production and consumption theory, market structures, and governmental impact on firms and households are evaluated. Agricultural examples are primarily utilized with some non-agricultural examples.

AGEC 1100 - Introduction to Computerized Ag Records (3CR)

(3L) This course is an introduction to farm and ranch computerized records management. It covers basic farm/ranch accounting functions including all financial statements (flow of funds, income statement and balance sheet). The course compares cash versus accrual accounting and the benefits of each. The focus of this course is

to develop and reinforce accounting and record management principles by utilizing the microcomputer and entering case farm/ranch data.

AGEC 2010 - Farm-Ranch Business Records (3CR)

(3L) [E] The mechanics of farm record keeping and its use as a management tool. The laboratory exercises are actual problems in farm and ranch management and record keeping.

AGEC 2020 - Farm-Ranch Business Management (4CR)

(3L, 2LB) [E] Economic principles and business methods applied to analyze firms and operations. Will utilize practical problem solving techniques for variety of management problems.

AGEC 2300 - Agricultural Marketing (3CR)

(3L) An introduction to agricultural markets and marketing. Topics include the structure of United States agriculture, prices and marketing costs, government policy's influence on marketing, effects of supply and demand on marketing, livestock and crop marketing, and risk management.

Prerequisites: Sophomore standing.

Agriculture Technology

AGTK 1560 - Horse Hoof Trimming (1CR)

(.5L, 1LB) A complete course in horse foot trimming, including the physiology of the feet and

legs, unsoundness, hoof care, equipment and the actual trimming and shoe removal on live horses and mules.

Offered once per year in the Fall semester.

Prerequisites: none

AGTK 1570 - Horseshoeing (2CR)

(1L, 2LB) (Max. 2) A complete course in horseshoeing, including the physiology of the feet and legs, unsoundness, hoof care, shoeing equipment, and the actual shoeing of live horses. Taught by a graduate of an accredited horseshoeing school.

AGTK 1580 - Introduction to Outdoor Recreation: Guide Outfitting (3CR)

(3L) This course is designed to familiarize the student with the outdoor recreational guide industry. Emphasis will be placed on the use of horses and mules in the outdoor guiding industry. This course is meant to be a preliminary course to an actual hands-on Outfitting/Guide Curriculum.

AGTK 1590 - Packing and Outfitting (2CR)

(0.5L, 3.5LB) A course dealing with the principles and techniques involved in the use of horses as a form of transportation on the ranch or in the wilderness. Covers equipment and general procedures used in packing.

American Sign Language

ASL 1200 - American Sign Language I (4CR)

(4L) This course will provide beginning level knowledge of American Sign Language, fingerspelling, deafness, and deaf culture. Emphasis will be on developing receptive and expressive language skills within the parameters of sign language using the American Council on the Teaching of Foreign Language 5C's to include: Communication, Culture, Connections, Comparisons and Community.

ASL 1220 - American Sign Language II (4CR)

(4L) This course will provide intermediate level instruction in American Sign Language, fingerspelling, deafness, and deaf culture. Emphasis will be on developing receptive and expressive language skills within the parameters of sign language.

Prerequisites: Successful completion (C or better) of ASL 1200.

ASL 2200 - American Sign Language III (4CR)

(4L) This course will provide advanced level instruction in American Sign Language, fingerspelling, deafness and deaf culture. Emphasis will be on developing receptive and expressive language skills within the parameters of sign language using the American Council on the Teaching of Foreign Language 5 C's to include: Communication, Culture, Connections, Comparisons and Community. This course will continue developing American

Sign Language. Advanced vocabulary and ASL grammar will be taught and reinforced through classroom presentations and activities, cultural models and visual media presentation. Discussions will focus on deafness, deaf history, current trends and related topics. The direct experience method (using ASL with no voice) will be used to enhance language acquisition.

Prerequisites: Successful completion (C or better) of ASL 1220.

ASL 2220 - American Sign Language IV (4CR)

(4L) This course will continue advanced level instruction in American Sign Language, fingerspelling, deafness and deaf culture. Emphasis will be on receptive and expressive language skills within the parameters of sign language using the American Council on the Teaching of Foreign Language 5 C's to include: Communication, Culture, Connections, Comparisons and Community. This course will continue developing American Sign Language. Advanced vocabulary and ASL grammar will be taught and reinforced through classroom presentations and activities, cultural models and visual media presentations. Discussions will focus on deafness, deaf history, current trends and related topics. The direct experience method (using ASL with no voice) will be used to enhance language acquisition.

Prerequisites: Successful completion (C or better) of ASL 2200 or equivalent coursework.

Animal Science

ANSC 1010 - Livestock Production I (4CR)

(3L, 2LB) [E] Course covers the scope of the livestock industry with particular emphasis on breeds and types and management of beef cattle, sheep and wool, swine, dairy cattle, poultry and horses.

ANSC 1020 - Livestock Production II (3CR)

(3L) Course covers fundamental principles of genetics and animal breeding, reproductive physiology, principles of nutrition, and digestion in domestic animals. Topics also include animal health and diseases, and grading and marketing methods of slaughter and feeder animals.

ANSC 1030 - Equine Management (3CR)

(3L) [E] A basic course covering the equine industry, including classes and breeds, selection with form to function, care and management, conformation and unsoundness, health and diseases, reproduction, and feeding and nutrition.

ANSC 1100 - Artificial Insemination (1CR)

(2LB) A complete course in artificial insemination, including class work in animal breeding, physiology, nutrition, and beef cattle management, as well as actual insemination work with animals.

ANSC 1130 - Equine Management II (3CR)

(3L) A basic course covering the equine industry, including the history, care and management, reproduction, care and

prevention of equine diseases, equine facilities and general equine practices.

ANSC 1150 - Animal Diseases (2CR)

(2L) A survey of the diseases common to this area in cattle, sheep, and horses. Special attention is given to sanitation, prevention, control, and eradication of disease.

ANSC 1160 - Issues in Agriculture (3CR)

(3L) Consists of investigations and discussions with respect to current topics in animal science.

Prerequisites: None.

ANSC 1200 - Livestock Fitting and Showing (2CR)

(1L, 2LB) Designed to provide students with the necessary skills to fit and show cattle, sheep, and swine. Emphasis will be placed on the clipping of feeder calves. This course is required for all students planning to exhibit feeder calves at the Arizona National.

ANSC 1210 - Livestock Judging I (3CR)

(1L, 4LB) Comparative appraisal and selection of beef cattle, sheep, hogs, and light horses. Students will be chosen from this class to represent Casper College at regional and national judging contests.

ANSC 1220 - Livestock Judging II (Advanced) (3CR)

(1L, 4LB) Advanced study in the principles of livestock selection with emphasis on judging and giving reasons.

Prerequisites: ANSC 1210, or permission of the instructor.

ANSC 2020 - Feeds and Feeding (4CR)

(3L, 2LB) [E] Principles of animal nutrition with emphasis upon practical feeding of livestock. Particular attention is given to feeding livestock in relation to recent discoveries in nutrition, including the functions and importance of vitamins and minerals, and the necessity for proper quantity of protein rations of livestock. Economy in feeding emphasized throughout the course.

ANSC 2110 - Beef Production (3CR)

(3L) A detailed study of the feeding, breeding, marketing, and pedigrees of all major breeds of beef cattle with emphasis on problems peculiar to the beef cattle industry in Wyoming.

Prerequisites: ANSC 1010 and ANSC 1020.

ANSC 2120 - Sheep Production (3CR)

(3L) A detailed study of care and management of sheep flocks in the Western states, with particular emphasis on problems peculiar to the range sheep industry in Wyoming.

Prerequisites: ANSC 1020.

ANSC 2130 - Swine Production (3CR)

(3L) Swine production in the United States including production of purebred and commercial swine: breeds, breeding, feeding, marketing, and management. Emphasis is on problems encountered in the production of swine in

Wyoming.

Prerequisites: ANSC 1010 or ANSC 1020. Offered periodically.

ANSC 2230 - Livestock Judging II/I (2CR)

(4LB) A concentrated study of livestock selection with major emphasis on team competition and national livestock shows.

Prerequisites: ANSC 1220, or permission of the instructor.

Anthropology

ANTH 1100 - Introduction to Physical Anthropology (3CR)

(3L) [E] Presents basic concepts relating to the origin, evolution, biological nature, and adaptation of the human species.

ANTH 1200 - Introduction to Cultural Anthropology (3CR)

(3L) [E] Using an ethnological approach, (comparative study of culture), this course surveys the basic concepts of cultural anthropology including cross cultural investigations of kinship, marriage, language, religion, politics, economics, and culture change.

ANTH 1300 - Introduction to Archaeology (3CR)

(3L) Provides a background in archaeological theories and methods and explores the ways in which prehistoric material remains can provide an understanding of human behavior.

ANTH 2000 - Introduction to Linguistic Anthropology (3CR)

(3L) [E] This course provides an introduction to anthropological approaches for understanding language use and interpretation within a social context.

ANTH 2210 - North American Indian (3CR)

(3L) [E] A survey of North American Indian societies from prehistory to the present. Covers selected prehistoric cultural sequences as well as a general culture-area survey of known historic tribes and a consideration of current issues facing Native American groups.

ANTH 2475 - Independent Studies in Anthropology

(1-3CR) (Max. 6) Provides opportunity for independent reading and more in-depth study in various fields of anthropology.

Prerequisites: Previous anthropology coursework and permission of the instructor.

Art

ART 0200 - Convocation (0CR)

(1LB) The participant will learn about the department programs, guest artist lectures, workshops, art gallery offerings, special topics courses and other opportunities at Casper College. Grading will be S/U.

Prerequisites: Associate of Fine Art: Art Education, Fine Arts, Graphic Design, Photography majors and Associate of Art majors only.

ART 1000 - General Studio Art (3CR)

(2L, 4LB) [E] General Studio Art is an introductory art class for non-art majors designed to give a personal, improvisational, and welcoming art experience to everyone. Boost your skill set, leading to new adventures in work and creativity. A variety of media will be covered in this class including, drawing, ceramics, printmaking, and metalsmithing.

ART 1005 - Drawing I (3CR)

(2L, 4LB) Introductory drawing emphasizing a wide range of drawing materials and methods of visual study. Fundamentals are stressed.

ART 1010 - Introduction to Art (3CR)

(3L) [E] A survey of the arts produced by humans from pre-history through contemporary trends. Emphasis on the basic elements of art and visual literacy through review of a variety of media and architecture. For non-art majors only.

ART 1015 - History of Graphic Design (3CR)

(3L) This course discusses historic and contemporary design history with a focus on formal and aesthetic issues.

ART 1110 - Foundation: Two-Dimensional (3CR)

(2L, 4LB) [E] Studies and sequential exercises in the basic elements of design: shape, line, value, color, and texture. Exploration of the relationships of these elements with emphasis on composition.

ART 1120 - 3D Design (3CR)

(2L, 4LB) [E] In this course, students are introduced to the fundamental principles of three-dimensional design and their relationship to objects in space. This hands-on course emphasized creative problem solving, employs design strategies, and develops manual building skills. The relationship of the body to the built environment, narrative, and a greater correlation between object and concept are explored. This course encourages exploration, the exchange of ideas, and builds skills that can be applied to a variety of disciplines.

ART 1130 - Foundation: Color Theory (3CR)

(2L, 4LB) [E] Studies and sequential exercises in color theory. Exploration of the relationships of hue, value, and chroma, studied in progressive exercises to enhance student's awareness of color and its aesthetic relationships.

ART 1140 - History of Photography (3CR)

(3L) This course introduces the history of photography, from its beginnings in the 19th century to contemporary artists who use photographic technologies. Photography often has multiple and contradictory subject placements. The central methodological problem of the course will be to develop critical visual literacy within the often complex and contradictory nature of photographic images that represent a diverse set of photographic practices (e.g. journalism, documentary, advertisement, fashion, art, and personal documents.)

ART 1150 – Film

Photography I (3CR)

(2L, 4LB) [E] A beginning course in still photography covering the operation of cameras and photographic equipment, processing of black and white films and prints, design and the history of photography. Assignments stress a variety of subjects emphasizing the fine art of photography.

Prerequisites: ART 2245 Digital Photography I

ART 1160 - Film

Photography II (3CR)

(2L, 4LB) A continuation of ART 1150 covering advanced camera and darkroom techniques including the Zone System, manipulated processes such as solarization, multiple printing, photograms, and toning. Emphasis is on the fine print and art of photography.

Prerequisites: ART 1150.

ART 1300 - Museum Studies (3CR)

(3L) The course provides an understanding of basic operations of a museum or gallery such as exhibit design, education, collections management, marketing, and an overview of the history and changing role of these facilities in society. The course also involves travel to Casper museums to explore their missions, services and collections.

ART 2006 - Drawing II (3CR)

(2L, 4LB) Continuation of the principles of drawing, including contemporary esthetics and the human figure.

Prerequisites: ART 1005.

ART 2010 - Art History I (3CR)

(3L) [E] A study of the visual arts produced by humans from prehistoric times to the Gothic Era. This course required for all art majors.

ART 2016 - Field Sketching (3CR)

(2L, 4LB) This course presents the basic drawing skills needed to record accurate observations of the natural environment. These skills can benefit other visual art disciplines and/or serve as a foundation for drawing itself as a major discipline.

ART 2020 - Art History II (3CR)

(3L) [E] A study visual arts and architecture produced throughout the world from the 13th - 18th centuries. Political, social, and economic factors relative to the visual arts will be considered. This course is required of all art majors.

ART 2023 - Collections Management (3CR)

(3L) This course is a practical study of the duties of a museum collections manager, including the documentation, loaning, digitization, preservation, storage and care of collections.

ART 2025 - Women in Art (3CR)

(3L) A general introduction to depictions of women in art from the earliest known artifacts produced by humans to understand how women were viewed in ancient societies, as well as women's involvement in

the visual arts from the Middle Ages to the present with emphasis on the 20th century. Questions that will be posed include: "how does gender affect art?" and "how do stereotypes of women affect viewing works of art?" Political, social, and economic factors will be examined in relation to women artists and their times to further understand artistic production.

ART 2035 - Art History III (3CR)

(3L) A study of the visual arts produced throughout the late 18th to 21st century in Europe and America. Political, social, and economic factors will be considered as they affected artistic style.

ART 2050 - Life Drawing I (3CR)

(2L, 4LB) The human figure is used as primary subject. Proportion, anatomy, movement, portraiture etc. are studied. A variety of drawing materials are used.

Prerequisites: ART 1005.

ART 2060 - Life Drawing II (3CR)

(2L, 4LB) The human figure is used as primary subject. Proportion, anatomy, movement, portraiture etc. are studied. A variety of drawing materials is used.

Prerequisites: ART 2050 or equivalent transfer.

ART 2073 - Introduction to Art Education (3CR)

(3L) A survey of the history of art education focusing on influential 20th century educators, as well as discussion of contemporary theories in the

field such as DBAE, Critical Theory, and Visual Thinking Strategies. This class will also focus on developing curriculum for the art education classroom with discussion of the stages of aesthetic development as well as assessment within an art course.

ART 2075 - Illustration I (3CR)

(2L, 4LB) This course is an introduction to the use of type, illustration, and expressive design to communicate visually. It consists of a series of sequential exercises to promote creative problem solving techniques and to master basic technical skills.

Prerequisites: ART 1005, ART 1110, and ART 1130.

ART 2076 - Illustration II (3CR)

(2L, 4LB) A continuation of the study of the exploration of visual communication concepts and design principles allowing students to develop more personal expressive ways of solving visual communication problems, and to expand their technical skills and use of multiple media.

Prerequisites: ART 2075.

ART 2090 - Printmaking (3CR)

(2L, 4LB) This course is an introduction to a variety of printmaking processes. Students explore new ways of creating imagery and surfaces unique to printmaking. Gaining expertise and control over a range of tools and materials will enable students to explore both consistent and variable editions. Students will study historical and contemporary approaches to

printmaking by viewing historical and contemporary works. The course culminates in an editioned print portfolio exchange. (Fall semester.)

ART 2105 - Digital Design II (3CR)

(2L, 4LB) Continued study of the Macintosh computer as a design tool to create and manipulate type and images and combine them.

Prerequisites: ART 1110, ART 2122

ART 2110 - Typography (3CR)

(2L, 4LB) [E] This course offers students a comprehensive introduction to typography through exploration and experimentation with letterforms and page layout for expressive communication. The course will cover the fundamental typographic principles, font recognition, and analysis of both historical and post-modern design theory. Emphasis will be placed on content, form and technique for effective use of typography in ads, posters, newsletters and other visual communications.

ART 2112 - Introduction to Graphic Design (3CR)

(2L, 4LB) [E] Graphic Design is a communication of ideas using type and images. This course offers students a comprehensive introduction to the field of graphic design that stresses theory and creative development in discipline-specific information, hands-on practice, and an understanding of time-honored principles. Although graphic styles and the tools of the graphic design field are constantly evolving, the

fundamental structures and principles of good design remain constant.

Prerequisites: ART 1110, ART 2122.

ART 2122 - Digital Design I (3CR)

(2L, 4LB) An introductory course in the use of the Macintosh computer as a design tool to create and manipulate images and combine them.

ART 2125 - Graphic Design Concepts (3CR)

(2L, 4LB) This course examines complex and multi-faceted commercial design problems as a means of developing dynamic and innovative solutions. Design projects are analyzed according to their conceptual and graphic composition, and are developed to effectively and creatively communicate a message to a specific audience. May be taken concurrently with Graphic Design Solutions.

Concurrently: ART 2110, ART 2112 and ART 2122.

ART 2130 - Graphic Design Solutions (3CR)

(2L, 4LB) This course offers students further exploration of concept development and the language of symbols combined with further exploration into the aesthetic issues of type. Emphasis will be placed on content, form and technique for effective use of graphic design and typography in ads, posters, newsletters, desktop publishing and other visual communications.

Prerequisites: ART 2112 and a working knowledge of current software.

ART 2141 - Professional Practice in the Arts I (1CR)

(1L) This seminar will focus on practical aspects of artistic practice such as preparing a professional portfolio and resume, generating an exhibition, understanding careers in art and preparing work for museum and/or gallery consideration. This course is required of all art majors.

ART 2210 - Painting I (3CR)

(2L, 4LB) [E] An introductory painting course presenting a variety of methods and subjects.

Prerequisites: ART 1005.

ART 2220 - Painting II (3CR)

(2L, 4LB) [E] An intermediate painting course presenting a variety of methods and subjects.

Prerequisites: ART 2210

ART 2230 - Painting III (3CR)

(2L, 4LB) [E] A painting course in which emphasis is on the aesthetic concepts of contemporary movements. Students are encouraged to experiment within the framework of selected projects and to explore individual ideas and broaden experience.

Prerequisites: ART 2210, ART 2220, and permission of the instructor.

ART 2240 - Painting IV (3CR)

(2L, 4LB) [E] A painting course in which emphasis is on the aesthetic concepts of contemporary movements. Students are encouraged to experiment within the framework of selected projects

and to explore individual ideas and broaden experience.

Prerequisites: ART 2210, ART 2220, ART 2230, and permission of the instructor.

ART 2245 - Digital Photography I (3CR)

(2L, 4LB) Investigation and application of some of the fundamentals of pictorial arrangement and expression within the realm of digital photography. Assignments are based on compositional problems. Some of the primary concerns are pictorial structure, balance, movement, contrast, theme, spatial relationships and color relationships. Additionally, the design and conceptual development of an assignment are emphasized coupled with high quality execution, originality and clarity of presentation.

Prerequisites: ART 1110 - Foundation: Two-Dimensional (3CR)

ART 2255 - Digital Photography II (3CR)

(2L, 4LB) A continued investigation and application of some of the fundamentals of pictorial arrangement and expression within the realm of digital photography. Assignments are based on compositional problems. Some of the primary concerns are pictorial structure, balance, movement, contrast, theme, spatial relationships and color relationships. Additionally, the design and conceptual development of an assignment are emphasized coupled with high quality execution, originality and clarity of presentation.

Prerequisites: ART 2245 or permission of instructor.

ART 2310 - Sculpture I (3CR)

(2L, 4LB) Sculpture I introduces students to the expansive field of sculpture, while also teaching fundamental skills upon which to build a studio practice. Students learn basic woodworking, casting techniques, and conduct various material studies. This course addresses contemporary issues and promotes an atmosphere that is balanced between conceptual development and material explorations.

ART 2320 - Sculpture II (3CR)

(2L, 4LB) This course exposes students to traditional and contemporary methods of working sculpturally. In this course, students develop a critical dialogue about sculpture and extended media while developing a personal direction in the medium. This course introduces advanced sculpture techniques, and encourages the deep exploration of ideas, techniques, and materials.

Prerequisites: ART 1120 and ART 2310.

ART 2341 - Sketches in Clay (3CR)

(2L, 4LB) This is an introductory class in the fundamentals of traditional and contemporary ceramic making by means of hand building and throwing on the wheel. Students study some of the rich history and traditions of ceramics as well as developing techniques and different firing possibilities. An emphasis on sketching and journaling creative through

processes before, during and after lab time has been added to the class.

Prerequisites: None

ART 2345 - Casting (3CR)

(2L, 4LB) This course offers a technical perspective on casting's unique possibilities, its place in history, and its role in contemporary object creation. Casting introduces students to diverse methods of casting and mold making. Techniques needed to cast rigid and flexible molds will be addressed through a variety of assignments and sample-based experiments. Students will have the opportunity to cast a variety of materials while being inspired to create concept-driven work in the sculptural format.

Prerequisites: ART 1120 and ART 2310 or permission of the instructor.

ART 2350 - Metalsmithing I (3CR)

(2L, 4LB) This course serves as an introduction to the fabrication of non-ferrous metals. In this course, students will engage with materials, techniques, and craft while focusing on innovation and experimentation. This technical approach will include an investigation into the rich history of metalsmithing in conjunction with that application of contemporary techniques. Career development and professional practice skills are an integral part of the curriculum.

ART 2360 - Metalsmithing II (3CR)

(2L, 4LB) This course expands the potential of working with non-ferrous metal through the introduction of various methods

of casting, fabricating, and stone setting. Throughout the semester, students will work to develop technical skills while developing a personal direction in the medium. This course encourages a deep exploration of ideas and materials. Career development and professional practice skills are an integral part of the curriculum.

Prerequisites: ART 2350.

ART 2370 - Metalsmithing III (3CR)

(2L, 4LB) This course focuses on a combination of surface treatments and hollowware fabrication processes for non-ferrous metals. Emphasis is placed on form and surface. Students are introduced to metal forming and raising through a variety of assignments and sample-based experiments. Further examination of surface treatments involving enameling, heat treatments, pagination, and other diverse processes in the introduction of color on metal. Students are encouraged to explore both the jewelry and sculptural formats as they work with assignments that inspire personal imagery and conceptual ideas. Students improve their fabrication and design skills while practicing innovative experimentation and ideation.

Prerequisites: ART 2360.

ART 2375 - Metalsmithing IV (3CR)

(2L, 4LB) This course focuses on diverse methods of creating forms and moveable parts in metal through complex fabrication techniques. Students investigate die forming, hinging and clasp mechanisms, tap & die processes, and

anticlastic/synclastic raising through a variety of assignments and sample-based experiments. Through these techniques, students gain skills that allow for the creation of lightweight hollow forms, enclosed and moveable containers, and an array of fabrication possibilities for complex forms. Throughout the semester, students are expected to work conceptually as they combine new technologies with previously learned skills.

Prerequisites: ART 2370.

ART 2410 - Ceramics I (3CR)

(2L, 4LB) [E] This is an introductory class in the fundamentals of traditional and contemporary ceramic making by means of hand building and throwing on the wheel. Students study some of the rich history and traditions of ceramics as well as decorating techniques and different firing possibilities.

ART 2420 - Ceramics II (3CR)

(2L, 4LB) [E] This is a continuation of Ceramics I, expanding techniques of throwing on the wheel as well as hand building, with more complex assignments. Students start to learn about loading and firing kilns and take more responsibility for firing their projects.

Prerequisites: ART 2410 or permission of the instructor.

ART 2430 - Ceramics III (3CR)

(2L, 4LB) [E] This course offers advanced throwing on the wheel and hand building assignments with more independence in kiln firing. High temperature firing

techniques and different styles of kilns become available for study.

Prerequisites: ART 2420 or permission of the instructor.

ART 2440 - Ceramics IV (3CR)

(2L, 4LB) [E] Students are challenged with advanced throwing or hand building assignments and are required to fire their own work with a technique best suited for the assignments.

Prerequisites: ART 2430 or permission of the instructor.

ART 2470 - Art Museum Training Internship

(1-3CR) (Max. 6) The internship gives the student exposure to museum work through firsthand experience.

Prerequisites: Student must be enrolled in the art department, permission of the instructor, and interview with Nicolaysen Art Museum staff member and instructor.

ART 2480 - Special Projects: Drawing

*(*LB, 1-3CR) (Max. 6)*

*Laboratory to be arranged.

Advanced drawing emphasizing individualized interests and projects. This course is designed for the student who has recently completed all the offered courses in a given area and still requires or wishes continued exploration of an advanced study in that area. The special projects are designed only as a continuation of previous courses, not personal endeavors of the student.

Prerequisites: ART 1005, ART 2050 and permission of the instructor.

ART 2481 - Special Projects: Illustration

(1-3CR) (Max. 6) An advanced course in methods and techniques used in illustration with emphasis on developing individual style. This course is designed for the student who has recently completed all the offered courses in a given area and still requires or wishes continued exploration of an advanced study in that area. The special projects are designed only as a continuation of previous courses, not personal endeavors of the student.

Prerequisites: ART 2076 and permission of the instructor.

ART 2482 - Special Projects: Painting

(1-3CR) (Max. 6) An advanced painting class for the student wishing to take further painting credit with a specific instructor. This course is designed for the student who has recently completed all the offered courses in a given area and still requires or wishes continued exploration of an advanced study in that area. The special projects are designed only as a continuation of previous courses, not personal endeavors of the student.

Prerequisites: ART 2210, ART 2220, and permission of the instructor.

ART 2483 - Special Projects: Printmaking

(1-3CR) (Max. 6) Special problems in advanced relief, intaglio and monotypes, and other printmaking techniques with approval and directional guidance of the instructor. The course involves the development of a total idea and project and the completion of a portfolio of

prints. This course is designed for the student who has recently completed all the offered courses in a given area and still requires or wishes continued exploration of an advanced study in that area. The special projects are designed only as a continuation of previous courses, not personal endeavors of the student.

Prerequisites: ART 2150, and permission of the instructor.

ART 2484 - Special Projects: Photography

(1-3CR) (Max. 6) Students will work on special problems or projects of their own choosing with approval and directional guidance of the instructor. The course involves the development of a total idea and project and the completion of a portfolio of prints. This course is designed for the student who has recently completed all the offered courses in a given area and still requires or wishes continued exploration of an advanced study in that area. The special projects are designed only as a continuation of previous courses, not personal endeavors of the student.

Prerequisites: ART 1160, ART 2095, and permission of the instructor.

ART 2485 - Special Projects: Ceramics

(1-3CR) (Max. 6) Assignments are of the student's choice with approval and guidance of the instructor based on credit hours. All work is done and finished at their own pace, meeting with the instructor as needed and at mid-term and finals. This course is designed for the student who has recently completed all the offered courses in a given area and still requires or wishes

continued exploration of an advanced study in that area. The special projects are designed only as a continuation of previous courses, not personal endeavors of the student.

Prerequisites: ART 2440 or permission of the instructor.

ART 2487 - Special Projects: Sculpture

(1-3CR) (Max. 6) Special problems of the student's own choosing with directional guidance by the instructor. Emphasis will be placed on the development of a total idea, whether it is one work or several. This course is designed for the student who has recently completed all the offered courses in a given area and still requires or wishes continued exploration of an advanced study in that area. The special projects are designed only as a continuation of previous courses, not personal endeavors of the student.
Prerequisites: ART 2320 and permission of the instructor.

ART 2488 - Special Projects: Metals

(1-3CR) (Max. 6) Special problems in jewelry of the student's own choosing with directional guidance by the instructor. Emphasis on design and technical skills. This course is designed for the student who has recently completed all the offered courses in a given area and still requires or wishes continued exploration of an advanced study in that area. The special projects are designed only as a continuation of previous courses, not personal endeavors of the student.

Prerequisites: ART 2360 and permission of the instructor.

ART 2489 - Special Projects: Graphic Design

(1-3CR) (Max. 6) An advanced study further exploring specific design problems with emphasis on development of ideas and flexibility of approach. This course is designed for the student who has recently completed all the offered courses in a given area and still requires or wishes continued exploration of an advanced study in that area. The special projects are designed only as a continuation of previous courses, not personal endeavors of the student.

Prerequisites: ART 2112 and permission of the instructor.

ART 2990 - Museum Training Internship (6CR)

(18LB) This course is designed for practical experience in a museum in areas such as collections management, education, development, or exhibition design. For museum/gallery studies majors only.

Prerequisites: ART 1300

Astronomy

ASTR 1000 - Descriptive Astronomy (3CR)

(3L) [E] Designed to give a general understanding of modern astronomy. A background in historical astronomy will open the course. From there, a survey of the solar system and the objects in it will be discussed. An overview of the life and death of a star will follow. Finally, a description of the galaxy will be covered along with a study on the various theories of the origin of the

universe. (Taken with ASTR 1015, equivalent to ASTR 1050 [SE].)

ASTR 1015 - Astronomy Laboratory (1CR)

(2LB) [E] An optional supplement to ASTR 1000 and designed to familiarize the student with tools and procedures of fundamental astronomical observations.

Prerequisites: MATH 0920. (Taken with ASTR 1000, equivalent to ASTR 1050 [SE].)

ASTR 1050 - Survey of Astronomy (4CR)

(3L, 2LB) [E] A survey of astronomy and the universe. Topics will include astronomical concepts, terms and history, as well as a study of stellar evolution, galaxies, cosmology, and the solar system. The lab is an exercise into the concepts and methods used by astronomers in their study of the universe.

Prerequisites: MATH 0900.

ASTR 1100 - Planets Around Stars (4CR)

(3L, 2LB) A survey of the planets and moons of our solar system; the physical laws governing their motions; the theory of their formation and evolution to the present time. Includes comparative studies of the interiors, surfaces, and atmospheres of the planets, and comparison of our solar system to recently discovered extrasolar planets.

Prerequisites: A grade of "C" or better in MATH 0920. ASTR 1000 recommended..

Atmospheric Science

ATSC 2000 - Introduction to Meteorology (4CR)
(3L, 2LB) [E] This first course in meteorology is for students with minimal background in math and science. It provides general and practical understanding of weather phenomena, and emphasizes observational aspects of the science, meteorological view of the physical world and the impact the science has on life and society. The course will include discussion of atmospheric composition and structure, radiation, winds and horizontal forces, stability and vertical motions, general circulation, synoptic meteorology, clouds and precipitation, severe storms and atmospheric optics.

Auto Body Repair

AUBR 1540 - Auto Body Welding (3CR)
(1L, 4LB) A course in the application of basic welding techniques in replacement and repair of auto body panels.

Prerequisites: WELD 1820 or concurrent enrollment.

AUBR 1550 - Auto Body Repair I (5CR)
(2L, 6LB) Course covers shop and tool safety; service information and measurements; mechanical repair of power train, suspension, steering, brake, cooling, heater and air conditioning, exhaust, emission control, and fuel systems.

AUBR 1560 - Auto Body Repair II (5CR)
(2L, 6LB) A continuation of AUBR 1550, covering the automotive electrical/electronic systems, and restraint system operation and service.

Prerequisites: AUBR 1550.

AUBR 1710 - Frame and Chassis I (2.5CR)
(1L, 3LB) An introduction to frame repair including impact on its effect on a vehicle, measurement of body dimensions, unibody straightening, and realigning techniques.

Prerequisites: AUBR 1550 and AUBR 1810.

AUBR 1760 - Rod and Custom Restoration I (4CR)
(2L, 4LB) Introduction to street rods and custom vehicles. Course consists of planning and designing a custom project, fabrication techniques, paint and refinishing, external body modifications, and suspension modifications. Bi-annually

AUBR 1770 - Rod and Custom Restoration II (4CR)
(2L, 4LB) A continuation course to AUBR 1760 Rod and Custom Restoration I. Areas of instruction will include electronics, welding metalworking, custom paint and graphics, and engine and drivetrain modifications. Bi-annually

Prerequisites: AUBR 1760

AUBR 1810 - Collision Damage Repair I (4CR)
(2L, 4LB) Introduction to the collision repair industry, vehicle construction technology, tool usage, materials, fasteners, working sheet metal, and the use of body fillers.

AUBR 1820 - Collision Damage Repair II (4CR)
(2L, 4LB) A continuation of AUBR 1810, covering the service and replacement of fenders, hoods, panels, bumpers, trim, doors, glass, and passenger compartment components.

Prerequisites: AUBR 1810.

AUBR 1910 - Auto Paint I (5CR)
(2L, 6LB) A course in auto painting, with emphasis on material and equipment handling.

AUBR 1920 - Auto Paint II (5CR)
(2L, 6LB) A continuation of AUBR 1910, stressing theoretical and practical aspects of final finishing procedures for complete car refinishing and spot repairs.

Prerequisites: AUBR 1910.

AUBR 1975 - Independent Study - Auto Body Repair (1-3CR) (Max. 6) This course provides an option for students with sufficient background to pursue special interests in the auto body lab under contract with the instructor.

Prerequisites: Permission of the instructor.

AUBR 1980 - Cooperative Work Experience

(1-8CR) This course is designed to provide an opportunity for students with sufficient entry level auto body skills to work off-campus, in weld related areas, while attending classes on campus part-time.

Prerequisites: Demonstrate proficiency of auto body skills, and permission of the instructor.

Automotive Technology

AUTO 1502 - Automotive Survey I (6CR)

(2L, 8LB) For an entry level into automotive repair. For those students with little or no automotive background. Provides general theory and repair in the following automotive systems: electrical, engine performance, brakes, suspension and steering.

AUTO 1503 - Automotive Survey II (6CR)

(2L, 8LB) A continuation of AUTO 1502 to provide third year high school students theory and exposure to the following automotive systems: engine repair and overhaul, heating and air conditioning, manual transmission, drive train and axles, and automatic transmission.

AUTO 1510 - Engine System Fundamentals (6CR)

(2L, 8LB) This course will cover engine design and operation, engine sub-systems including ignition, fuel, cooling, oiling, intake and exhaust, and timing systems. Emphasis is placed on the proper usage of diagnostic

tools and equipment, base engine diagnosis, engine performance, and tune-up procedures.

AUTO 1515 - Basic Automotive Technology (3CR)

(1L, 4LB) This course will provide students with little or no automotive background a practical look at working in the automotive industry with general theory and repair in the areas of electrical systems, engine performance, brake systems, suspension systems, and steering systems.

AUTO 1690 - Manual Power Train Fundamentals (4CR)

(2L, 4LB) This course is designed to provide automotive students with the general theory, operation and component service involved in the transmission of mechanical power. The primary emphasis of the course deals with an introduction to drive shafts, drive axles, clutches, manual transmissions/transaxles and four-wheel/all-wheel drive components.

AUTO 1740 - Brake Systems (4CR)

(2L, 4LB) An introduction to braking systems, this course will cover basic theory and service of hydraulic systems, power brake systems, parking brakes, and antilock systems. Diagnostics, service and repair procedures are emphasized.

AUTO 1760 - Heating and Air Conditioning (4CR)

(1L, 6LB) The course will cover heating and air conditioning theory, regulations, troubleshooting, component service, evacuation, recharging

and retrofitting procedures.

Prerequisites: AUTO 1510 and AUTO 1765 or permission of instructor.

AUTO 1765 - Automotive Electrical (5CR)

(2L, 6LB) Introductory course designed to cover the theory, operation, testing and service of automotive electrical systems, battery, starting and charging systems.

AUTO 2500 - Advanced Engine Rebuilding (4CR)

(1L, 6LB) Designed to provide students with the background and hands-on practice necessary to diagnose, repair and overhaul gasoline engines.

Prerequisites: AUTO 1510.

AUTO 2555 - Suspension and Steering (4CR)

(2L, 4LB) This course is an introduction to automotive alignment and suspension, and will cover chassis and steering system components, service procedures, alignment theory, and four-wheel alignments.

AUTO 2565 - Advanced Automotive Electrical (5CR)

(2L, 6LB) A continuation of the vehicle electrical system operation and testing, covering lighting circuits, instrumentation, accessories, body computers, electronic chassis controls and passive restraint systems.

Prerequisites: AUTO 1765.

AUTO 2580 - Automotive Electronic Theory (2CR)

(2L) Intended for advanced automotive students who have a

desire to increase their knowledge of basic electronics. The course is intended to provide an introduction to electronics and on-board microprocessors as they are currently used on production vehicles.

Prerequisites: AUTO 1765.

AUTO 2610 - Computerized Fuel Systems (5CR)

(2L, 6LB) This course is intended for automotive students who have the need to increase their background on electronically controlled engine management systems. Students will begin with an overview of concepts that are applicable to understanding and diagnosing systems on all vehicles; then will move on to the study of individual systems.

Prerequisites: AUTO 1510 and AUTO 1765.

AUTO 2800 - Problems in Automotive Technology
(1-3CR) (Max. 6) Designed to provide the opportunity for advanced automotive students to pursue an independent problem in advanced areas of automotive repair. Students electing this course will develop, under supervision of an instructor, a problem, which is of specific interest to them.

Prerequisites: Advanced standing in the automotive program, and permission of the instructor.

AUTO 2810 - Diagnosis and Tune-up Procedures (4CR)

(2L, 4LB) Provides students with the theory, diagnosis, adjustment

and repair of the systems that affect engine performance. Includes basic engine condition, distributor ignition, carburetion, and emission control systems. Emphasis is placed on accurate use of diagnostic tools, equipment, proper tuning procedures, use of specifications, and interpretation of test results.

Prerequisites: AUTO 1510 and AUTO 2610.

AUTO 2980 - Cooperative Work Experience (Automotive)

(1-6CR) (Max. 8) On the job training with in automotive technology.

AUTO 2995 - Automotive Workshop: (Subtitle) (1-3CR)

Overview of basic automotive systems, light service work and used vehicle inspection.

Aviation

AVTN 1980 - Cooperative Work Experience

(1-8 CR) Students are afforded the opportunity to gain practical on-the-job experience in their specialties. Students will be supervised by the instructor and the employer. A minimum of 80 hours of on-the-job training represents one semester credit.

AVTN 2510 - Private Pilot Ground School (3CR)

(3L) Includes the study of Federal Aviation Regulations, flight dynamics, meteorology, navigation, and airport operations. Designed to fulfill the ground school requirements for the FAA Private Pilot Certificate. FAA private pilot written test is class outcome.

AVTN 2520 - Private Pilot Flight School (3CR)

(3L) Requires flight instruction as listed by the Federal Aviation Administration (FAA) for a private pilot license which will be paid by students directly to a FAA recognized flight school based on the flight school's regularly published costs. Students will receive an S/U grade based on the results of a final check flight as required by the FAA.

Prerequisites: Concurrent enrollment in AVTN 2510 and third-class medical certificate or permission of instructor.

AVTN 2600 - Instrument Pilot Ground School (3CR)

(3L) Includes the study of aircraft altitude control, flight maneuvers, and flight based solely on instrument reference. Also covered are hazardous weather, interpreting weather data, FAA regulations and IFR procedures. FAA instrument rating written test is outcome.

Prerequisites: AVTN 2520, or permission of the instructor.

AVTN 2620 - Instrument Pilot Flight School (3CR)

(3L) Teaches the application of aircraft altitude control, flight maneuvers, and flight based solely on instrument reference. (Stage I-III). The course also includes advance navigation, IFR/ATC procedures and night flying. Requires flight and hood instruction as listed by the Federal Aviation Administration (FAA) for an instrument rating which will be paid by students directly to a FAA recognized flight school based on the flight school's regularly published costs. Students will receive an

S/U grade based on the results of a final check flight as required by the FAA.

Prerequisites: AVTN 2520, or permission of the instructor.

AVTN 2705 - Commercial Pilot Ground School (3CR)

(3L) Includes the study of aircraft altitude control and flight maneuvers applicable to the commercial pilot certificate. Federal Aviation Administration commercial pilot written test is outcome.

Prerequisites: AVTN 2620, or permission of the instructor.

AVTN 2720 - Commercial Pilot Flight I (3CR)

(3L) Advanced flight instruction teaching abilities such as precision altitude flying, commercial maneuvers, radio navigation, and night flying. Requires flight instruction as listed by the Federal Aviation Administration (FAA) for an Commercial Pilot License which will be paid by students directly to a FAA recognized flight school based on the flight school's regularly published costs. Students will receive an S/U grade based on the results of an intermediate check flight as required by the FAA.

Prerequisites: Completion of AVTN 2620, or permission of the instructor.

AVTN 2730 - Commercial Pilot Flight II (3CR)

(3L) Advanced flight instruction teaching abilities such as precision altitude flying, commercial maneuvers, radio navigation, and night flying. Requires flight instruction as listed by the Federal Aviation

Administration (FAA) for an Commercial Pilot License which will be paid by students directly to a FAA recognized flight school based on the flight school's regularly published costs. Students will receive an S/U grade based on the results of an final check flight as required by the FAA.

Prerequisites: AVTN 2720 - Commercial Pilot Flight I (3CR) Completion of AVTN 2720, or permission of instructor.

Banking

BANK 1500 - Principles of Banking (3CR)

(3L) An introduction to the banking services. Includes history and evolution, the documents and language of banking, the deposit function, check processing and collection, bank bookkeeping, bank loans and investments, trust department services, specialized services to foreign traders and other banks, and bank regulations and examination.

Biology

BIOL 1000 - Introduction to Biology I (4CR)

(3L, 3LB) A study of the cell as the unit of life, the chemistry of life, and an overview of the functioning of organs and organ systems of vertebrates. General biological principles such as genetics, homeostasis, and structure/function relationships are emphasized. This course is appropriate for biology and biology-related majors, especially those pursuing health-related degrees such as nursing, medical technology, occupational therapy, physical

therapy, etc. It also fulfills the laboratory science requirements of such majors as education, social and behavioral sciences, humanistic studies, English, etc. Biology at the high school level is desirable but not required.

BIOL 1010 - General Biology I (4CR)

(3L, 3LB) [E] Fundamental concepts including basic chemistry, cell structures and functions, tissues, energy reactions, genetics, molecular biology, population dynamics, and evolutionary theory. Designed for life science majors and pre-professional life science curricula. It is anticipated that students have had one year of high school biology.

BIOL 2022 - Animal Biology (4CR)

(3L, 3LB) This course addresses the evolution, anatomy, physiology and ecology of animals. It is intended as a continuation of BIOL 1010, generally for students majoring in the sciences.

Prerequisites: BIOL 1000 or BIOL 1010

BIOL 2023 - Plant and Fungal Biology (4CR)

(3L, 3LB) An introduction to the principles of botany and mycology. Topics discussed include cell structure, anatomy, diversity, taxonomy, physiology, reproduction, genetics, evolution, and ecology of plants and fungi.

Prerequisites: BIOL 1000, BIOL 1010, or equivalent.

BIOL 2110 - Yellowstone Field Science (3CR)

(3L) A field approach to the ecology, natural history and politics of Yellowstone National Park. Students spend a hiking-intensive week and write about the experience under the guidance of an English instructor (ENGL 2055). Concentration will be on plant and animal identification, natural history, and interactions with each other and their environment. Political issues in Yellowstone, i.e., snowmobiles, bison migration and wolf restoration will be discussed.

BIOL 2120 - Biomedical and Environmental Ethics (3CR)

(3L) This course will examine ethical issues related to medicine, biology technology and the natural environment. During the first half of the course, ethical theory is introduced, and the class will read, discuss and debate material on medical and technological issues such as defining life, abortion, euthanasia, biomedical research, genetic engineering and speciesism. The second half of the course will be devoted to issues such as animal rights, land ethics, crop engineering and the value of wilderness and biodiversity. Much class time is devoted to debate and discussion. College biology recommended.

BIOL 2325 - Tropical Ecology (3CR)

(6LB) Tropical Ecology utilizes on-site instruction to introduce students to the fundamental principles of tropical biology, the natural history of important tropical plants and animals, and their conservation. Students will

be introduced to a variety of habitats, depending on the country visited. Field orientation at each site visited includes identification of plants and animals and general ecology and natural history, area management, history and cultural considerations necessary for conservation and research in the tropics. Financial assistance may be available for interested and qualified students.

Prerequisites: BIOL 1000 or BIOL 1010, and permission of the instructor. Students must complete an application form, available from the instructor.

BIOL 2400 - General Ecology (3CR)

(3L) [E] An introduction to the principles of ecology. Topics stressed include ecosystems, communities, populations, succession, aquatic and terrestrial habitats, natural selection, abiotic interactions, and speciation.

Prerequisites: BIOL 1000, BIOL 1010 or equivalent.
Cross-listed: LIFE 2400

BIOL 2410 - Field Ecology I (2CR)

(5LB) [E] A field and laboratory course to introduce research methods in general ecology. Includes required field trips.

Prerequisites: BIOL 1010, or permission of the instructor.
Cross-listed: LIFE 2410

BIOL 2465 - Research Problems in Biology

(1-3CR) (Max. 3) A comprehensive research study is required. Upon completing the project, the student should present a paper and oral seminar

to a committee selected by the project instructor. The problem and amount of credit received must have the approval of the instructor.

Prerequisites: Permission of the instructor.

Business**BUSN 2000 - International Business (3CR)**

(3L) [E] Students develop knowledge of the diverse cultural impact on multinational trade, marketing, finance, management, and government policies. Emphasis will be on the cultural dynamics of cultural business.

Business Administration**BADM 1000 - Introduction to Business (3CR)**

(3L) [E] An orientation to the field of business: types of business organizations, financing of businesses, marketing functions, and business environment.

BADM 1005 - Business Mathematics I (3CR)

(2L, 2LB) Designed to review basic mathematics skills and build a proficiency in the operation of electronic calculators. These skills are applied to practical business problems in bank services, payroll, taxes, risk management, mark-up, discount, depreciation, financial analysis, simple and compound interest.

Prerequisites: MATH 0920 or Algebra Domain 40-65.

BADM 1020 - Business Communications (3CR)

(3L) Helps students to compose, edit, and rapidly revise business messages on microcomputers. Group interaction is emphasized with written communications, reports, and other communications resources such as speaking and listening, and use of the Internet and e-mail.

BADM 1025 - Entrepreneurial Finance (3CR)

(3L) The successful management of a company's finances is fundamental to success in today's competitive business environment. This course covers key economic concepts, management functions, financial statements and financial analysis used for a business.

BADM 1030 - Personal Finance (3CR)

(3L) The efficient management of money is a prime requirement for a happy and successful family life. This course is designed to aid the student in planning a program for such major items as inflation, budgeting, insurance, savings and investment, home buying, and income taxes. Recommended as an elective for business and nonbusiness majors.

BADM 2010 - Business Law I (3CR)

(3L) [E] An introductory survey course providing a broad overview of business related legal topics. Students will be familiarized with the nature and sources of law, court systems, jurisdictions of state and federal courts, small claims court, common law, statutory law, constitutional law, criminal law,

torts, contracts, (especially as they are affected by the Uniform Commercial Code), social responsibility and business ethics, property law, estate planning, and how to avoid probate.

BADM 2025 - Employment Law (3CR)

(3L) [E] This is an introductory survey course providing a broad overview of employment related topics. The course will cover both state and federal employment law.

BADM 2030 - Business Ethics (3CR)

(3L) [E] This course focuses on the importance of ethics in business considerations as well as ethical issues in the news today. This course will examine how ethics is an essential part of all business elements, from management to employee development.

BADM 2040 - E-commerce (3CR)

(3L) To prepare for the rapid changes in electronic commerce, students will be exposed to multifaceted business issues such as: the role of independent third-parties, the regulatory environment, risk management, Internet security standards, cryptography and authentication, firewalls, e-commerce payment mechanisms, intelligent agents, and web-based marketing.

Prerequisites: INET 1895 .

BADM 2050 - Film Business and Legal Aspects (3CR)

(3L) An introductory survey course providing a broad overview of business and legal

topics in the film industry. Students will be familiarized with the nature of the film industry with special focus on independent films. Students will also learn copyright and trademark law associated with the film industry. Students will also explore new changes in the industry brought about by the digital age and new approaches in marketing through the internet.

Prerequisites: None.

BADM 2055 - Media and Entertainment Law (3CR)

(3L) An introductory survey course providing a broad overview of business and legal topics in the media and entertainment industry. Students will be familiarized with the beginnings of freedom of speech, press, and expression. Students will explore cutting edge, current events that highlight areas such as copyrights, advertising, pornography, censorship of the media, cable and satellite television, digital and satellite radio, and the internet. Students will also study and analyze media and entertainment law ethics issues.

Prerequisites: None.

BADM 2060 - Music Business and Copyrights (3CR)

(3L) An introductory survey course providing a broad overview of business and legal topics in the music industry. Students will be familiarized with the nature and sources of the three income streams in the music industry: music publishing, recordings, and live entertainment. Students will also

learn copyright law associated with music. Students will explore new changes in the industry brought about by the digital age and new approaches in marketing through the internet and mobile applications.

Prerequisites: None.

**BADM 2065 -
Entrepreneurial Cyberlaw
and E-Commerce
Regulation (3CR)**

(3L) An introductory survey course providing a broad overview of business and legal topics in cyberspace with a focus towards entrepreneurs. Students will not only be familiarized with the fundamentals of cyber law and e-commerce regulation in a global business context, but also the impact of the law on the technology sector firm itself.

Prerequisites: None.

**BADM 2100 - Small
Business Practices (2CR)**

(2L) For the person interested in starting his or her own business. Emphasis will be on the development of a "business plan" and the finance, accounting, management, and marketing after the business has been established.

**BADM 2195 -
Entrepreneurship (3CR)**

(3L) This course is designed for those students who have always wanted to start their own business, or for those that just want to explore the possibilities.

**BADM 2245 - Real Estate
Law (3CR)**

(3L) [E] This is an introductory survey course providing a broad overview of real estate related

legal topics. More specifically, the course will cover the differences between real and personal property, define fixtures and their significance, and explore the scope of real property to the sky, air, and natural resources. There will be a section on easements, profits, and licenses. There will be discussions on the types of ownership such as joint tenancy or tenancy in common. We will discuss real estate agents, brokers, and the duties attending to those positions.

**BADM 2340 - Business
Organizations and
Government Regulations
(3CR)**

(3L) A study of the principles of agency and employment law, independent contractors, wrongful termination, worker's compensation, civil rights act, administrative law, environmental law, antitrust, partnerships, limited partnerships, joint-ventures, corporations, subchapter S corporations, limited liability companies, franchises, security regulation, lender liability and consumer protection, and international law.

**BADM 2350 - Commercial
Law (3CR)**

(3L) A study of the basic principles of the law of personal and real property and its financing, water law, landlord and tenant, bailments, Uniform Commercial Code, sales, commercial paper, secured transactions, Uniform Consumer Credit Code, creditor's remedies and suretyship, bankruptcy and reorganization, exemptions, enforcement of judgment, garnishment, and execution.

**Business Office
Technology**

**BOTK 1540 - Business
English (3CR)**

(3L) For those who need a review of basic communication skills. Students study the fundamentals of grammar, punctuation, and spelling. These skills are applied to situations that occur in business offices.

**BOTK 1655 - Keyboarding
Speed and Accuracy
(1CR)**

(2LB) This course provides students with proven techniques for improving their precision and performance. The drills are designed to increase keying speeds while maintaining a high degree of accuracy. This class offers the students the opportunity to move their keyboarding efficiency to the next level. Extra laboratory work may be required. Students need to know the keyboard. A student may take a departmental exam to challenge this course. Students successfully completing the exam will receive a grade of "S" for 1 credit.

**BOTK 1660 - Document
Formatting (2CR)**

(.5L, 3LB) This course emphasizes development of document formatting skills using word processing software. Students will learn to properly format those documents used in the working world: letters, memos, reports, tables, and other common and/or specialized formats. Some extra laboratory work may be necessary. Minimum keyboarding skills of 30 wpm needed.

BOTK 1955 - Professional Development (3CR)

(3L) Designed to provide an awareness of the "people" skills essential for job success. Topics include developing a positive self-image, a professional self-image, business ethics, time management, human relations and communication skills, organizational dynamics, and career management.

BOTK 1980 - Cooperative Work Experience I

(1-3CR) (Max. 6) The student is given the opportunity to gain practical, on-the-job experience within the student's area of business specialization. Supervision will be by program coordinator and employer. A minimum of 80 hours of on-the-job training represents one semester hour. The student must maintain 12 credit hours with a 2.0 GPA during the semester.

Prerequisites: Student must be a full-time business information systems major and have permission of the instructor.

Certified Occupational Therapy Assistant

COTA 2020 - Human Occupations and Life Roles (2CR)

(1L, 2LB) The foundation of occupational therapy is purposeful activity related to development and life roles. This course provides an in-depth exploration of occupations and life roles throughout the life cycle while exploring occupational therapy theory, analysis and synthesis of occupations as performed in the various life stages. Provides

discussion of influences of disability and culture to occupational performance.

Prerequisites: Permission of OTA program director.

COTA 2100 - Psychosocial Aspects (3CR)

(2L, 2LB) This course addresses acute and chronic psychosocial dysfunction conditions and occupational therapy's role in providing service. Various developmental concerns and mental health settings are discussed. The OTA's role in interventions is presented including theory, evaluation, treatment planning and intervention. Psychosocial issues in physical dysfunction are also explored.

Prerequisites: COTA 2200, COTA 2300, COTA 2310, COTA 2420, and PSYC 1000.
Concurrently: Taken concurrently with COTA 2210 and COTA 2320.

COTA 2150 - Group Dynamics (1CR)

(2LB) This course is designed to develop effective interpersonal communication to prepare students for professional/patient interactions in clinical practice and the engagement of therapeutic use of self. An emphasis is placed on the development of basic listening skills, providing meaningful feedback, and group membership skills. This course provides an environment, which promotes sharing of ideas, attitudes and feelings, peer feedback and support of group members.

Prerequisites: Admission into the

OTA program, or permission of the OTA program director.

COTA 2160 - Leadership Skills (2CR)

(1L, 2LB) This course promotes effective interpersonal communication for group and professional leadership, evaluation of self and others, and therapeutic-use of-self techniques necessary for effective occupational therapy service provision. Group leadership and interactive skills are practiced along with activity analysis, adapting and grading of group activities.

Prerequisites: COTA 2150, COTA 2200, COTA 2300, COTA 2310, COTA 2420.
Concurrently: Taken concurrently with COTA 2100 and COTA 2210.

COTA 2200 - Therapeutic Approaches and Media I (2CR)

(4LB) Exploration of a variety of media and therapeutic approaches for special needs populations. Activity analysis and adaptation of activities are practiced extensively. Types of activities explored include play, education, daily living skills, social participation, work and leisure. Use of the Occupational Therapy Practice Framework is introduced and applied to practice.

COTA 2210 - Therapeutic Approaches and Media II (2CR)

(4LB) Continuation of implementation of the Occupational Therapy Practice Framework. A variety of media will be explored for implementation with psychosocial and pediatric

populations. Activity analysis, adapting, and grading of interventions for therapeutic application for these populations is the focus of this class

Prerequisites: COTA 2020 , COTA 2200, COTA 2300, COTA 2310, COTA 2420

Concurrently: Taken concurrently with COTA 2100 and COTA 2350 .

COTA 2220 - Therapeutic Approaches and Media III (3CR)

(6LB) This course continues the exploration of service implementation for the occupational therapy assistant in the physical disabilities settings. Areas studied include daily living skills, work, leisure, education, and social participation. Techniques applied in physical disabilities settings are practiced.

Prerequisites: COTA 2020, COTA 2200, COTA 2210, COTA 2300, COTA 2310, COTA 2320, COTA 2350, and COTA 2420.

Concurrently: Taken concurrently with COTA 2330 and COTA 2400.

COTA 2300 - Fieldwork Integration I (2CR)

(1L, 2LB) An introduction to the role of working with special needs populations in the community. The role and professional expectations of occupational therapy assistants are introduced. This course provides fieldwork preparation integrated with classroom discussions. Students will complete 20 hours of clinical experience. Beginning

knowledge of medical terminology is studied.

COTA 2310 - Fieldwork Integration II (1CR)

(2LB) A continuation of pre-fieldwork course work and beginning preparation for Level I fieldwork. Primary focus on professional skills in community experiences and with special needs populations. Begin clinical documentation for OTA practitioner.

Prerequisites: COTA 2300.

COTA 2320 - Fieldwork Integration III (1CR)

(2LB) Designed to prepare students for Level I and II fieldwork experiences. Students will complete Level I fieldwork in psychosocial and pediatric settings. Continuation of documentation concepts.

Prerequisites: COTA 2020, COTA 2300, COTA 2310, and COTA 2420.

Concurrently: Taken concurrently with COTA 2100 and COTA 2350.

COTA 2330 - Fieldwork Integration IV (1CR)

(2LB) A continuation of clinical readiness skills. Includes Level I experiences in developmental disabilities, physical disabilities and geriatric settings as well as preparation for Level II experiences. Clinical reasoning skills for transition from student to practitioner are an integral part of the course.

Prerequisites: COTA 2020, COTA 2100, COTA 2200, COTA 2300, COTA 2310, COTA 2320, COTA 2350, and COTA 2420.

Concurrently: Taken concurrently with COTA 2220 and COTA 2400.

COTA 2350 - Clinical Theory and Practice I (3CR)

(1L, 4LB) Course examines occupational therapy theory and practice for individuals aged birth through 21 with a focus on physical disabilities and developmental dysfunction. Explores implementation of occupational therapy in a variety of settings including theory, assessment, planning treatment plan and intervention.

Prerequisites: COTA 2020, 2050, COTA 2200, COTA 2300, COTA 2310, and COTA 2420.

Concurrently: Taken concurrently with COTA 2210 and COTA 2320.

COTA 2400 - Clinical Theory and Practice II (3CR)

(1L, 4LB) Course examines occupational theory and practice for individuals over the age of 21 with a focus on physical disabilities, neurological impairment and aging dysfunction. Explores implementation of occupational therapy including theory, assessment, treatment planning and implementation, in a variety of settings.

Prerequisites: COTA 2020, COTA 2200, COTA 2210, COTA 2300, COTA 2310, COTA 2320, COTA 2350, and COTA 2420.

Concurrently: Taken concurrently with COTA 2220 and COTA 2330.

COTA 2420 - Clinical Conditions (3CR)

(3L) Specific diagnoses commonly seen by the occupational therapists are examined and application of occupational therapy techniques and theory are discussed.

Prerequisites: Admission into the OTA Program or permission of the OTA Program Director and ZOO 2040, ZOO 2041, and KIN 2050.

COTA 2450 - Health Care Systems (3CR)

(3L) Course provides exploration of the health care system and the delivery of occupational therapy services. Topics include: reimbursement, team concepts in health care, the role of the OTA within the OT department and health care environments, levels of authority and responsibility, and familiarity with alternative health care choices.

Prerequisites: COTA 2020, COTA 2100, COTA 2150, COTA 2160, COTA 2200, COTA 2210, COTA 2300, COTA 2310, COTA 2320, COTA 2350, and COTA 2420.

COTA 2500 - Fieldwork A (3CR)

(2L, 2LB) First of two Level II fieldwork placements. Eight weeks of fieldwork in contracted facility. Includes a minimum of 40 hours a week of on-site skill practice. On-line integration of learning experiences with instructor and class members is expected.

Prerequisites: Must have successfully completed all academic course work and Level I fieldwork.
Concurrently: (May be taken

concurrently with COTA 2550 and/or COTA 2600.)

COTA 2550 - Fieldwork B (3CR)

(2L, 2LB) Second of two Level II fieldwork placements. Eight weeks of fieldwork in contracted facility. Includes a minimum of 40 hours a week of on-site skill practice. On-line integration of learning experiences with instructor and class members is expected.

Prerequisites: Must have successfully completed all academic coursework and COTA 2500.
Concurrently: (May be concurrently taken with COTA 2500 and/or COTA 2600.)

COTA 2600 - Fieldwork Options

(2-3CR) Six to eight weeks fieldwork optional for students wishing further specialized training in a particular facility. Length of training to be prearranged with school and clinical setting. On-line integration of learning experiences with instructor and class members is expected.

Prerequisites: Must have successfully completed all academic coursework, Level I fieldwork and COTA 2500 and COTA 2550.
Concurrently: (May be taken concurrently with COTA 2500 and COTA 2550.)

COTA 2975 - Independent Study in OT

(1-3CR) (Max. 6) This course provides occupational therapy assistant students the opportunities to complete independent research/study in areas of interest within the field

of occupational therapy.

Prerequisites: Permission of the instructor.

Chemistry

CHEM 1005 - Basic Chemistry I (3CR)

(3L) [E] Designed primarily for students who have not had high school chemistry or feel that they need a review, this course consists of a study of matter, atomic structure and bonding, the periodic table, chemical symbols, nomenclature and chemical equations, quantitative composition of compounds, calculations from chemical equations. Provides acceptable credit for students enrolled in agriculture, forestry, home economics, nursing, and petroleum technology. Not recommended for engineering, pre-medicine, pre-dentistry, pre-pharmacy, pre-veterinary medicine or any of the physical science majors. Students needing laboratory credit should enroll concurrently in CHEM 1006.

Prerequisites: C or better in MATH 0900
Concurrently: (Taken with CHEM 1006, equivalent to UW CHEM 1000.)

CHEM 1006 - Basic Chemistry Laboratory I (1CR)

(3LB) [E] Elementary chemical laboratory practice demonstrating the applications of chemical theory. This laboratory includes experiments on density, changes of state, physical and chemical properties, percent composition of hydrates, elementary qualitative analysis, chemical reactions, and empirical

formulas. Not recommended for students who plan to take CHEM 1025 or CHEM 1035.

Concurrently: Concurrent enrollment or credit in CHEM 1005 is required. (Taken with CHEM 1005, equivalent to UW CHEM 1000.)

CHEM 1025 - Chemistry I (3CR)

(3L, *) [E] *One problem class per week. The first semester of a general course designed to meet the requirements of pre-professional, engineering, science, and liberal arts majors. Covers fundamental principles, atoms, subatomic particles, periodicity of elements, stoichiometry, bonding, oxidation states, states of matter, and solutions.

Prerequisites: A 'C' or better in MATH 0930, or an ACT math score of 23 or better. (High school chemistry strongly recommended or a 'C' or better in CHEM 1005)

(CHEM 1025 with CHEM 1028 are equivalent to UW CHEM 1020.)

CHEM 1028 - Chemistry Laboratory I (1CR)

(3LB) [E] Introductory chemistry laboratory used to introduce the student to laboratory equipment and technique and to demonstrate some of the chemical laws discussed in CHEM 1025. (CHEM 1025 with CHEM 1028 are equivalent to UW CHEM 1020.)

CHEM 1035 - Chemistry II (3CR)

(3L, *) [E] *One problem class per week. The second semester of a general course designed to meet the requirements of pre-professional, engineering, science, and liberal arts majors. Covers thermodynamics, kinetics and mechanism of chemical reactions, equilibrium situations, complex equilibria, electrochemistry, descriptive chemistry, and organic chemistry.

Prerequisites: A 'C' or better in both CHEM 1025 and MATH 1400, or permission of the instructor. (CHEM 1035 with CHEM 1038 are equivalent to UW CHEM 1030.)

CHEM 1038 - Chemistry Laboratory II (1CR)

(3LB) [E] A continuation of CHEM 1028 used to introduce more advanced technique, qualitative analysis and simple organic chemistry.

Concurrently: To be taken concurrently with CHEM 1035.

CHEM 2230 - Quantitative Analysis (4CR)

(2L, 6LB) [E] The study and practice of the principles and techniques of quantitative isolation and determination of some of the elements and their compounds. The applications and limitations of the theories and operations of analytical chemistry. The solutions of problems of all types are a major part of the two weekly class periods.

Prerequisites: CHEM 1035 or permission of the instructor.

CHEM 2300 - Introductory Organic Chemistry (4CR)

(4L) [E] A one-semester introduction to organic chemistry with a biological emphasis. Topics covered are bonding, structure, intermolecular attractions, common and systematic nomenclature, hydrocarbons, alcohols, phenols, mercaptans, ethers, aldehydes, ketones, carboxylic acids and their derivatives, amines, stereochemistry, carbohydrates, lipids, amino acids, proteins, nucleic acids, heterocycles, natural products, and polymers. Students needing organic laboratory credit should enroll concurrently in CHEM 2325.

Prerequisites: CHEM 1005 or CHEM 1025.

CHEM 2320 - Organic Chemistry I (3CR)

(3L, *) [E] *One problem class per week. First of a two-semester sequence in modern organic chemistry. Topics covered are bonding, structure, alkanes, alkenes, alkynes, kinetics, stereochemistry, cycloaliphatic compounds, aromaticity, and arenes.

Prerequisites: CHEM 1035, or permission of the instructor. Concurrently: To be taken concurrently with CHEM 2325.

CHEM 2325 - Organic Chemistry Laboratory I (1CR)

(3LB) This laboratory involves instruction in fundamental organic laboratory techniques including simple synthesis and use of gas chromatography.

Concurrently: To be taken

concurrently with CHEM 2320 or CHEM 2300.

CHEM 2340 - Organic Chemistry II (3CR)

(3L, *) [E] *One problem class per week. A continuation of CHEM 2320. Topics covered are spectroscopy (mass spectrometry, infrared, ultraviolet and nuclear magnetic resonance) halo alkanes, alcohols, ethers, aldehydes, ketones, carboxylic acids and their derivatives, phenols, carbohydrates, polymers, and natural products.

Prerequisites: CHEM 2320.
Concurrently: To be taken concurrently with CHEM 2345.

CHEM 2345 - Organic Chemistry Laboratory II (1CR)

(3LB) Involves detailed synthetic preparations and spectral and chemical analysis of the products.

Concurrently: To be taken concurrently with CHEM 2340.

CHEM 2465 - Research Problems in Chemistry (1CR)

(3LB) A comprehensive research study in which the student performs under graduate chemical research under the direction of a principal investigator.

Prerequisites: Permission of instructor.

Chinese

CHIN 1010 - First Year Chinese I (4CR)

(4L) [E] This course is intended for students who have never

studied Chinese at the college level. Students will learn the fundamentals of the Chinese language through listening, speaking, reading, and writing activities at the ACTFL (American Council on the Teaching of Foreign Languages) Novice Low Level. The course will also introduce students to the culture of various Chinese-speaking countries and areas. Language laboratory times are required as needed. Students who want to take for credit the next course in the sequence must complete this course with a grade of "C" or better.

Prerequisites: None

CHIN 1020 - First Year Chinese II (4CR)

(4L) [E] This course is a continuation of the objectives in CHIN 1010. Students will become more proficient in basic listening, speaking, reading, and writing Chinese and will further their grammatical study of the Chinese language at the ACTFL (American Council on the Teaching of Foreign Languages) Novice Mid- Level. The course will continue to introduce students to the cultures of various Chinese-speaking countries and areas. Language laboratory times are required as needed.

Prerequisites: A grade of "C" or better in CHIN 1010, CLEP test result, equivalent of 6-8 semesters of high school Chinese with a cumulative "B" average or better in those classes, or instructor's permission.

Cisco

CSCO 2000 - Beginning Internetworking (3CR)

(3L) This class focuses solely on networking fundamentals and is not specific to Cisco products or technologies. Student learning will include an understanding of the OSI networking model, networking components, premises wiring, industry standards, networking topologies and designs, and professional practices. Project learning experiences will include designing networks and the installation of network premises cabling.

CSCO 2010 - Advanced Internetworking I (3CR)

(2L, 2LB) This course is the second semester of a four semester CCNA (Cisco Certified Network Associate) certification based training program. This class focuses on router configuration and applying the networking principles outlined in CSCO 2000 to real world situations. Specific topics include router components and features, intermediate IP addressing, routing protocols, router modes and functions, access control lists and network design.

Prerequisites: CSCO 2000 or permission of instructor

CSCO 2020 - Advanced Internetworking II (4CR)

(4L) This course is the third and fourth semesters of a four semester CCNA (Cisco Certified Network Associate) certification based training program. This class focuses on the application of advanced routing protocols such as OSPF and EIGRP, advanced IP addressing, LAN switching and VLAN design, and the configuration of wide area network access using the point-to-point protocol (PPP),

ISDN, and frame relay.

Prerequisites: CSCO 2010.

CSCO 2035 - CCNA Certification Exam Review (1CR)

(1L) This course will be a thorough review of the Cisco CCNA Certification Exam requirements. Using lectures, flash cards and electronic testing, students will be presented with a complete outline of exam requirements and will be able to accurately gauge their level of preparedness to take the exam.

Prerequisites: None (should be preparing to sit for the CCNA Exam)

Civil Engineering

CE 2070 - Engineering Surveying (3CR)

(2L, 4LB) [E] Principles and theory of land surveying for engineering students. The use and care of the surveyor's chain, level, and theodolite. Error theory and propagation of errors in measurement and calculations. Traverse measurement and adjustment, stadia for mapping, and solar angle for line bearing. Methods of public land and municipal surveying.

Prerequisites: MATH 1450 or high school equivalent

Communication

CO/M 1000 - Introduction to Mass Media (3CR)

(3L) [E] Explores the nature and function of the mass media in contemporary society. Begins by examining some major theoretical conceptions of the

communication process, concentrating on how communication creates and sustains culture. Other topics include the effects of the media on media consumers, special characteristics of the various media, and public policy issues in regard to mass media.

CO/M 1020 - Workplace Communication (3CR)

(3L) Designed to introduce students to best communication practices for the 21st century workplace. This course is presentation-centered, but also introduces pertinent communication theory. Yearly in the fall semester

CO/M 1030 - Interpersonal Communication (3CR)

(3L) [E] Focuses on face-to face relationships in interpersonal communication settings. Self-concept, perception, language, nonverbal channels, listening, and emotions are presented as factors in dyadic relationships.

CO/M 1040 - Introduction to Human Communication (3CR)

(3L) [E] An introduction to the nature and function of human symbolic communication in its various settings. The role of symbolic communication on the interpersonal level as a method of establishing and defining human relationships will be examined, as will the relationship of symbolic communication to the establishment and maintenance of larger behavioral, economic, and cultural processes and structures.

CO/M 1060 - Forensics I (1CR)

(2LB) For those students interested in competing in events sponsored by the National Community College Speech Association.

CO/M 1080 - Talking With: (Subtitle) (1CR)

(1L) (Max. 3) This course will focus on unique or specific communication situations, for which there are often special strategies or rules for effective communication.

CO/M 1505 - Communication for Professional Success

(1-3CR) A practical approach to improving communication in the workplace. This course presents principles and practices for business and professional employees in three areas: personal skills (Interpersonal Communication), group skills (Small Group Communication), and presentation skills (Public Speaking and Interviewing). The course may be taken for three credits as a whole, or individually for one credit each.

CO/M 2010 - Public Speaking (3CR)

(3L) An introductory course in public speaking. The emphasis is on theory, speech development, and practice as the student is introduced to a variety of speaking situations from impromptu talks to platform speeches. This course will fulfill the C2 requirement for the University of Wyoming.

CO/M 2060 - Forensics II (1CR)

(2LB) (Max. 2) For those interested in competing in those events sponsored by Phi Rho Pi, the national community college speech association. Students will attend and participate in intercollegiate forensics as members of the forensics squad of Casper College.

Prerequisites: Permission of the instructor.

CO/M 2090 - Introduction to Persuasion (3CR)

(3L) [E] Human communication as a change agent is studied along with relationships of attitudes to behavior with emphasis on behavioral research and contemporary theories.

Prerequisites: CO/M 2010 or permission of instructor.

CO/M 2100 - Media Writing I (3CR)

(2L, 2LB)3 [E] Learning the meaning of news, beginning newswriting, development of news sources, selection and organization of information, variations in types of news, the developments and trends of journalistic forms, and social and legal responsibilities of the press. Practice in gathering and writing news. Preparation of articles for campus newspaper.

Prerequisites: ENGL 1010 or permission of instructor.

CO/M 2110 - Nonverbal Communication (3CR)

(3L) [E] This course focuses on the elements, functions, and impacts of nonverbal communication in human communication. Students are introduced to the research and

theory, as well as the practical applications, in their interactions with others.

Prerequisites: ENGL 1010 or permission of instructor.

CO/M 2120 - Small Group Communication (3CR)

(3L) [E] Communication behavior in small group situations is explored; networks, dynamics, leadership roles, member functions, and decision-making behavior.

Prerequisites: CO/M 2010 or CO/M 1030 or permission of instructor.

CO/M 2125 - Family Communication (3CR)

(3L) Designed to explore the role that communication plays in family functioning.

Prerequisites: CO/M 1030 or permission of instructor.

CO/M 2135 - Gender, Communication and Culture (3CR)

(3L) This course provides both a theoretical and real-life view, for both genders, on how our communication in work, school, social and relationship settings help shape and design our gender constructs.

CO/M 2145 - Mentoring Communication

(1-2CR) This course will focus on unique or specific communication situations associated with serving as a mentor for elementary students between the ages of 8 - 11 and the application of special strategies or rules for effective communication in those situations. This course is associated with the Help

Yourself Academy, an after-school program designed to offer Title 1 NCSD elementary students (grades 3 - 6) the opportunity to focus on a math and science curriculum.

Prerequisites: Permission of the instructor.

CO/M 2150 - Argumentation and Public Discourse (3CR)

(3L) [E] Students will be introduced to the elements of effective argument - including evidence, reasoning, case construction and presentation skills to bring about changes in belief and conviction. Warning: This course focuses on current controversial issues and students may be asked to present arguments that differ from their own personal positions on those issues. The intent of the course is not to change students' minds, but they will critically evaluate their own political and philosophical beliefs and opinions.

Prerequisites: CO/M 2010 or permission of instructor.

CO/M 2190 - Basic Video Production (3CR)

(2L, 2LB) Basic camera operation, sound, lighting, scriptwriting, planning, budgeting, and editing introduce the fundamentals of corporate and educational single-camera video production. Students will work in a variety of crew positions to create private or institutional videotapes.

CO/M 2200 - Broadcast Production (3CR)

(2L, 2LB) [E] Introduction to the fundamental technical and production concepts in radio,

television, and motion pictures. Actual experience with equipment and an understanding of its operation are emphasized. Prerequisites: CO/M 2190 or permission of the instructor.

CO/M 2300 - Intro to Public Relations (3CR)

(3L) This course provides a foundation for the proper use of public relations tools in any given business, organization, or situation. Students will develop writing skills and techniques using various public relations tactics. Just as important, they understand the importance of research and planning in creating a public relations program. Identification of publics, persuasive techniques, media ethics and law, message strategies, and research methods pertaining to public relations are topics emphasized.

CO/M 2340 - Editing and Production (3CR)

(3L) Evaluation, selection and preparation of news copy for publication. Practice in copy reading, proof reading, headline writing, and page layout. Use of photography and advertising in page layout.

Prerequisites: CO/M 2100.

CO/M 2355 - Introduction to Media Photography (3CR)

(3L)3 This course is designed for students to gain a general understanding of digital camera operation and the development of photojournalism and its role in a visually-oriented world. Students will use both film and digital cameras for their photographs and will learn how to manipulate them in Adobe Photoshop.

CO/M 2380 - Cinema History (3CR)

(3L) [E] A study of the development of film from 1895 to the present in relation to historical forces shaping the film industry in the form of artistic movements, world history, popular taste, technology, economics, and politics. Weekly screening of historically significant films supplement readings, lectures, and discussions.

Prerequisites: ENGL 1010 or permission of instructor.

CO/M 2390 - Independent Publications (1CR)

(2LB) (Max. 3CR) Students interested in work on the newspaper or the literary/art magazine will work in advertising, photography, records, circulation, editorial and or writing/editing.

Prerequisites: Permission of the instructor

CO/M 2471 - Communication Internship

(1-3CR) (Max. 6) This course is designed for students wishing to gain work experience using communication skills. This is an unpaid internship. The student will complete 80 hours of work for 1 credit hour. The student will be evaluated by his/her supervisor at work as well as several visits by the instructor. This course may be repeated to a maximum of 6 credit hours.

Prerequisites: Permission of instructor.

CO/M 2475 - Independent Study

(1-3CR) (Max. 6) An opportunity for students to develop projects in their particular area of interest within the communication discipline.

Prerequisites: CO/M 1040, consent of instructor, and completion of at least six hours of 2000 level CO/M credits.

CO/M 2480 - Cooperative Work Experience

(1-3CR) (Max. 6) Laboratory work consists of paid on-the-job training independently arranged and accompanied by academic instruction.

Prerequisites: Permission of instructor..

CO/M 2520 - Intro to Social Media (3CR)

(3L) This course will introduce methods for analyzing and understanding how people apply social media technologies and their societal implications. The course will offer real world examples to help students use tools like Facebook, Twitter, Pinterest, Tumblr and YouTube in creating content and communication plans for organizations and businesses. In addition, students will learn how to manage their own identity or brand through various forms of social media.

Computer Applications

CMA 1500 - Computer Keyboarding (1CR)

(2LB) This course will give students hands-on experience with the microcomputer keyboard for application in

computer usage. Designed for students with no previous keyboarding instruction. Extra laboratory work may be required. Available for S/U or letter grade.

CMAP 1505 - Introduction to Computers (1CR)

(.5, 1LB) This course is designed as an introductory course for students new to the computer realm. It is a general overview of pertinent aspects computer users need to know. Topics include different types of computers and the features that make them unique, computer networking, computer hardware and peripheral devices, an overview of operating systems and the tasks they provide, an introduction to computer software applications, the role of privacy and security in the digital environment, how to use the World Wide Web by navigating and searching the web, concepts related to ecommerce and consumer safety, and exposure to the social aspect of the web.

CMAP 1506 - Computer Keyboarding II (1CR)

(.5, 1LB) This course is designed for students with limited typing skills who need to improve technique, speed or accuracy. This course is intended to give students additional hands-on experience using the computer keyboard to improve speed and accuracy while learning word processing skills. Students need to know proper keyboarding techniques and keyboard layout. Extra laboratory work may be required.

Prerequisites: CMAP 1500 or permission of the instructor.

CMAP 1550 - E-Portfolio Development (1CR)

(.5L, 1LB) This course is designed for students to create a developmental electronic learning record that will provide reflection upon their learning and evidence of achievement in their particular field of study. Professional items will be added such as a resume, cover letter, and other pertinent examples to substantiate learning of assessment purposes for prospective employment. Technical skills include file management, media creation and upload. Information relevant to the aesthetics and functionality of e-portfolios will also be provided.

CMAP 1610 - Windows I (2CR)

(1L, 2LB) This course is an introduction to the Windows operating system. The fundamentals of the Windows operating system will be explored. Students will learn to use the help, my computer, and Internet features of Windows. In addition, they will learn how to manage files and organize disks, how to customize the desktop, how to share data between programs, how to perform primary system maintenance, and they will be exposed to the multimedia/Internet functions of Windows. Windows experience is recommended.

CMAP 1615 - Operating Systems (3CR)

(3L) This course is an introductory course on the basics of computer operating systems including file systems, configuration, inter-process communication, security, administration, interfacing, multitasking, and performance

analysis. The effect of additional technologies such as multi-core processing, wireless technologies, PDA and telephone operating systems are also explored. Specific information related to Linux, Windows and UNIX operating systems will be examined at the end of the semester.

CMAP 1700 - Word Processing I (1CR)

(.5L, 1LB) The following techniques will be presented: creating documents, deleting and inserting text, moving, copying, printing, formatting, using multiple documents, finding and replacing text, and running a spelling check. Extra laboratory work may be required. Keyboarding ability recommended.

CMAP 1705 - Word Processing II (1CR)

(.5L, 1LB) The following techniques will be presented: additional editing and formatting skills, some DOS features, page numbering, boilerplates, special printing effects, math maneuvers, merge printing of form letters and envelopes, and producing mailing labels. Extra laboratory work may be required. Keyboarding ability.

CMAP 1710 - Word Processing III (1CR)

(.5L, 1LB) The following techniques will be presented: preparing fill-in documents, conditional merge printing, automating document assembly, merging with math, creating tables of contents and indexes, adding soft fonts, working with data bases and spreadsheets, keyboarding macros and using additional advanced features. Extra laboratory work may be

required.

Prerequisites: CMAP 1705.

CMAP 1715 - Word Processing (3CR)

(1L, 4LB) Will cover basic through advanced functions of word processing software. Training will be provided on microcomputers in the origination, processing, editing, and output of the document cycle. Various formats, applications, and exercises will be utilized to produce a variety of professional documents. Extra laboratory work may be required. A keyboarding speed of 30 wpm is needed to succeed. Completion of CMAP 1700, CMAP 1705 and CMAP 1710 (for a total of 3 credits) is equivalent to CMAP 1715.

CMAP 1750 - Spreadsheet Applications I (1CR)

(.5L, 1LB) Designed to integrate information processing and spreadsheet problems and to create applications for the modern business environment. Extra laboratory work may be required.

CMAP 1755 - Spreadsheet Applications II (1CR)

(.5L, 1LB) This course is designed to integrate information processing and intermediate level spreadsheet problems and to create applications for the modern business environment.

Prerequisites: CMAP 1750 or permission of the flex lab instructor.

CMAP 1760 - Spreadsheet Applications III (1CR)

(.5L, 1LB) This course is designed to integrate information processing and advanced level

spreadsheet problems and to create applications for the modern business environment.

Prerequisites: CMAP 1755 or permission of the flex lab instructor.

CMAP 1765 - Spreadsheet Applications (3CR)

(2L, 2LB) This course covers the features of Microsoft Excel. Topics include creating worksheets, charts, formulas; developing functions, formatting, Web queries, What-If analysis; creating static and dynamic Web pages, data tables, financial schedules; creating, sorting, and querying a list; creating templates; working with multiple worksheets and workbooks, object linking and embedding (OLE), using macros, importing data, and working with Pivot Charts. Completion of CMAP 1750, CMAP 1755 and CMAP 1760 (for a total of 3 credits) is equivalent to CMAP 1765.

CMAP 1800 - Database Applications I (1CR)

(.5L, 1LB) The following operations will be presented: designing, creating, editing, sorting, indexing, and searching database files. Database files will be used with Wizards to create queries, tables, forms, and reports. Keyboarding skill equivalent of 20 wpm is needed to succeed.

CMAP 1805 - Database Applications II (1CR)

(.5L, 1LB) This course is designed to integrate information processing and intermediate level database problems and to create applications for the modern business environment.

Prerequisites: CMAP 1800 or permission of the flex lab instructor.

CMAP 1810 - Database Applications III (1CR)

(.5L, 1LB) This course is designed to integrate information processing and advanced level database problems and to create applications for the modern business environment.

Prerequisites: CMAP 1805 or permission of the flex lab instructor.

CMAP 1815 - Database Applications (3CR)

(2L, 2LB) The following operations will be presented: designing, creating, editing, sorting, indexing, and searching database files. Database files will be used with Wizards to create queries, tables, forms, and reports. Students will apply operations and learn to use multiple databases, create advanced queries and custom forms and reports, integrate documents with other programs, and use the World Wide Web and hyperlink fields. Keyboarding skills equivalent to 20 wpm are needed to succeed. Completion of CMAP 1800, CMAP 1805 and CMAP 1810 (for a total of 3 credits) is equivalent to CMAP 1815.

CMAP 1850 - Document Publishing I (1CR)

(.5L, 1LB) This is an introductory course to desktop publishing using current desktop publishing software. Students will learn desktop publishing concepts necessary to create flyers, brochures, and newsletter. They will also learn to create custom publications from scratch. Individual skills will be

developed related to text editing, graphic design and editing, the use of placeholders, editing templates; and the creation of color schemes, font schemes, and customized building blocks. Extra laboratory work may be required. Keyboarding and work processing skills are strongly recommended for successful completion of this course.

CMAP 1851 - Document Publishing II (1CR)

(.5L, 1LB) This class builds upon the skills learned in Document Publishing I. Students will learn how to build business information sets, create letterhead templates, business cards, work with tables for the creation of calendars, merge publications with data files, and create data driven catalogs. New skills will include the creation of new styles, working with master pages, Word Art, editing and embedding tables, and managing merged publications. Extra laboratory work may be required.

Prerequisites: CMAP 1850

CMAP 1852 - Document Publishing III (1CR)

(.5L, 1LB) This class builds upon the skills learned in Document Publishing I and II. Students will learn the more advanced concepts such as editing large scale publications, sharing and distributing publications, and creating an interactive web site including the creation of web forms. Individual student skills will include the ability to create a table of content, bookmarks, hyperlinks, and generation of html and Visual Basic code. Extra laboratory work may be required.

Prerequisites: CMAP 1850 and CMAP 1851

CMAP 1855 - Desktop Publishing (3CR)

(2L, 2LB) This is a comprehensive course using current desktop publishing software to creating a wide variety of documents. Students will learn how to create flyers, brochures, newsletters, custom publications, business information sets, data-driven catalogs, and large-scale publications. Additionally, they will learn how to merge a publication to a data source to create multiple documents and create an interactive web site including the creation of web forms. Students will develop skills in object linking, embedding, editing text, color editing, graphic design of objects, and template design. They will be introduced to html code and Visual Basic. Keyboarding and word processing skills are strongly recommended for successful completion of this course. Completion of CMAP 1850, CMAP 1851 and CMAP 1852 (for a total of 3 credits) is equivalent to CMAP 1855.

CMAP 2220 - Spreadsheets for Management (3CR)

(2L, 2LB) Development of skills in business decision-making with emphasis on problem analysis, data gathering, and recommended solutions to case-type problems. All features of spreadsheets will be explored including spreadsheet analysis, data base management, macro programming, and charts. Extra laboratory work may be required.

Prerequisites: Completion of COSC 1200, ACCT 1010 and minimum COMPASS score of 33 or ACT score of 21, keyboarding ability, or permission of the instructor is required. (Spring semester.)

CMAP 2630 - Presentation Graphics (2CR)

(1L, 2LB) This course is designed to provide a working knowledge of presentation software. Procedures include authoring multimedia projects to include animation, sound files, object linking and embedding technology. Topics include using/creating/customizing design templates and themes, adding effects to shapes and objects, modifying visual elements, animation with motion paths, and the design/delivery of presentations. Extra laboratory work may be required. Completion of CMAP 2635 and CMAP 2636 (for a total of 2 credits) is equivalent to CMAP 2630.

CMAP 2635 - Presentation Graphics I (1CR)

(.5L, 1LB) This course is designed to develop techniques necessary to design appropriate presentations focusing on purpose and intended audience. Students will create presentations using a template, customize themes, insert objects, create SmartArt objects, and add special effects to a presentation. Extra laboratory work may be required. Completion of CMAP 2635 and CMAP 2636 (for a total of 2 credits) is equivalent to CMAP 2630.

Prerequisites: Completion of or concurrent enrollment in CMAP 1615 and CMAP 1715 are recommended.

CMAP 2636 - Presentation Graphics II (1CR)

(.5L, 1LB) This course is designed to incorporate the advanced features of PowerPoint. Students will integrate presentations with other programs, customize handouts, publish a presentation as a Web page, add action buttons, add hyperlinks, incorporate advanced special effects and create special types of presentations. Extra laboratory work may be required. Completion of CMAP 2635 and CMAP 2636 (for a total of 2 credits) is equivalent to CMAP 2630.

Prerequisites: CMAP 2635 or permission of the instructor.

CMAP 2990 - Topics: (Subtitle)

(.33-4CR) Consists of investigations and discussions with respect to current topics in computer applications.

Computer Science

COSC 1010 - Introduction to Computer Science (4CR)

(3L, 2LB) [E] Introduction to problem solving and programming using structured program development techniques applied to a high-level programming language. Students will participate in software experimentation in a closed laboratory setting. Additional programming exercises will be assigned for student to complete in open laboratories or on their own equipment.

Prerequisites: Typing skills.

COSC 1030 - Computer Science I (4CR)

(3L, 2LB) [E] Study of algorithmic problem solving using principles of structured programming and object-oriented design. Algorithms are implemented in a high-level, object-oriented language. Programming assignments and experimentation with software in a closed laboratory supplement the discussion.

Prerequisites: Previous programming experience required and COSC 1010 or instructor permission.

COSC 1200 - Computer Information Systems (3CR)

(2L, 2LB) [E] An introduction to computers and information processing. Computer concepts covered include: the merger of computer and communication technologies, hardware, software, ethics, and security. Students develop basic software skills in: word processing, spreadsheets, databases, presentations, Web designing, and integrating software. Keyboarding skills equivalent to 20 wpm is needed to succeed.

COSC 2030 - Computer Science II (4CR)

(3L, 2LB) [E] Studies the use and implementation of abstract data structures in an object oriented programming environment. Topics include lists, stacks, queues, tables, binary trees, graphs, space and time complexity, recursion, and recursive data types. Programming exercises and experimentation with software in a closed laboratory supplement the discussion.

Prerequisites: COSC 1030.

COSC 2150 - Computer Organization (3CR)

(3L) [E] Foundations class for advanced coursework in computer science. Use of assembly and high-level languages to study the structure and operations of computers. Topics include the logical organization of computers, structured data and instruction representation in various types of languages, and extensive study of the assembly language of a modern microprocessor. Most programming is done at the assembly language level.

Prerequisites: COSC 2030 (or concurrent enrollment) or permission of instructor.

COSC 2240 - Systems Analysis and Design (3CR)

(3L) How to analyze existing information processing systems and prepare user specifications for improved systems. The systems development life cycle, from investigation through installation and review, and an actual systems analysis.

COSC 2300 - Discrete Structures (3CR)

(3L) [E] Applications in computer science of set theory, counting techniques, Boolean algebra, mapping, relations and functions, propositional logic and graphing. Additional topics include induction, proof methods, and propositional calculus.

Prerequisites: COSC 1030 or MATH 2200. (Dual listing MATH 2300.)

COSC 2405 - User Interface Design (2CR)

(2L) An intermediate-level course in developing graphical applications for a modern operating system. Through a series of hands-on activities, students will gain experience in designing, implementing, and debugging user interfaces for practical applications. The use of a wide variety of user interface components will be covered together with best practices for the platform of interest. The emphasis of this course is on creating clean, usable interface designs rather than producing the most technically capable implementation.

Prerequisites: COSC 1030.

COSC 2406 - Object-oriented Programming (4CR)

(3L, 2LB) [E] Students will study algorithmic problem solving techniques using an object-oriented programming language. Topics include encapsulation, inheritance, and composition. Applications are drawn from graphical user interfaces, user interfaces, input/output, and network communication.

Prerequisites: COSC 1030

COSC 2409 - Programming: Topic

(2-4CR) [E] Describes various computer languages focusing on their differences from prerequisite languages and the uses of these new features. This course will give the student the chance to study new and unusual languages and their uses.

Prerequisites: COSC 1030 or instructor permission.

COSC 2418 - Web App Development (3CR)

(3L) Development of interactive, database-driven web applications. Some light web design is included, but the focus is on the back end server software. Students use a web app framework such as Django or Rails to quickly develop rich web-based applications. Topics covered include object-relational models, authentication and authorization, and Ajax. Knowledge of web design is beneficial but not required. Biannually

Prerequisites: COSC 1030, Computer Science I

COSC 2480 - Cooperative Experience (Computer Systems and Applications)

(1-3CR) (Max. 6) The student is afforded the opportunity to gain practical, on-the job experience within the student's area of business specialization. Supervision of program coordinator and employer, if required. A minimum of 80 hours of on-the job training represents one semester hour. The student must maintain 12 credit hours with a 2.0 GPA during the semester this course is taken.

Prerequisites: Computer systems and applications or computer science major and permission of the program coordinator.

COSC 2495 - Computer Workshop (1CR)

(3LB) (Max. 3) Offers practical experience in programming and in using the computer to process various types of jobs. Intended for those students who wish to obtain additional programming experience.

Prerequisites: COSC 2030.

Computer Security

CSEC 1500 - Network Security Fundamentals (3CR)

(2L, 2LB) This course examines current standards for information security through examination of security technologies, methodologies and best practices. Topics include evaluations of security models, risk assessment, threat analysis, attack types, encryption technologies, organizational technology, security implementation, disaster recovery planning, and security policy formulation and implementation.

Prerequisites: CSCO 2000

CSEC 1510 - Network Defense Principles (3CR)

(2L, 2LB) This course introduces students to the various methodologies used for attacking a network. Students are introduced to the concepts, principles and techniques, supplemented by hands-on exercises for attacking and disabling a network. These methodologies are presented within the context of properly securing the network. Students are provided with updated security resources that describe new vulnerabilities and innovative ways to protect networks by using the skills and tools of an ethical hacker.

Prerequisites: CSEC 1500.

CSEC 1520 - Network Attack Principles (3CR)

(2L, 2LB) This course will provide students with information about ongoing threats in cyber space. Students will be able to identify cyberspace threats to compare/contrast their resources, capabilities, motivations and aversion to risk. Students will learn valuable skills related to preventing attacks, detecting when attacks have occurred, and recovery from an attack. This course provides comprehensive review of hacking concepts and industry best practices.

Prerequisites: CSCO 2000

CSEC 1530 - Computer Forensics (3CR)

(2L, 2LB) The universal use of technology in every aspect of our lives has provided the need for the recovery of evidence in a digital format. In today's technology driven world most crimes and civil disputes involve the use of some form of a digital device. This course is designed to teach students how to perform computer crime investigations by identifying, collecting and maintaining digital artifacts to preserve their reliability for admission as evidence.

CSEC 1980 - Cooperative Work Experience – Internship

(1-3CR) (3CR Max) Students will have the opportunity to gain on-the-job experience to improve and develop new skills in the area of cyber security. Students will be supervised by the program coordinator and the hosting employer. A minimum of 80 hours of on-the-job training represents one semester hour of work. Students must

maintain a 2.0 GPA during the semester for which they are enrolled in this course.

Prerequisites: Student must be a Computer Security major and have permission of the program coordinator.

Construction Technology**CNTK 1560 - Construction Safety (3CR)**

(3L) Understanding safety and planning preventative measures is crucial to the modern construction firm. You will receive in-depth information concerning specific areas of safety management. This program emphasizes the importance of managing safety and productivity with equal emphasis.

CNTK 1630 - Basic Cabinet Making (2CR)

(1L, 2LB) For anyone wishing to learn basic cabinet making skills. Cabinet design, construction techniques, finishing procedures, and machine operation are included in classroom and laboratory instruction. Students construct an appropriate cabinetry unit of their choice.

CNTK 1640 - Furniture Refinishing Methods (2CR)

(1L, 2LB) This course covers different types of wood finishes, application methods and appropriate uses. Topics include stains, dyes, fillers, paints and special wood treatment techniques. Students will gain an understanding of these various processes as they produce sample blocks of these finishes. Also covers the procedures for

refinishing and restoring furniture.

CNTK 1670 - Woodworking (1.5CR)

(3LB) This course is designed to provide the student with the basic knowledge of woodworking tools, materials, processes in construction, and finishes with the main emphasis on the correct usage, set-up, and safe operation of both stationary and hand-held woodworking tools. The student chooses their own project(s) and provides their own materials to construct project(s) using the shop facilities during the extent of the 10 week class. S/U grade.

CNTK 1700 - Introduction to Construction (4CR)

(2L, 4LB) Basic concepts of residential and light commercial construction. This will include hands-on training in the safe operation and use of both hand and power tools, concrete testing and grading, and careers in the construction industry.

CNTK 1750 - Blueprint Reading (2CR)

(2L) Interpreting building plans and specifications. Types of drawings, scales, symbols, types of construction, electrical, mechanical, and various other details.

CNTK 1850 - Construction Techniques (2CR)

(2L) A survey course to introduce the student to the world of construction, including residential, commercial, and industrial projects with a chronological study of the development of architectural form.

CNTK 1860 - Woodworking Fundamentals I (4CR)
(2L, 4LB) A course for those wanting to learn or further their woodworking skills. An emphasis will be placed on safety, problem solving, material selection, and practical approaches to woodworking. In the lab, students will receive an introduction to the safe and correct use of both hand and stationary power tools and equipment to build a project of the student's choice.

CNTK 1865 - Woodworking Fundamentals II (4CR)
(2L, 4LB) This course provides an enhanced knowledge of techniques and materials used in the design and construction of wood furnishings. Emphasis on problem solving, multi-joining technology and custom finishing.

Prerequisites: CNTK 1860.

CNTK 1870 - Building Materials and Systems (3CR)
(3L) Building materials and structural systems as they relate to the construction industry. Methods of construction, environmental impact and code requirements.

CNTK 1875 - Wood Carving and Turning (2CR)
(1L, 2LB) This course covers the fundamentals of turning and of wood carving as related to furniture making. Topics include wood-forming, chip carving, high-relief carving and bas-relief carving. Emphasis is placed on selection and safe use of tools, tool sharpening and carving

techniques of both hand and power tool carving. Students will learn skills in the use of the wood lathe both faceplate and spindle turning. Green-wood turning and segmented turning will be introduced.

Prerequisites: None

CNTK 1905 - Carpentry (4CR)
(2L, 4LB) This course is designed to build upon previously learned skills in carpentry, roofing, concrete, and work site safety, through hands-on construction techniques in a lab setting. Typically, the material covered will relate to residential construction, but commercial and industrial applications will be covered.

Prerequisites: CNTK 1700.

CNTK 1975 - Materials Handling and Construction Equipment (3CR)
(3L) The new art and science of moving and storing all types of materials and products of the construction industry including machines, equipment, and systems.

CNTK 2500 - Advanced Furniture Projects (4CR)
(2L, 4LB) This class will focus on material selection, esthetic design, advanced joinery techniques, selection of hardware and consideration of grain and color to compliment the design. Coopering, bent lamination, veneering will be covered. Emphasis is placed on a high degree of craftsmanship, design and professionalism as demonstrated by the student through an independent furniture project of their choice and approved by the instructor.

Prerequisites: CNTK 1860

CNTK 2510 - Construction Estimating (3CR)
(3L) A study of the core functions of estimating and job preplanning. Plans and specifications are used for quantity survey. Economic factors of time, cost, production control, overhead, and profit are considered.

CNTK 2520 - Architectural and Construction Planning (3CR)
(3L) A survey of architectural construction administration including planning and scheduling as practiced in the building industry. Codes, specifications, and contractual documents as they apply to building projects.

CNTK 2525 - Construction Project Management (3CR)
(3L) An introduction to construction project management, focused on the utilization of commercial computer software packages.

Prerequisites: CNTK 2510.

CNTK 2980 - Cooperative Work Experience (Construction)
(1-4CR) (Max. 6) Practical construction experience on the job, with required written reports on the field experience. See "Unit of Credit."

Counseling

CNSL 2200 - Introduction to Student Leadership I (2CR)

(2L) This course will acquaint students with the leadership skills and competencies necessary for successful service in the college community and beyond. While required of students elected to the ASCC Student Senate, enrollment is open to all students.

Prerequisites: Election to ASCC Student Senate, or permission of the instructor.

Criminal Justice

CRMJ 1705 - Firearms (3CR)

(1L, 4LB) This course will address range safety procedures and legal issues concerning the use of deadly force by law enforcement officers. In addition, the course will introduce students to basic defensive handgun techniques. Students will also be introduced to the proper handling, firing and maintenance of police pump action shotguns, semi-automatic patrol rifles and precision rifles. Students must furnish ammunition, ear and eye protection and pay an access fee for use of the shooting range. This is considered to be a vocational skills course and as such it may not transfer to the University of Wyoming or other four-year institutions that offer a bachelor degree in criminal justice. Enrollment is open to all interested students provided they can lawfully possess firearms.

Prerequisites: None

CRMJ 2005 - Introduction to Automated Fingerprint Identification Systems (1CR)

(.5L, 1LB) Exploration of areas of contention, which occur within the criminal justice system in America today. To include such topics as bail, plea-bargaining, Supreme Court decisions of a controversial nature, police discretion, and others.

Prerequisites: Permission of the instructor.

CRMJ 2120 - Introduction to Criminal Justice (3CR)

(3L) [E] The agencies and processes involved in the criminal justice system legislature, the police, the prosecutor, the public defender, the courts, and corrections. An analysis of the roles and problems of law enforcement in a democratic society with an emphasis upon inter-component relations and checks and balances.

CRMJ 2130 - Criminal Investigation I (3CR)

(3L) Theory of criminal investigation: relations of the detective with other law enforcement divisions, modus operandi, sources of information, surveillance, personal identification, interrogation, preliminary and follow-up investigations, collection and preservation of evidence. Enrollment limited to majors in law enforcement except by permission of the instructor.

CRMJ 2210 - Criminal Law I (3CR)

(3L) [E] Comparative study of criminal laws; origins of laws; review of Wyoming criminal laws and procedures; elements of a crime; parties to a crime; elements of specific crimes; arrest, jurisdiction of criminal courts and criminal procedures. (Spring semester.)

Prerequisites: Completion of, or concurrent enrollment in CRMJ 2120.

CRMJ 2230 - Law of Evidence (3CR)

(3L) Leading rules and principles of exclusion and selection, burden of proof, nature and effect of presumptions, proof of authenticity, and contents of writings; examination, competency, and privilege of witnesses. (Fall semester.)

Prerequisites: CRMJ 2120.

CRMJ 2250 - Police Administration (3CR)

(3L) Principles of organization and management as applied to law enforcement agencies. Theoretical and practical aspects of management factors such as organizations, decision-making, values, human relations, and power.

Prerequisites: CRMJ 2120, or permission of the instructor.

CRMJ 2280 - Criminal Procedure (3CR)

(3L) This course will familiarize the student with the state of Wyoming and federal criminal process. The fourth, fifth, sixth, and fourteenth amendments to the United States Constitution

will be emphasized, along with applicable Supreme Court cases. The laws of arrest, search, seizure, pretrial identification procedures and confessions will be studied. An overview of the criminal court system as it relates to individual rights protected under the Constitution and key Supreme Court holdings will be taught.

CRMJ 2350 - Introduction to Corrections (3CR)

(3L) A general overview of the correctional process describing the history and evolution of the American corrections system. This course covers all aspects of institutional and community-based corrections. Meets only in spring semester of even-numbered years.

CRMJ 2430 - The Community and the Police (3CR)

(3L) The course delves into the areas of police professionalism and the concept of community relations. Areas discussed will include use of power, prejudice, race relations, civil rights, police political relations and police media relations.

Prerequisites: CRMJ 2120, or permission of the instructor.

CRMJ 2570 - Criminalistics (3CR)

(2L, 2LB) This course will delve into the aspects of crime scene management. From the first initial contact with the crime scene, the student will learn to gather physical evidence, document, photograph, and diagram the scene to scale. They will identify fibers, hairs, paints, tool markings, fingerprints and other impressions. We will also look into what the future holds in

the area of crime scene management.

CRMJ 2895 - Capstone Directed Studies in Criminal Justice (1CR)

This capstone course is the conclusion of the student's criminal justice academic experience and is the final course completed by students in the Criminal Justice Associate of Arts (A.A.) degree or the Criminal Justice Associate of Applied Science (A.A.S.) degree. The course is designed to assess the student's understanding of the Criminal Justice System and his/her readiness to become employed by a criminal justice agency.

Prerequisites: All major requirements or concurrent enrollment in any remaining major requirement courses and permission of the instructor.

CRMJ 2965 - Directed Studies in Criminal Justice

(1-3CR) (Max. 6) Faculty-guided research in an area of mutual interest to the student and instructor within the law enforcement or corrections major.

CRMJ 2970 - Criminal Justice Internship (1-3CR) (MAX 3)

*(*1-3CR) (Max. 3)* *Thirty hours of participation per credit hour. This course will place a student in a criminal justice agency for a few hours per week for one semester as an observer. It will afford the pre-service student the opportunity to observe the workings of the criminal justice system, and the in-service student an opportunity to work in a collateral criminal justice agency.

Prerequisites: Sophomore standing and permission of the instructor.

CRMJ 2980 - Cooperative Work Experience (Law Enforcement)

*(*2- 3CR) *(see "unit of study")* Supervised work and project experience for the purpose of increasing student understanding of law enforcement problems and procedures. Supervision is provided by both the instructional staff of the college and the cooperating agencies. Analysis and reports of student's performance; regular group meetings. Enrollment limited to majors in law enforcement with sophomore standing except by permission of the instructor.

Crop Science

CROP 2200 - Forage Crop Science (4CR)

(3L, 2LB) This course provides a comprehensive introduction to the biology, propagation and management of forage and farm crop plants. Many topics (e.g., plant ecophysiology, cropping practices in agro ecosystems, plant genetic improvement) will be covered.

Culinary Arts

CULA 2050 - Culinary Food Production I (4CR)

(1L, 6LB) This course will teach students basic culinary skills which will include: basic kitchen safety and sanitation, knife skills, stocks and soups, mother sauces, small sauces and modern sauces, basic meat fabrication, basic dressings: vinaigrettes and marinades, grains and pastas, and breakfast cookery.

Curriculum and Instruction

EDCI 1430 - Life Science in the Elementary School (1CR)

(2LB) [E] Covers selection of basic life science concepts, materials and curricula appropriate for elementary school.

Concurrently: LIFE 1020, or permission of the instructor.

EDCI 1440 - Physical Science in the Elementary School (1CR)

(2LB) [E] Covers selection of basic physical science concepts, materials and curricula appropriate for elementary school. This course parallels the content of PHYS 1090 and should be taken the same semester.

EDCI 1450 - Earth Science in the Elementary School (1CR)

(2LB) [E] Covers selection of basic earth science concepts, materials, and curricula appropriate for elementary school. This course parallels the contents of GEOL 1070.

EDCI 1500 - Introduction to Teaching (1CR)

(1L) This course will provide an overview of the professional expectations of education students. Topics to be addressed will include efolio development, academic program planning, the skills and strategies necessary to proceed successfully through pre-service teacher education and a career in early childhood, elementary and/or secondary education.

EDCI 2050 - Introduction to Outdoor Education (3CR)

(1L, 4LB) This practicum course addresses pedagogies specific to teaching in outdoor settings.

Students will teach field science in this outdoor course.

Prerequisite: This is a practicum course that includes some classroom and field (outdoor) experiences. Culmination of this course will include an outdoor teaching experience in an on-site camp environment that will be 3-5 days in length. Students should be comfortable walking and teaching in an outdoor environment. This is a companion course to EDUC 2100, which should be taken concurrently with or prior to taking this course. This course is intended for secondary science education majors or other students with advisor or instructor approval.

EDCI 2250 - Diversity in Education (3CR)

(3L) This course is designed to introduce students to the conceptualization, design and implementation of a multicultural education that respects and honors diversity as well as promotes national unity.

EDCI 2495 - Workshop (Subtitle)

(1-2CR) Special topics in education offered in response to specific needs or public interest.

Dance

DANC 1015 - Introduction to Dance (2CR)

(2L) (Max 2CR) This course will take a look at the formation of genres within dance history. It will be an overview of the

beginnings of modern dance, ballet, jazz dance, and tap dance.

DANC 1210 - Dance Ensemble I (1CR)

(3LB) This class covers technique and performance focusing specifically on technique skills and performing at an intermediate level (various styles and genres). This class can be repeated up to two times with a total of two credits.

Prerequisites: Permission of the instructor and previous dance experience.

DANC 1300 - Dance Improvisation I (1CR)

(2LB) This course will investigate improvisation in dance at the beginning level. It will incorporate improvisational exercises that will lead to short phrase work.

DANC 1320 - Dance Improvisation II (1CR)

(2LB) This course will investigate improvisation in dance at the intermediate level and really allow the student to explore movement connected to emotional output and with musical enhancement. This course will also help the student/dancer to understand musical meter and tempo varieties within an improvisational exercise. In addition there will be game playing that will open the world of improvisation wider. It will incorporate improvisational exercises that will lead to phrase work.

**DANC 1410 - Ballet I
(1CR)**

(3LB) [E] This course will emphasize the fundamentals of ballet. Will focus on technique, terminology, and the execution of the basic steps.

**DANC 1420 - Ballet II
(2CR)**

(4.5LB) (Max 4CR) [E] A continuing course in the principles and techniques of classical ballet. Emphasis is placed on the continuation of broadening the dancer's movement vocabulary while refining acquired technical skills.

This course can be repeated once.

Prerequisites: DANC 1410 in good standing, or permission of the instructor.

**DANC 1425 - Ballet
Studies (1CR)**

(3LB) This course will emphasize various areas of ballet techniques. There will be in-depth focus on specific skills found in the genre of ballet. Previous ballet experience required.

**DANC 1450 - Beginning
Tap Dance (1CR)**

(3LB) [E] This course will emphasize the fundamentals of tap dance. Will focus on technique, terminology, and the execution of the basic steps.

**DANC 1460 - Modern
Dance I (1CR)**

(3LB) This course is an introduction to the principles and techniques of modern dance. Dancers will focus on technique, terminology and the execution of the basic steps, as well as the

discovery of movement in space and time. This class will serve the student as a study in exploration of the basic ideas of modern dance.

Cross-listed: PEAC 1460

**DANC 1470 - Modern
Dance II (1CR)**

(3LB) [E] This course will be a continuation of study in the principles and techniques of modern dance. Dancers will focus on linking technique with terminology and execute combinations made up of the basic-intermediate steps, as well as the continued discovery of movement in space and time.

Prerequisites: DANC 1460/PEAC 1460

Cross-listed: PEAC 1470

DANC 1480 - Jazz I (1CR)

(3LB) [E] This course will emphasize the fundamentals of jazz dance. It will focus on technique, terminology, and the execution of the basic jazz steps.

**DANC 1500 - Dance
Performance**

(2-4LB) (1-2CR) (Max. 5) [E] Individually supervised practical training in performance and production during the rehearsal and performance of the fall and spring productions of the dance concert. Open entry.

Prerequisites: permission of the instructor.

**DANC 2200 -
Backgrounds of Dance
(3CR)**

(3L) [E] A survey of ethnic and theatrical dance forms from primal society to the 20th century. The course examines

the place of the arts as a reflection of the culture. The course emphasizes dance from a global point-of-view and includes a look at social dances as well as the performance dances.

Prerequisites: ENGL 1010, DANC 1015, or permission of the instructor.

**DANC 2210 - Dance
Ensemble II (1CR)**

(3LB) (Max. 2) [E] This class covers technique and performance focusing specifically on technique skills and performing at an advanced level (various styles and genres).

This class can be repeated up to once for a total of 2 credits

Prerequisites: permission of the instructor and previous dance experience.

**DANC 2212 - Beginning
Composition (2CR)**

(1L, 2LB) This course is a beginning level composition course that will give the student various exercises in which to better understand choreography and its principles. The student will explore ways in which to make a dance with a completed beginning, middle, and end.

**DANC 2215 - Intermediate
Dance Composition (3CR)**

(2L, 2LB) This course further develops the student's abilities to compose and choreograph their own ideas into dance works. The student will develop a better understanding of choreographic skill through short assignments and full works.

Prerequisites: DANC 2460,

DANC 2212, or permission of the instructor.

DANC 2410 - Ballet III (2CR)

(5LB) [E] A continuing course in the principles of classical ballet. Emphasis is placed on continuing to broaden the dancer's movement vocabulary while refining acquired technical skills. Pointe work will be started with those students who are ready along with partnering skills, more advanced Barre and Centre skills, including Tours and Beats.

Prerequisites: Successful completion of DANC 1420.

DANC 2420 - Ballet IV (2CR)

(5LB) A continuing course in the principles and techniques of classical ballet. Emphasis is placed on refining the dancer's movement vocabulary while increasing the level of difficulty of acquired technical skills. Dancers will continue in both partnering and Pointe work. Ballet conditioning will be a part of every class.

Prerequisites: Successful completion of DANC 2410.

DANC 2450 - Tap II (1CR)

(3LB) This course will review the basic tap steps and then move on to more intermediate rhythms, clarification of sounds and more complicated footwork.

Prerequisites: DANC 1450, or permission of the instructor.

DANC 2460 - Modern Dance III (2CR)

(4LB) [E] A second level course covering the principles and techniques of modern dance.

This course will expose the students to deeper investigation to various techniques of modern dance including but not limited to Horton, Ailey, Cunningham, Graham, and Humphrey/Limon.

Prerequisites: DANC 1470, or permission of the instructor.

DANC 2470 - Modern Dance IV (2CR)

(4LB) A third level course covering the principles and techniques of modern dance. This course will continue to look at post-modern techniques/styles and be a link from the historical modern dance to the contemporary explorations and modern dance trends.

Prerequisites: DANC 2460, or permission of the instructor.

DANC 2480 - Jazz II (1CR)

(3LB) [E] A second level course furthering the student's knowledge of jazz dance and its origins. Dancers will focus on techniques, terminology, and the execution of jazz steps from the intermediate to the advanced level.

Prerequisites: DANC 1480, or permission of the instructor.

Diesel Technology

DESL 1540 - Heavy Duty Electrical Systems (3CR)

(2L, 2LB) Introductory course to electrical systems used in heavy diesel engines. Course will cover fundamental electrical quantities, components and basic circuits. Additional content will cover heavy diesel engine electrical systems.

DESL 1580 - Power Train, Braking, and Steering (3CR)

(3L) (5 weeks) Manual clutches, drive lines, manual transmissions, and final drive units.

DESL 1600 - Diesel Engines (3CR)

(2L, 2LB) Introductory course covers medium to heavy diesel engines. The course is intended to provide an overview of engine construction, fuel systems and general maintenance.

DESL 1610 - Engine Rebuilding I (9CR)

(4L, 10LB) (10 weeks) Disassembly procedures, evaluating serviceability of components, preparing the engine block for overhaul; the assembly procedure for crankshafts, bearings, pistons, seals, and valve train; the servicing of cylinder heads including valve grinding and seating; bolt torquing, timing, and run-in checks.

DESL 1620 - Engine Rebuilding II (9CR)

(3L, 12LB) (5 weeks Lec, 15 weeks Lab) Live engines and drive-in work are used for instruction. The students make up the estimates and deal with the customer directly. Students are evaluated on their ability to handle the entire operation from meeting the customer to unit performance on completion.

Prerequisites: DESL 1610.

DESL 1650 - Diesel Fuel Systems and Tuning I (5CR) (5 weeks)

(3L, 4LB) (5 weeks) Basic fuel systems, fuel pumps, injectors, and evaluating system failure.

Prerequisites: DESL 1610.

DESL 1660 - Diesel Fuel Systems and Tuning II (3CR) (5 weeks)

(3L) (5 weeks) Air induction systems, injector and fuel pump operations. Troubleshooting and electronic fuel controls.

DESL 1680 - Natural Gas Engine Technology (10.5CR)

(6L, 9LB) Course is designed to cover the principles and service procedures for the natural gas engine and equipment pertinent to the natural gas industry. Course will cover fuels, ignition systems, combustion, lean combustion theory, exhaust gas analysis, lubrication systems, cooling systems, mounting and alignment, and gas compression concepts.

Prerequisites: DESL 1605 or DESL 1610.

DESL 1850 - Basic Hydraulics (3CR)

(2L, 2LB) Principles of hydraulic systems and components used in mobile equipment. Factors of consideration in the selection, installation, operation, and maintenance of hydraulic systems.

DESL 1980 - Co-op Work Experience (Diesel)

(1-8CR) (Max. 8): 8 hours/week for 16 weeks - Total 128 hours. Designed to give students hands-on training in diesel equipment

maintenance and repair in a production shop setting. A student working for an employer is responsible for employment verification and documentation of hours worked and jobs done. Students staying on campus will meet the training requirements of the department.

Early Childhood

EDEC 1020 - Introduction to Early Childhood Education (3CR)

(3L) [E] Introduces the student to the field of early childhood education through lecture discussion, observation, and participation. The student will be exposed to different programs in the community. Topics to be explored include components of quality programs, child development theory, curriculum development, learning environments, classroom management, parent-teacher relationships, importance of play, and teaching as a profession.

EDEC 1030 - Infant and Toddler Care (2CR)

(2L) This course provides information on growth and development of children under the age of three along with curriculum implications; defines the interactive role of the caregiver, and explores other components of infant toddler care including implementation of quality programming and adult interactions. The course along with EDEC 1035 - Infant and Toddler Care Lab (1CR) meets the criteria for the Wyoming Infant Toddler Credential.

EDEC 1035 - Infant and Toddler Care Lab (1CR)

(2LB) Supervised experience in the care of infants and toddlers at an approved early childhood program. This course along with EDEC 1030, Infant and Toddler Care, meets the criteria for the Wyoming Infant Toddler Credential.

Prerequisites: EDEC 1030 (or concurrent enrollment).

EDEC 1100 - Observation and Guidance of Young Children (2CR)

(2L) Effective methods of observation and guidance to meet the children's needs individually and in groups with an emphasis on promoting a positive and constructive climate in the early childhood setting. Topics include assessments, recording behaviors, planning environments, materials and equipment, scheduling, discipline and parent-teacher communication.

Prerequisites: EDEC 1020, FCSC 2122, PSYC 2300, or permission of the instructor.

EDEC 1105 - Observation and Guidance of Young Children Lab (1CR)

(2LB) Supervised experience in the observation and guidance of young children at an early childhood center. (Spring semester.)

Prerequisites: EDEC 1100 (or concurrent enrollment).

**EDEC 1200 -
Administration in Early
Childhood Programs
(3CR)**

(3L) Designed to provide students with the opportunity to develop skills in both the business and human relations components of administering centers for young children. Includes procedures in establishing early childhood centers; administrative forms; fiscal management; selection, development, and motivation of staff; parent and community involvement; and program regulations and evaluation. (Fall semester.)

Prerequisites: EDEC 1020, or permission of the instructor.

**EDEC 1300 - Curriculum
Planning and
Development for Young
Children (2CR)**

(2L) Development of skills in planning, implementing and evaluating developmentally appropriate experiences to encourage intellectual, physical, social, emotional, and creative growth in young children with the focus on the concept of the whole child.

Prerequisites: EDEC 1020, FCSC 2122, PSYC 2300, or permission of the instructor.

**EDEC 1305 - Curriculum
Planning and
Development for Young
Children Lab (1CR)**

(2LB) Supervised experience in planning, implementing and evaluating curriculum activities at an early childhood center.

Prerequisites: EDEC 1300 or concurrent enrollment.

**EDEC 2210 - Student
Teaching in Early
Childhood Education
(6CR)**

(2L, 8LB) By actively participating in the care and education of young children in an early childhood program, students should become more proficient in administrative skills, increase their awareness of contemporary issues in early childhood, and demonstrate a high level of competence as a head teacher. Students will serve in directed field experience; one eight-hour day per week for a total of 120 clock hours. Students will also serve 30 hours in seminar during the semester. Enrollment is limited to majors in early childhood education except by permission of the instructor.

Prerequisites: EDEC 1100 and EDEC 1105, EDEC 1300 and EDEC 1305, or permission of the instructor.

Economics

**ECON 1010 - Principles of
Macroeconomics (3CR)**

(3L) [E] An introduction to our present mixed capitalistic economic system. Emphasis is on the role of markets, the determination of national output, inflation and unemployment, the banking system, and the economic role of government.

**ECON 1020 - Principles of
Microeconomics (3CR)**

(3L) [E] An introduction to the economics behavior of firms and households in a market economy and the environment in which they operate. Also studies the roles of government and foreign trade, as it relates to the

decisions of firms and households.

Prerequisites: Minimum ACT Score of 21, COMPASS Placement Score in the Algebra domain of 40, or a C or better in MATH 0920 or higher in the last two years.

**ECON 2400 -
Environmental Economics
(3CR)**

(3L) This is a three-credit introductory course in environmental economics. This course will cover such traditional environmental topics as pollution control, externalities and public lands. Issues of sustainability of the current economic system with respect to fossil fuel use and environmental destruction will be addressed. A balance between theory and institutional background will be presented in this course.

Prerequisites: ECON 1010 and ECON 1020.

Education

**EDUC 2100 - Public
School Practicum (4CR)**

(2L, 4LB) [E] This course is for prospective educators and a capstone course for education majors at the sophomore level. Students will participate in a practicum experience in a public-accredited school under the supervision of a certified mentor teacher for a minimum of 60 hours. Students will also attend one weekly 110-minute class session. Electronic portfolios are used extensively in this course to demonstrate student proficiencies in content knowledge, skills and preparation to be an effective teacher. Assignments, projects,

and classroom experiences are aligned with NCATE accreditation and InTASC standards. Students enrolled in this course must be 18 years of age or older.

Prerequisites: EDFD 2020, ITEC 2360 and PSYC 2300.

Education /Elementary

EDEL 1410 - Theory I Seminar: Education (1CR)

(1L) This seminar is a hands-on application course designed to accompany and enhance MATH 1100 - Number and Operations for Elementary School Teachers (3CR). This is a required course for all prospective elementary teachers.

Prerequisites: Concurrent enrollment in MATH 1100.

EDEL 2010 - Mentoring in Education

(1-2CR) This course will focus on specific teaching techniques and strategies utilized when mentoring third, fourth and fifth grade elementary students. Students in this course will also reflect upon strategies to continually improve teaching techniques. This course is associated with the Help Yourself Academy, an afterschool program designed to offer students the opportunity to focus on a math and science curriculum.

Prerequisites: Permission of any Education Faculty Member required.

EDEL 2140 - Teaching Literacy in the Elementary School (3CR)

(3L) Provides an acquaintance with basic assumptions underlying curriculum and processes in literacy and to give opportunity for selecting and using instructional materials.

Prerequisites: ENGL 1010, EDFD 2020

EDEL 2280 - Literature for Children (3CR)

(3L) [E] A survey course designed for reading and discussion of works of literature for children. Selection of children's books for school, home, and library is stressed. In order to establish criteria for evaluation, students are expected to become acquainted with a wide sampling of children's literature including classics, both old and new.

Prerequisites: ENGL 1020.

EDEL 2410 - Theory II Seminar: Education (1CR)

(1L) This seminar is a hands-on application course designed to accompany and enhance MATH 2120 - Geometry and Measurement for Elementary School Teachers (3CR). This is a required course for all prospective elementary teachers.

Prerequisites: Concurrent enrollment in MATH 2120.

Education Foundations

EDFD 2020 - Foundations of Education (3CR)

(3L) [E] A foundations course designed to provide a general survey of educational thought

and practice. Emphasis is given to critical thinking about numerous educational points of view.

Prerequisites: ENGL 1010, or permission of the instructor.

EDFD 2100 - Educational Psychology (3CR)

(3L) [E] Provides an overview of the field of educational psychology, its theoretical bases, and classroom application to the teaching-learning process and examines research design in education.

Prerequisites: EDFD 2020 and PSYC 2300.

Electrical Apprenticeship

ELAP 1510 - Union Electrical Apprentice I (5CR)

(5L) Casper College partners with the Wyoming Electrical Joint Apprenticeship and Training Committee (WJATC) to provide extensive training designed to complement on-the-job training received by electrical apprentices. Classes meet several times a year for a week at a time over the 4-year apprenticeship program duration. The combination of course work and training prepare an apprentice electrician to take the journeyman electrician exam administered by the State of Wyoming Department of Fire and Electrical Safety. Course ELAP 1510 is a first year course scheduled for completion during the fall semester. This course is designed to provide the beginning electrical apprentice the necessary skills and knowledge to ensure safe and

efficient work practices on the job. Topics of study include: safety, introductions to the National Electrical Code, basic electrical theory, wiring methods and important information about Wyoming Joint Apprenticeship Training Council (WJATC), National Electrical Contractors Association (NECA), and the International Brotherhood of Electrical Workers (IBEW).

Prerequisites: Acceptance into the WJATC apprenticeship program, recommended status as a first-year Electrical Apprentice with a WJATC approved contractor and registered with the State of Wyoming Electrical Board of the Department of Fire and Prevention and Electrical Safety as an apprentice electrician.

ELAP 1515 - Independent Electrical Apprentice I (5CR)

(5L) This is the first semester class of a series of classes mandated for electrical apprentices. This series of classes is designed to complement the on-the-job training received by electrical apprentices. This course is designed to provide the beginning electrical apprentice with the necessary skills and knowledge to ensure safe and efficient work practices on the job. Topics of study include safety, introduction to the National Electrical Code, basic electrical theory, lighting and appliance circuits, and wiring methods.

Prerequisites: Recommended status as a first-year Electrical Apprentice with and Independent Electrical contractor, and registered with the State of Wyoming Electrical

Board of the Department of Fire Prevention and Electrical Safety, as an apprentice electrician.

ELAP 1520 - Union Electrical Apprentice II (5CR)

(5L) Casper College partners with the Wyoming Electrical Joint Apprenticeship and Training Committee (WJATC) to provide extensive training designed to complement on-the-job training received by electrical apprentices. Classes meet several times a year for a week at a time over the 4-year apprenticeship program duration. The combination of course work and training prepare an apprentice electrician to take the journeyman electrician exam administered by the State of Wyoming Department of Fire and Electrical Safety. Course ELAP 1520 is a first year course scheduled for completion during the spring semester. This course is designed to provide the beginning electrical apprentice the necessary skills and knowledge to ensure safe and efficient work practices on the job. Topics of study include: safety, introductions to the National Electrical Code, basic electrical theory and wiring methods. Additionally, this course will cover Ohm's Law, powerlaw, Kirchhoff's current law to electrical currents.

Prerequisites: Acceptance into the WJATC apprenticeship program, successful completion of ELAP 1510, recommended status as a first-year Electrical Apprentice with a WJATC approved contractor and registered with the State of Wyoming Electrical Board of the Department of Fire and Prevention and Electrical Safety as an apprentice electrician.

ELAP 1525 - Independent Electrical Apprentice II (5CR)

(5L) This is the second semester class of a series of classes mandated for electrical apprentices. This series of classes is designed to complement the on-the-job training received by electrical apprentices. This course is designed to provide the beginning electrical apprentice with the necessary skills and knowledge to ensure safe and efficient work practices on the job. Topics of study include safety, introduction to the National Electrical Code, basic electrical theory, lighting and appliance circuits, and wiring methods.

Prerequisites: Recommended status as a first-year Electrical Apprentice with an Independent Electrical contractor, and registered with the State of Wyoming Electrical Board of the Department of Fire Prevention and Electrical Safety, as an apprentice electrician.

ELAP 1530 - Union Electrical Apprentice III (5CR)

(5L) Casper College partners with the Wyoming Electrical Joint Apprenticeship and Training Committee (WJATC) to provide extensive training designed to complement on-the-job training received by electrical apprentices. Classes meet several times a year for a week at a time over the 4-year apprenticeship program duration. The combination of course work and training prepare an apprentice electrician to take the journeyman electrician exam administered by the State of Wyoming Department of Fire

and Electrical Safety. Course ELAP 1530 is a first year course scheduled for completion during the summer semester. This course is designed to provide the beginning electrical apprentice the necessary skills and knowledge to ensure safe and efficient work practices on the job. Topics of study include: safety, introductions to the National Electrical Code, basic electrical theory and wiring methods. Additionally, students will learn how to differentiate between parallel and series paths in electrical circuits.

Prerequisites: Acceptance into the WJATC apprenticeship program, successful completion of ELAP 1520, recommended status as a first-year Electrical Apprentice with a WJATC approved contractor and registered with the State of Wyoming Electrical Board of the Department of Fire and Prevention and Electrical Safety as an apprentice electrician.

ELAP 1535 - Independent Electrical Apprentice III (5CR)

(5L) This is the third semester class of a series of classes mandated for electrical apprentices. This series of classes is designed to complement the on-the-job-training received by electrical apprentices. This course is designed to provide second year electrical apprentice with the necessary skills and knowledge to ensure safe and efficient work practices on the job. Topics of study include safety, the National Electrical Code, electrical theory, and industrial wiring methods.

Prerequisites: Recommended status as a second-year Electrical

Apprentice with an Independent Electrical contractor, and registered with the State of Wyoming Electrical Board of the Department of Fire Prevention and Electrical Safety, as an apprentice electrician.

ELAP 1540 - Union Electrical Apprentice IV (5CR)

(5L) Casper College partners with the Wyoming Electrical Joint Apprenticeship and Training Committee (WJATC) to provide extensive training designed to complement on-the-job training received by electrical apprentices. Classes meet several times a year for a week at a time over the 4-year apprenticeship program duration. The combination of course work and training prepare an apprentice electrician to take the journeyman electrician exam administered by the State of Wyoming Department of Fire and Electrical Safety. Course ELAP 1540 is a second year course scheduled for completion during the fall semester. This course is designed to provide the beginning electrical apprentice the necessary skills and knowledge to ensure safe and efficient work practices on the job. Topics of study include: safety, introductions to the National Electrical Code, basic electrical theory and wiring methods. The course will teach students to properly read and interpret residential blueprints.

Prerequisites: Acceptance into the WJATC apprenticeship program, successful completion of ELAP 1530, recommended status as a second-year Electrical Apprentice with a WJATC approved contractor and registered with the State of Wyoming Electrical Board of the

Department of Fire and Prevention and Electrical Safety as an apprentice electrician.

ELAP 1545 - Independent Electrical Apprentice IV (5CR)

(5L) This is the fourth semester class of a series of classes mandated for electrical apprentices. This series of classes is designed to complement the on-the-job-training received by electrical apprentices. This course is designed to provide the 2nd or 3rd year electrical apprentice with the necessary skills and knowledge to ensure safe and efficient work practices on the job. Topics of study include industrial applications and the National Electrical Code.

Prerequisites: Recommended status as a second-year Electrical Apprentice with an Independent Electrical contractor, and registered with the State of Wyoming Electrical Board of the Department of Fire Prevention and Electrical Safety, as an apprentice electrician.

ELAP 1550 - Union Electrical Apprentice V (5CR)

(5L) Casper College partners with the Wyoming Electrical Joint Apprenticeship and Training Committee (WJATC) to provide extensive training designed to complement on-the-job training received by electrical apprentices. Classes meet several times a year for a week at a time over the 4-year apprenticeship program duration. The combination of course work and training prepare an apprentice electrician to take the journeyman electrician exam administered by the State of

Wyoming Department of Fire and Electrical Safety. Course ELAP 1550 is a second year course scheduled for completion during the spring semester. This course is designed to provide the beginning electrical apprentice the necessary skills and knowledge to ensure safe and efficient work practices on the job. Topics of study include: safety, introductions to the National Electrical Code, basic electrical theory and wiring methods. Additionally, the course will cover grounding, bonding and transformers.

Prerequisites: Acceptance into the WJATC apprenticeship program, successful completion of ELAP 1540, recommended status as a second-year Electrical Apprentice with a WJATC approved contractor and registered with the State of Wyoming Electrical Board of the Department of Fire and Prevention and Electrical Safety as an apprentice electrician.

ELAP 1555 - Independent Electrical Apprentice V (5CR)

(5L) An in depth study of commercial installations, including NEC requirements and calculations for same.

Prerequisites: Recommended status as a second or third year Electrical Apprentice with an Independent Electrical contractor, and registered with the State of Wyoming Electrical Board of the Department of Fire Prevention and Electrical Safety, as an apprentice electrician.

ELAP 1560 - Union Electrical Apprentice VI (5CR)

(5L) Casper College partners with the Wyoming Electrical Joint Apprenticeship and Training Committee (WJATC) to provide extensive training designed to complement on-the-job training received by electrical apprentices. Classes meet several times a year for a week at a time over the 4-year apprenticeship program duration. The combination of course work and training prepare an apprentice electrician to take the journeyman electrician exam administered by the State of Wyoming Department of Fire and Electrical Safety. Course ELAP 1560 is a second year course scheduled for completion during the summer semester. This course is designed to provide the beginning electrical apprentice the necessary skills and knowledge to ensure safe and efficient work practices on the job. Topics of study include: safety, introductions to the National Electrical Code, basic electrical theory and wiring methods. Additionally, the course will cover grounding and bonding and transformers II.

Prerequisites: Acceptance into the WJATC apprenticeship program, successful completion of ELAP 1550, recommended status as a second-year Electrical Apprentice with a WJATC approved contractor and registered with the State of Wyoming Electrical Board of the Department of Fire and Prevention and Electrical Safety as an apprentice electrician.

ELAP 1565 - Independent Electrical Apprentice VI (5CR)

(5L) An in depth study of commercial installations, including NEC requirements and calculations for same.

Prerequisites: Recommended status as a second or third year Electrical Apprentice with an Independent Electrical contractor, and registered with the State of Wyoming Electrical Board of the Department of Fire Prevention and Electrical Safety, as an apprentice electrician.

ELAP 1570 - Union Electrical Apprentice VII (6CR)

(6L) Casper College partners with the Wyoming Electrical Joint Apprenticeship and Training Committee (WJATC) to provide extensive training designed to complement on-the-job training received by electrical apprentices. Classes meet several times a year for a week at a time over the 4-year apprenticeship program duration. The combination of course work and training prepare an apprentice electrician to take the journeyman electrician exam administered by the State of Wyoming Department of Fire and Electrical Safety. Course ELAP 1570 is a third year course scheduled for completion during the fall semester. This course is designed to provide the beginning electrical apprentice the necessary skills and knowledge to ensure safe and efficient work practices on the job. Topics of study include: safety, introductions to the National Electrical Code, basic electrical theory and wiring methods. This course will cover magnetism and induction,

alternators, three-phase motors and basic level I motor operation in addition to motor controls.

Prerequisites: Acceptance into the WJATC apprenticeship program, successful completion of ELAP 1560, recommended status as a third-year Electrical Apprentice with a WJATC approved contractor and registered with the State of Wyoming Electrical Board of the Department of Fire and Prevention and Electrical Safety as an apprentice electrician.

ELAP 1575 - Independent Electrical Apprentice VII (5CR)

(5L) This is the seventh semester class of a series of classes mandated for electrical apprentices. This series of classes is designed to complement the on-the-job-training received by electrical apprentices. This course is designed to provide the 4th year electrical apprentice with the necessary skills and knowledge to ensure safe and efficient work practices on the job. The National Electrical Code and journeyman type questions will be covered along with individual review topics.

Prerequisites: Recommended status as a fourth year Electrical Apprentice with an electrical contractor, and registered with the State of Wyoming Electrical Board of the Department of Fire Prevention and Electrical Safety, as an apprentice electrician.

ELAP 1580 - Union Electrical Apprentice VIII (6CR)

(6L) Casper College partners with the Wyoming Electrical Joint Apprenticeship and

Training Committee (WJATC) to provide extensive training designed to complement on-the-job training received by electrical apprentices. Classes meet several times a year for a week at a time over the 4-year apprenticeship program duration. The combination of course work and training prepare an apprentice electrician to take the journeyman electrician exam administered by the State of Wyoming Department of Fire and Electrical Safety. Course ELAP 1580 is a third year course scheduled for completion during the spring semester. This course is designed to provide the beginning electrical apprentice the necessary skills and knowledge to ensure safe and efficient work practices on the job. Topics of study include: safety, introductions to the National Electrical Code, basic electrical theory and wiring methods. This course will also cover motors level I, which includes all aspects of motors and motor control.

Prerequisites: Acceptance into the WJATC apprenticeship program, successful completion of ELAP 1570, recommended status as a third-year Electrical Apprentice with a WJATC approved contractor and registered with the State of Wyoming Electrical Board of the Department of Fire and Prevention and Electrical Safety as an apprentice electrician.

ELAP 1585 - Independent Electrical Apprentice VIII (5CR)

(5L) This is the eighth semester class of a series of classes mandated for electrical apprentices. This series of classes is designed to complement the on-the-job-

training received by electrical apprentices. This course is designed to provide the 4th year electrical apprentice with the necessary skills and knowledge to ensure safe and efficient work practices on the job. The National Electrical Code and journeyman type questions will be covered along with individual review topics.

Prerequisites: Recommended status as a fourth year Electrical Apprentice with an electrical contractor, and registered with the State of Wyoming Electrical Board of the Department of Fire Prevention and Electrical Safety, as an apprentice electrician.

ELAP 1590 - Union Electrical Apprentice IX (6CR)

(6L) Casper College partners with the Wyoming Electrical Joint Apprenticeship and Training Committee (WJATC) to provide extensive training designed to complement on-the-job training received by electrical apprentices. Classes meet several times a year for a week at a time over the 4-year apprenticeship program duration. The combination of course work and training prepare an apprentice electrician to take the journeyman electrician exam administered by the State of Wyoming Department of Fire and Electrical Safety. Course ELAP 1590 is a fourth year course scheduled for completion during the fall semester. This course is designed to provide the beginning electrical apprentice the necessary skills and knowledge to ensure safe and efficient work practices on the job. Topics of study include: safety, introductions to the National Electrical Code, basic electrical theory and wiring

methods. This course will cover instrumental level I and instrumentation level II in addition to code work.

Prerequisites: Acceptance into the WJATC apprenticeship program, successful completion of ELAP 1580, recommended status as a fourth-year Electrical Apprentice with a WJATC approved contractor and registered with the State of Wyoming Electrical Board of the Department of Fire and Prevention and Electrical Safety as an apprentice electrician.

ELAP 1600 - Union Electrical Apprentice X (6CR)

(6L) Casper College partners with the Wyoming Electrical Joint Apprenticeship and Training Committee (WJATC) to provide extensive training designed to complement on-the-job training received by electrical apprentices. Classes meet several times a year for a week at a time over the 4-year apprenticeship program duration. The combination of course work and training prepare an apprentice electrician to take the journeyman electrician exam administered by the State of Wyoming Department of Fire and Electrical Safety. Course ELAP 1600 is a fourth year course scheduled for completion during the spring semester. This course is designed to provide the beginning electrical apprentice the necessary skills and knowledge to ensure safe and efficient work practices on the job. Topics of study include: safety, introductions to the National Electrical Code, basic electrical theory and wiring methods. This class will also include code calculations, applied codeology and

information about the journeyman examination.

Prerequisites: Acceptance into the WJATC apprenticeship program, successful completion of ELAP 1590, recommended status as a fourth-year Electrical Apprentice with a WJATC approved contractor and registered with the State of Wyoming Electrical Board of the Department of Fire and Prevention and Electrical Safety as an apprentice electrician.

Electronics

ELTR 1515 - Basic AC/DC Electronics (2CR)

(1L, 2LB) Groundwork in electrical fundamentals needed for an understanding of modern electronics.

Prerequisites: High school Algebra and English

ELTR 1535 - Electrical Power (3CR)

(2L, 2LB) Fundamentals of AC electrical machines and transformers. Topics covered are electromagnetism, transformers, AC motors and motor control.

Prerequisites: Completion or concurrent enrollment in ELTR 1515 or ELTR 1570, or permission of the instructor.

ELTR 1545 - Utility Locator Certification (2CR)

(1.5L, 1LB) Fundamentals of underground utility location will be covered. This will include the methods used to change the transmitter current levels, change the shape of the magnetic field, how to measure the magnetic field with the receiver, and how to produce a round magnetic

field and verify depth.

Successful completion of this course will result in certification as an underground utility locator.

ELTR 1570 - Electric Circuits (4CR)

(4L) Fundamentals of DC and AC circuit analysis, electromagnetics, and single-phase transformers.

Prerequisites: ACT score of 19 (or Compass score 45) or higher; completion or concurrent enrollment in ELTR 1620 or permission of the instructor.

ELTR 1605 - Process Control (3CR)

(2L, 2LB) Fundamentals of process control systems using PID control. Students will control single and multivariable processes and calibrate sensors. Other topics include valve actuators and industrial data communications.

Prerequisites: Completion of ELTR 1570, or permission of the instructor.

ELTR 1620 - Electrical Concepts Laboratory (1.5CR)

(3LB) An introductory laboratory course for electronics technicians. Emphasizes analysis and troubleshooting of simple AC and DC circuits. Additional topics covered include magnetism and electromagnetism.

Prerequisites: Completion of or concurrent enrollment in ELTR 1570.

ELTR 1645 - Accelerated Utility Locator Certification (1.5CR)

(1.5L) This course is designed for utility locators that have two years or more of utility locating experience. The course will cover the fundamentals of utility locating, practical demonstrations of concepts covered in the lectures, Wyoming state law for utility locating, and the federal law for utility locating. Successful completion of this course will result in certification as an underground utility locator.

ELTR 1700 - Introduction to Solid State Electronics (4CR)

(2L, 4LB) This course explores the principles of operation and behavior of solid state devices including diodes, BJTs, FETs, MOSFETs and Operational Amplifiers.

Prerequisites: ELTR 1570, or permission of the instructor.

ELTR 1750 - Electronic Design and Fabrication (2CR)

(1L, 2LB) A course using industrial processes to design and fabricate electronic circuitry. Topics include soldering, computer-generated schematics, computer-designed PC boards, industrial etching processes, and sheet metal fabrication.

ELTR 1760 - Introduction to Digital Electronics (4.5CR)

(3L, 3LB) Logic circuits associated with the control and operation of a digital computer. Application of the specific logic circuits through selected laboratory experiments.

ELTR 1770 - Microprocessor Fundamentals (4.5CR)

(3L, 3LB) Microprocessors, their architecture, language, and capabilities. Students will have an opportunity to work with those that are most commonly used in industry and will be expected to develop individual projects in addition to the required laboratory experiments.

ELTR 1980 - Cooperative Work Experience (Electronics)

(Max. 8) (1-8CR) (Max. 8) On-the-job training with a cooperative industrial or commercial electronics maintenance, fabrication or service facility. Eighty hours of work per semester earns one hour of credit.

Prerequisites: Permission of the instructor.

ELTR 2515 - Licensing for Electronics (1CR)

(1L) This course is for electronic, electrical, industrial and educational technicians who need to be certified. The course will focus on the FCC, Certified Electronics Technician, and other national certification exams.

ELTR 2600 - Electronic Communication (4.5CR)

(3L, 3LB) Emphasis on radio receivers and transmitters, antennas, amplitude and frequency modulation FM stereo multiplex circuits, and FM radios.

Prerequisites: ELTR 1700 or permission of instructor.

ELTR 2610 - Advanced Microprocessors (3CR)

(2L, 2LB) Programming microcontrollers to read inputs and control outputs. Students will use common microcontrollers such as Arduino and Raspberry Pi.

Prerequisites: ELTR 1770, or permission of the instructor.

ELTR 2815 - Programmable Logic Controllers (4CR)

(2L, 4LB) Assembly, programming and troubleshooting programmable logic controllers in industrial processes. This course will include variable frequency drives, robotics and data communications.

Prerequisites: Completion or concurrent enrollment in ELTR 1515 or ELTR 1570 or permission of the instructor.

ELTR 2870 - CCD Cameras and Security Systems (2CR)

(1L, 2LB) This course will cover the construction and use of charged coupled device (CCD) camera sensors, which are used in digital cameras, machine vision cameras, and surveillance cameras. Other areas covered will be lighting, image acquisition and storage, surveillance systems and security cameras.

Prerequisites: ELTR 1570 or permission of the instructor.

ELTR 2910 - Computer Networking (2CR)

(1L, 2LB) This is an introduction

to the technical and software aspects of local area networks. The course will include Windows Server software installation, use, and maintenance, network cable systems, and system troubleshooting.

ELTR 2920 - Small Computer Repair Techniques (3CR)

(2L, 2LB) Techniques used to install and maintain microcomputers. Emphasis will be on basic computer troubleshooting techniques, both at the system and board level with representative small computer systems. Mass storage techniques for small systems, their strong and weak points and repair. Basic Internet connectivity via both modems and NICs will also be covered.

ELTR 2925 - Fiber Optics (4CR)

(2L, 4LB) Fundamentals of light-wave communications and transmission. Includes the fundamentals of light, light sources, optical fiber characteristics, splices, connectors, couplers, receiver, and driver systems. System maintenance and splicing will be stressed. Safety procedures will be stressed throughout the course of instruction.

ELTR 2945 - Fiber Optic Workshop (2CR)

(1L, 2LB) An introductory course in the use of fiber optic technology as it applies to industry and education. This course is designed to instruct representatives from industry and secondary education in the area of fiber optics.

ELTR 2975 - Independent Study in Electronics

(1-3CR) (Max. 6) Electronics majors who have completed the introductory courses may be permitted to contract with the instructor for special advanced problems in electrical applications to be pursued as independent study.

Prerequisites: sophomore standing and permission of the instructor.

Emergency Medical Technician

EMT 1500 - Emergency Medical Technician (9CR)

(6L, 9LB) An entry level education of emergency medical services to prepare the student for a career as an emergency medical technician.

Prerequisites: basic emergency care (Preferred).

EMT 2500 - Advanced Emergency Medical Technician (8CR)

(6L, 6LB) This course is designed to provide the student with an expanded and enhanced knowledge of Emergency Medical Services and how to provide advanced care for the sick and injured. This course follows the current National EMS Education Standard.

Prerequisites: Successful completion of EMT 1500 and permission of instructor.

EMT 2750 - Wyoming Emergency Medical Technician-Intermediate

(6CR)

(5L, 3LB) This course is designed to provide the student with an expanded and enhanced knowledge of Emergency Medical Services and how to provide advanced care for the sick and injured. This course follows the current Wyoming EMS Education Standard.

Prerequisites: The student must contact the instructor for approval prior to enrollment. Successful completion of EMT 2500 is required.

Engineering Science

ES 1000 - Orientation to Engineering Study (1CR)

(1L) [E] Orientation course to provide students with exposure to all forms of engineering.

ES 1060 - Introduction to Engineering Problem Solving (3CR)

*(3L, *) [E]* * One problem class each week. An introduction to engineering documentation and reports, computing tools for data presentation and graphics, equation solving, and manipulation of tabular data.

Concurrently: MATH 2200.

ES 1100 - Introduction to Rocketry (2CR)

(1L, 2LB) This introductory course in rocketry will provide an overview of various rocket propulsion concepts such as solid, hybrid, liquid, nuclear and antimatter. It will focus on composite solid rocket motors and cover their design, ballistic analysis, structural analysis, and thermal analysis. The course will discuss the design, analysis and constructor of rocket bodies

including structural analysis, flight stability and recovery systems.

ES 2110 - Statics (3CR)

(3L, *) [E] *One problem class each week. Analysis of force systems in equilibrium while at rest. Includes forces as vectors acting at a point and on structures, distributed forces, and friction. Centroid and moment of inertia of areas and solids.

Prerequisites: MATH 2205 or concurrent enrollment. Students should be enrolled concurrently in PHYS 1310 and ES 1060 is recommended.

Concurrently: PHYS 1310 and ES 1060

ES 2120 - Dynamics (3CR)

(3, *) [E] *One problem class each week. The study of particle and body motion. Includes the study of translation and rotation and the related concepts of work, energy, impulse, and momentum.

Prerequisites: ES 2110 and MATH 2205, PHYS 1310, or concurrent enrollment.

ES 2210 - Electric Circuit Analysis (4CR)

(3L, *, 2LB) [E] *One problem class each week. A basic course in electrical engineering circuit analysis for all engineering majors. Emphasis is placed on basic circuit theory, circuit modeling, analytical methods, network theorems, and first order circuits.

Prerequisites: MATH 2205.
Concurrently: ES 2120.

ES 2310 - Thermodynamics (3CR)

(3L) [E] A first course in classical thermodynamics governing processes related to heat work and equilibrium of gaseous liquid, and solid systems.

Prerequisites: MATH 2205 and PHYS 1310, or permission of the instructor.

ES 2330 - Fluid Dynamics (3CR)

(3L, *) [E] *One problem class each week. Characteristics and behavior of fluids. Applications of Bernoulli and Euler equations of equilibrium. Study of surface tension, vapor pressure, viscosity, and shear stress of fluids. Analysis of laminar and turbulent flow in pipes.

Prerequisites: ES 2120 and MATH 2205, or permission of instructor.

ES 2410 - Mechanics of Materials I (3CR)

(3L, *) [E] * One problem class each week. The mechanics of deformable bodies. Topics include stress and strain of structures and machine components. The course will include an introduction to the design process.

Prerequisites: ES 2110 and MATH 2205.

Engineering Technology

ENTK 1010 - Elements of Surveying (3CR)

(2L, 3LB) The principles of land surveying include distance measurement, elevations and angles. This course includes fundamentals of trigonometry, the necessary review of algebraic

principles, and a thorough introduction to the surveying instruments and their use. Lecture material is accompanied by field measurements providing adequate practical experience. Following the course, students should be able to assist with a survey crew or lay out a simple construction site. An introduction to the U.S. public land system and the principles of the GPS system are included.

ENTK 1021 - Descriptive Geometry (3CR)

(2L, 2LB) Emphasis is on the graphic solutions to engineering and design problems. Topics will include: visibility, notation, auxiliary views, true lengths and angles, bearing, grade, intersecting lines, lines on planes, point views, normal views piercing points, intersection of planes, contour mapping, outcrop, cut and fill, revolution of lines, vectors and perspective.

Prerequisites: ENTK 1510, or permission of the instructor.

ENTK 1060 - Excel Technical Applications (3CR)

(3L) This course will focus on the technical application of Microsoft Excel and its use in an engineering/drafting office environment. Students will learn productivity tools in Excel and explore how to integrate Excel with computer aided drafting software to increase productivity.

ENTK 1510 - Drafting I (4CR)

(2L, 4LB) An introductory course in industrial communications through technical drawing and computer-aided drafting. Topics include, sketching, lettering, plan geometry, multiview and axonometric projections dimensioning using traditional drafting instruments and computer aided drafting equipment.

ENTK 1650 - Mechanical Drafting and Design I (4CR)

(2L, 4LB) A continuation of the instruction received in ENTK 2510, this is an intermediate mechanical design course focusing on assembly modeling using both top-down and bottom-up techniques. Application of design intent on part and assembly models instructs the student to predict how design changes will impact the model. In addition, students realize the importance of file management tools in assemblies.

Prerequisites: ENTK 2510, or permission of the instructor.

ENTK 1710 - Architectural Drafting I (4CR)

(2L, 4LB) [E] Designing homes with emphasis on today's residential designs and construction methods. Develop documents for construction purposes using sketching and computer-aided design techniques. Designs will follow local, state and national code specification.

Prerequisites: ENTK 1510, or permission of the instructor.

ENTK 1720 - Architectural Drafting II (4CR)

(2L, 4LB) Develop documents for architectural presentations and graphics using sketching, various CAD techniques, and building information modeling.

Prerequisites: ENTK 1510 and ENTK 1710, or permission of the instructor.

ENTK 1750 - Commercial Architectural Drafting (4CR)

(2L, 4LB) Design, planning, and construction documents of existing and new commercial buildings. Topics include construction methods and materials, drawing conventions, the AIA drawing standards, the National CAD Standards, the Uniform Drawing System, and the International Building Code.

Prerequisites: ENTK 1510, or permission of the instructor.

ENTK 2510 - CAD-3D Modeling (4CR)

(2L, 4LB) An introductory course in 3-D solid modeling. The student will learn basic part and assembly modeling techniques with an emphasis on design intent. Standard 3 view part prints including section, detail and exploded views will be created.

Prerequisites: ENTK 1510, or permission of the instructor.

ENTK 2525 - Design and Manufacturing Methods I (4CR)

(2L, 4LB) A course emphasizing solid modeling and manufacturing techniques involved with various CNC equipment and the impacts of

CAD on design and production. Manufacturing techniques utilizing CNC plasma, CNC router, laser engraver, machining/turning center and 3D printer will be covered in this course.

Prerequisites: ENTK 1510 or ENTK 2510 or Instructor Approval.

Concurrently: None.

Cross-listed: MANF 2525

ENTK 2530 - Design and Manufacturing Methods II (4CR)

(2L, 4LB) This course is a continuation of Design and Manufacturing Methods I. This course will emphasize solid modeling and manufacturing techniques involved with various CNC equipment and the impacts of CAD on design and production. Manufacturing techniques utilizing CNC plasma, CNC router, laser engraver, machining/turning center and 3D printer will be covered in this course.

Prerequisites: ENTK 2525, or permission of instructor.

ENTK 2550 - Civil Drafting I (4CR)

(2L, 4LB) This course introduces principles and techniques of civil drafting using AutoDesk's Land Development Desktop to create engineering maps. This course includes an overview of mapping, surveying, and earthwork.

Prerequisites: ENTK 1510, or permission of the instructor.

ENTK 2625 - Mechanical Drafting and Design II (4CR)

(2L, 4LB) This is an advanced mechanical design course focusing on design and marketing tools used with solid modeling of parts and assemblies. The students learn to integrate weldments, fasteners, sheet metal parts and web base design tools into assemblies. These tools aid the designer during the product development phase of a project.

Prerequisites: ENTK 1650.

ENTK 2975 - Independent Study in Drafting

(2-6LB) (1-3CR) (Max. 3) Drafting majors who have substantial background in drafting may be permitted to contract with the instructor for special advanced problems in drafting to be pursued on an independent study basis.

Prerequisites: Permission of instructor.

ENTK 2976 - Independent Study in Computer-Aided Drafting

(2-6LB) (1-3CR) Students who have substantial background in drafting may be permitted to contract with the instructor for special advanced problems in computer aided drafting to be pursued on an independent study basis.

Prerequisites: Permission of the instructor.

ENTK 2980 - Cooperative Work Experience (Drafting)

(1-8CR) (Max. 8) A minimum of 80 hours of on-the-job training per credit hour with college supervision. Training must be in the area of drafting or a closely related field such as surveying.

Prerequisites: Permission of the instructor.

ENTK 2990 - Special Topics

(1-12CR) Offered in answer to specific need or public interest. A student may repeat this course under different subtitles to a maximum of 12 credit hours.

English

ENGL 0490 - Special Topics: (Subtitle)

(1-5CR) Offered in answer to specific need or public interest.

ENGL 0800 - Introduction to College Reading and Writing I (5CR)

(5L) Reading and writing are both processes of composing and are requisites to success in all college courses. This first level developmental English course provides instruction for critical reading and critical thinking skills used to compose a variety of effective writings. Students will have the opportunity to practice writing skills, review grammar and mechanics, read a variety of materials, and learn methods of responding to readings.

Prerequisites: Acceptable placement score.

ENGL 0850 - Accelerated Writing and Reading (5CR)

(5L) This course will combine the skills learned in ENGL 800 and ENGL 900. Combined writing skills seeks to strengthen the student's writing fluency through a study of selected elements of basic composition. These include grammar, spelling, and punctuation as well as sentence development, paragraph development, and essay development. The course introduces students to different patterns of organization and various types of writings through assigned readings and multiple-draft writing assignments.

Prerequisites: Acceptable placement score or completion of the pre-requisite course with a "C" or better.

ENGL 0900 - Introduction to College Reading and Writing II (4CR)

(4L) Reading and writing are both processes of composing and are requisites to success in ENGL 1010. This upper level developmental English course provides instruction for active reading and critical thinking skills used to compose effective essays. Students will have opportunities to practice a recursive writing process and will be introduced to using outside texts as a way to generate ideas. Students are given the option of receiving S/U grades. Students receiving "C" or better in any 1000 or 2000 level English course may not subsequently earn credit in ENGL 0900.

Prerequisites: Acceptable placement score or completion

of ENGL 0800 with a "C" or better.

ENGL 0910 - Enhancement for Comp 1 (3CR)

(3L) ENGL 910 is a course devoted to improving students' writing and critical reading as a corequisite to ENGL 1010. This course provides intensive instruction writing expository essays for specific audiences as well as instruction in reading and working with college level texts. It emphasizes the process of drafting, revising, and editing, as well as comprehending and interpreting a variety of texts. This course enables students who place into the higher level developmental English to complete the college level composition sequence more quickly.

Students are given the option of receiving S/U grades. Students receiving "C" or better in any 1000 or 2000 level English course may not subsequently earn credit in ENGL 0910. Fall and Spring semesters

Prerequisites: Acceptable placement score or a grade of "C" or higher in ENGL 0800. Concurrently: Students enrolled in this course must be concurrently enrolled in the corresponding section of ENGL 1010

ENGL 1010 - English I: Composition (3CR)

(3L) [E] A study of the fundamentals of purposeful communication in English. The course focuses on reading and writing expository essays, on using effective language for exposition of ideas, and on thinking clearly. Students are to

practice synthesizing information, organizing it coherently, and writing clearly.

Prerequisites: Acceptable placement score or completion of ENGL 0850 or ENGL 0900 with a "C" or better.

ENGL 1020 - English II: Composition (3CR)

(3L) An extension of ENGL 1010. Further refines the student's abilities to gather and synthesize material from independent reading. Students study language both to appreciate its precise control and to interpret the experience of others. College-level essays (including a research paper) and two oral presentations are required.

Prerequisites: A grade of "C" or higher in ENGL 1010.

ENGL 1040 - Introduction to Creative Writing (3CR)

(3L) A study and workshop in the technique of the craft of writing poetry, fiction, non-fiction, and drama for the purpose of self-expression and cultural understanding. As needed

ENGL 2005 - Technical Writing (3CR)

(3L) [E] Technical Writing further refines the student's abilities to gather and synthesize material from independent reading. In addition the course develops writing styles and techniques, document design and formats, and audiences/readership considerations specifically suited to technological and scientific fields of study. Two oral presentations that incorporate visual rhetoric. The course

concludes with a student directed research proposal or other research project, culminating in one of the two required presentations.

Prerequisites: A grade of "C" or higher in ENGL 1010 within the last ten years.

ENGL 2006 - Environmental Literature (3CR)

(3L) Environmental literature is a survey course that will explore the major environmental texts and some of the writers of our time. Students interested in nature writing, literature and environmental politics will appreciate this course. Essay writing and group work will be required to complete this study.

Prerequisites: ENGL 1010. ENGL 1020 recommended.

ENGL 2011 - Literature for Young Adults (3CR)

(3L) This course will be a study of the origin, development, and cultural underpinnings of the field of Young Adult fiction, and an overview of many of the subgenres of the field.

Prerequisites: ENGL 1010.

ENGL 2020 - Introduction to Literature (3CR)

(3L) Introduction to Literature further refines the student's abilities to gather and synthesize material from independent reading. The course focuses on teaching the specific skills, techniques, and terminology necessary for writing effectively about literature and writing literary criticism. This course will devote significant time to the discussion of writing and to its application in addition to

engaging students with a variety of readings that may come from a variety of literary periods and movements. College-level essays, including a research paper and, and two oral presentations are required.

Prerequisites: ENGL 1010
Concurrently: ENGL 1020

ENGL 2045 - Conferencing with Writers (3CR)

(3L) This course covers methodology of one-to-one and one-to-small group writing tutoring. The course introduces writing tutors to the education principles and Writing Center goals underlying common tutoring techniques. Topics addressed are theories of learning, principles of memory, learning styles, successful tutoring techniques, online tutoring, and writing across the curriculum. Writing tutors will observe and participate in tutoring sessions in the Casper College, UW/CC Writing Center. This course is required for, but not restricted to, Writing Center Staff. Non-Writing Center staff must make arrangements with the director to provide for alternative tutoring situations.

Prerequisites: ENGL 1010.
ENGL 1020 recommended.

ENGL 2046 - Conferencing with Writers II (3CR)

(3L) This course is a continuation of ENGL 2045 and covers theories underlying one-to-one and small group responses to writing. The course introduced writing tutors to writing center and peer tutor theories that inform uniformly

accepted best practices. Topics addressed are theoretical constructs of collaboration, interpersonal dynamics, responding to students and student texts, and online tutoring. This course is required for, but not restricted to, Writing Center staff. Non-Writing Center staff must make arrangements with the director to provide for alternative tutoring situations.

Prerequisites: ENGL 1010.
ENGL 1020 recommended.

ENGL 2050 - Creative Writing: Intro to Fiction (3CR)

(3L) [E] Analysis of the elements of fiction and practice of writing fiction at the introductory and intermediate level.

Prerequisites: ENGL 1010.
ENGL 1020 recommended.

ENGL 2055 - Creative Writing: Writing in the Wild (3CR)

(3L) Student-centered, week-long field experience in Yellowstone National Park focuses on reading and writing imaginative verse and prose inspired by nature. Class days are devoted to collecting journal observations during daily hikes, engaging in a variety of writing exercises, and discussing readings and each other's writing. The course culminates in the submission of a writing portfolio.

Prerequisites: ENGL 1010 or permission of the instructor, alert senses, and the ability to hike moderate distances (6-12 miles a day) over uneven terrain. ENGL 1020 recommended.

ENGL 2060 - Creative Writing: Introduction to Nonfiction (3CR)

(3L) As the enormous popularity of national bestsellers demonstrate, the creative nonfiction genre has far-reaching appeal for the millions of readers. In this course the student will analyze the elements of nonfiction and practice writing nonfiction at the introductory and intermediate level.

Prerequisites: ENGL 1010.
ENGL 1020 recommended.

ENGL 2080 - Creative Writing: Introduction to Poetry (3CR)

(3L) [E] Analysis of the forms of poetry, and practice of writing poetry at the introductory and intermediate level.

Prerequisites: ENGL 1010.
ENGL 1020 recommended.

ENGL 2130 - Creative Impulse (Twentieth Century Humanities) (3CR)

(3L) [E] Focuses on the visual arts, literature, music, and philosophy of the 20th century. Attention is given to the influence of history upon our culture and the changes in thinking brought about by scientific discovery.

Prerequisites: ENGL 1010.
ENGL 1020 recommended.

ENGL 2140 - World Literature I (3CR)

(3L) Exploring literature from a wide array of time periods and language backgrounds, this course examines great works of world literature, ancient and

modern. This course also engages themes as explored through various time periods, cultures, and visual genres like cinema and the visual arts. Through discussion and analysis, this course explores the diverse ways that cultures attempt to express themselves through written and artistic expression.

Prerequisites: ENGL 1010.
ENGL 1020 recommended.
Cross-listed: (Cross-listed as HUMN 2140.)

ENGL 2145 - War Literature (3CR)

(3L) War stories exist at the nexus of two fundamental human drives: the drive to create, and the drive to destroy. In an effort to better understand these human impulses, students in War Literature will examine a range of texts that deal with complex, multivalent experiences of war. Texts will include letters, poems, stories, songs, speeches, propaganda, and film.

Prerequisites: ENGL 1010.
ENGL 1020 recommended.

ENGL 2150 - World Literature II (3CR)

(3L) Although primarily a study of the literature of the Middle Ages and beyond, attention will be paid to the other arts, to religion, and to philosophy. Literary values and the qualities of the greatness of selected works of Western Civilization, including any ideas embodied in those works, will be our focus. We may include modern works, including modern works, late in the semester.

Prerequisites: ENGL 1010.
ENGL 1020 recommended.

Cross-listed: (Cross-listed as HUMN 2150.)

ENGL 2185 - Classical Mythology (3CR)

(3L) Focuses on Greek myth and legend. Included as background are geography, history, excerpts from literature, and theories of interpretation.

Prerequisites: ENGL 1010.
ENGL 1020 recommended.

ENGL 2210 - English Literature I (3CR)

(3L) A survey of British literature from the Anglo-Saxons to the 18th century. Emphasis is on reading, discussing, and writing about important works in our literary heritage.

Prerequisites: ENGL 1010.
ENGL 1020 recommended.

ENGL 2220 - English Literature II (3CR)

(3L) A survey of British literature from the early 19th century to the modern period. Emphasis is on reading, discussing, and writing about important works in our literary heritage.

Prerequisites: ENGL 1010.
ENGL 1020 recommended.

ENGL 2225 - Playing with Shakespeare: Literature in Performance (4CR)

(4L) A fresh look at Shakespeare, aimed at engaging students' interests and increasing their appreciation and enjoyment of his works. Will include study of a variety of different performances. Will examine and respond to the interpretations of actors, directors, and literary critics in order to arrive at a

more complete understanding of Shakespeare's plays, both as literature and performance.

Prerequisites: ENGL 1010, or permission of the instructor.
ENGL 1020 recommended.
Cross-listed: (Cross-listed as ENGL 2225.)

ENGL 2230 - Introduction to Shakespeare (3CR)

(3L) Students are introduced to the works of Shakespeare through careful reading (and re-reading) of representative major plays and/or sonnets in order to become acquainted with Shakespeare's dramatic and poetical art. Both formal lecture and discussion will cover each reading. From time to time the class will watch tapes of scenes from the plays in order to understand how the plays might be staged and actors interpret roles. In addition to reading between eight and 12 plays and a dozen or so sonnets, students will take mid-term and final objective and essay examinations, report on the interpretation by a major critic (Johnson, Coleridge, Hazlitt, Bradley, Harrison, and so on), and write one short and one extended (possibly research) essay.

Prerequisites: ENGL 1010.
ENGL 1020 recommended.

ENGL 2235 - Literature of Horror (3CR)

(3L) [E] A study of the development and traditions, and conventions of horror and the supernatural in English and American literature. Readings will consist mostly of prose fiction, though there will be a few assigned readings of non-fiction.

Prerequisites: ENGL 1010.
ENGL 1020 recommended.

ENGL 2270 - Modern Women Writers (3CR)

(3L) An introductory level course, which will focus on women writers of the late 19th century and of the 20th century. Works by earlier writers demonstrate the traditional roles of women in society as well as questions about and challenges to those roles, while works written since the middle of the 20th century image women in a changing society. These works are the background to contemporary literature which presents positive and powerful images of women as recent writers revise traditional roles and envision new realities for women and for society.

Prerequisites: ENGL 1010.
ENGL 1020 recommended.

ENGL 2310 - American Literature I (3CR)

(3L) A survey of major American writers and their significant contributions from the Colonial Era to the Civil War.

Prerequisites: ENGL 1010.
ENGL 1020 recommended.

ENGL 2320 - American Literature II (3CR)

(3L) A continuation of ENGL 2310: American writers from the Civil War to the mid-20th Century.

Prerequisites: ENGL 1010.
ENGL 1020 recommended.

ENGL 2350 - African American Literature (3CR)

(3L) A chronological and thematic survey of African American writers and their works, from the earliest slave narratives to contemporary writings. This course will explore one specific sector of the diversity of American literature.

Prerequisites: ENGL 1010.
ENGL 1020 recommended.

ENGL 2440 - Literary Genres: Short Story (3CR)

(3L) [E] A study of several short stories with emphasis on the development of the genre as a modern art form, from its structural crystallization in the early 19th century to the experimental techniques of the latter 20th century.

Prerequisites: ENGL 1010.
ENGL 1020 recommended.

ENGL 2475 - Independent Study

*(*1-3CR) (Max. 6)* *Individual appointments with instructor. Books and periodicals studied independently by student in consultation with instructor.

Prerequisites: ENGL 1010.
ENGL 1020 recommended.

ENGL 2495 - Workshop: (Subtitle)

(.5-2CR) (Max. 4) Offered in response to needs and interests of students and members of the community. The topic varies but focuses on reading, writing and analyzing contemporary literature. Guest scholars and writers give lectures, readings, and workshops about different genres including poetry, fiction, and nonfiction. A student may repeat this course twice under

different subtitles to a maximum of four credit hours.

Prerequisites: ENGL 1010.
ENGL 1020 recommended.

English as a Second Language

ESL 0100 - English as a Second Language Level I

(1-3CR) This individualized, self-paced course for students whose native language is not English provides instruction and practice in reading, grammar, writing, listening, and speaking at a high-beginning to low-intermediate level of English proficiency. S, X, or U grade only.

ESL 0200 - English as a Second Language Level II

(1-3CR) This individualized, self-paced course for students whose native language is not English provides instruction and practice in reading, grammar, writing, listening, and speaking at a low-intermediate to intermediate level of English proficiency. S, X, or U grade only.

ESL 0300 - English as a Second Language Level III

(1-3CR) This individualized, self-paced course for students whose native language is not English provides instruction and practice in reading, grammar, writing, listening, and speaking at an intermediate to high-intermediate level of English proficiency. S, X, or U grade only.

ESL 1000 - Conversational English for ESL Students (1CR)

(1L) Conversational English for ESL is designed to accompany coursework in ESL 1010 and ESL 1020. It gives students the opportunity to interact verbally, overcome the tendency to "translate directly" and to discuss texts and current events. It includes listening as well as speaking, and will include recorded materials as well as assignments to live lectures. It is accessible to ESL students at a variety of levels who come to college from varied cultures and linguistic backgrounds. Preferred: TOEFL score of 350 or higher. Experience with oral and written English.

ESL 1010 - English as a Second Language I (4CR)

(4L) Intermediate level international students and students with limited English proficiency will earn four credits in reading, listening, grammar, and writing. Students will interact with one or two instructors, read English texts, write and edit responses, and participate in discussions of texts and/or related issues. Students are encouraged to enroll in ESL 1000, Conversational English for ESL Students.

Prerequisites: Permission of instructors. Preferred: TOEFL score of 350 or better; successful completion of introductory ESL courses.

ESL 1020 - English as a Second Language II (4CR)

(4L) High intermediate/low advanced level international students and students with limited English proficiency will earn four credits in reading,

grammar, and writing. Students will interact with one or two instructors, read English texts, write and edit responses, and participate in discussions of texts and/or related issues. Students are encouraged to enroll in ESL 1000.

Prerequisites: Permission of instructors. Preferred: TOEFL score of 400 or better; successful completion of introductory ESL courses.

Environment and Natural Resources

ENR 1200 - Environment (4CR)

(3L, 3LB) This course fulfills a lab science requirement for both science and non-science majors by introducing key concepts in the life sciences through analysis of environmental and natural resource issues. It is appropriate for all students seeking a deeper understanding of environmental challenges. This course is intended to cultivate informed citizens capable of understanding both the scientific basis of environmental challenges as well as an appreciation for the importance of the non-scientific dimensions of those challenges. This course uses complex, real-world environmental challenges to explore fundamental scientific principles such as hypothesis testing, energy flow, nutrient cycling, ecosystem structure and function, population ecology, community ecology, and the role of humans in systems.

ENR 1500 - Water, Dirt, and Earth's Environment (4CR)

(3L, 3LB) Introductory environmental geology course focusing on water and soil both as hazards and as life-sustaining resources; exploring surface processes and climate change over geological and human timescales. Case studies illustrate the environmental tradeoffs of resource use.

Cross-listed: (Cross-listed with GEOL 1500)

ENR 2000 - Environment and Society (3CR)

(3L) This course explores environmental and social interactions—that is, how we relate to non-human nature and how we represent these relationships. During the semester you will evaluate texts and other media from a variety of fields. We will also address some of the core issues impacting the relationship between the environment and society.

ENR 2450 - Principles of Fish and Wildlife Management (3CR)

(3L) [E] Emphasizes principles of habitat and population biology and management, human dimensions of wildlife management, as well as law and policy.

Prerequisites: LIFE 1010/BIOL 1010

Cross-listed: ZOO 2450

ENR 2465 - Research Problems in Environmental Sciences

(1-4CR) (Max 4) This is an independent research study

course. A comprehensive research study is required. Upon completing the project, the student should present a paper and an oral seminar to a committee selected by the project instructor. The problem and amount of credit received must have the approval of the instructor.

ENR 2480 - Cooperative Work Experience

(1-8CR) This course provides the opportunity to gain life science and/or wildlife management concepts from a vocational or employment experience within the student's area of specialization. A minimum of 80 hours of on-the-job training represents one semester credit hour. The instructor and the employer will supervise students.

Prerequisites:
Preapproval/consent of instructor. Must be Life Science, Environmental Science, or Wildlife Management Major. Student must have at least a 2.0 GPA.

Environmental Science

ENVT 1500 - Applied Math for Operators (2CR)

(2L) Practical and realistic applications of mathematical formulas and problems related to the operations of water and wastewater treatment plants and collection and distribution systems.

Prerequisites: MATH 0930, or permission of the instructor.

ENVT 1510 - Distribution Systems (3CR)

(3L) Introduction to the basics of distribution system operation and maintenance and key system components. Topics covered include storage, cross connections, water quality, regulations, chlorination, piping, meter, pumps, hydrants and safety.

ENVT 1520 - Collection System Operation/Maintenance (3CR)

(3L) Introduction to the basics of collection system operation and maintenance and key system components. Topics to be covered include inspecting and testing, cleaning methods, lift stations, safety and administration.

ENVT 1530 - Trenching and Shoring (1CR)

(1L) Introduction to the Occupational Safety and Health Administration's Construction regulation subpart P: Excavations 1926.650-652 known as the Trenching and Shoring Rule. Topics covered are causes of cave-ins, soil classifications, determining soil types and protection systems.

ENVT 1540 - Confined Spaces (1CR)

(1L) Introduction to the Occupational Safety and Health Administration's (OSHA) permit required confined space entry regulation. Class focuses on understanding the regulations and the required elements of a confined space program.

ENVT 1550 - Safety in Water Quality (2CR)

(2L) Introduction to safety issues that affect water quality system operators. The course will review general safety issues and specific Occupational Safety and Health Administration (OSHA) regulations. Topics to be covered include hazard communication, blood borne pathogens, chemical safety, respiratory protection, lockout-tag out, and general safety practices.

ENVT 1560 - Water Treatment Plant Operation I (3CR)

(3L) This course is an introduction to the basics of water treatment plant operation and key system components. Includes water sources, coagulation, flocculation, sedimentation, filtration, disinfection, Safe Drinking Water Act rules and regulations, fluoridation and iron and manganese removal.

ENVT 1570 - Wastewater Treatment Plant Operation I (3CR)

(3L) Introduction to the basics of wastewater plant operation and maintenance. Topics covered include package plants, oxidation ditches, waste stabilization ponds, trickling filters, primary and preliminary treatment and chlorination.

ENVT 1600 - Industrial Safety (4CR)

(4L) This course is an introduction to safety issues that affect personnel in the electric power industry. It will review general safety issues and specific Occupational Safety and Health (OSHA) regulations for General Industry. Topics to be covered

include: Introduction to OSHA, exit routes, emergency action plans, fire protection plans and fire protection, electrical, personal protective equipment, walking/working surfaces and fall protection, hazard communication, powered industrial trucks, bloodborne pathogens, working in extreme weather environments, and electric power generation, transmission, and distribution. All subjects will emphasize hazard awareness. An OSHA Ten-Hour general industry card will be awarded to all students successfully completing the mandatory OSHA requirements contained in this curriculum. Each student will be required to compose a three to five page essay on personal safety.

ENVT 1625 - Small Water Systems (3CR)

(3L) This course is an introduction to the basics of small water system operation and maintenance and key system components. Topics to be covered include surface water treatment, groundwater systems, storage, monitoring, emergency response preparedness, financial considerations and managerial responsibilities. Course uses a combination of DVD based video presentations and workbook assignments completed at home prior to class as well as classroom lectures and field trips.

ENVT 1650 - Waste Stabilization Ponds/Lagoons Operation and Maintenance (1CR)

(1L) This course will cover wastewater composition, lagoon types, facultative and aerated lagoon operational theory, dissolved oxygen and pH

measurement, calculating hydraulic and organic loading, detention time, geometric mean, average flow and percent removal and NPDES permits. Course will also include a field trip to a local lagoon system.

ENVT 2510 - Applied Math for Water Plant Operators (2CR)

(2L) Practical and realistic applications of mathematical formulas and problems related to the operations of a water treatment plant and distribution system.

Prerequisites: ENVT 1500, or permission of the instructor.

ENVT 2515 - Applied Math for Wastewater Plant Operators (2CR)

(2L) Practical and realistic applications of mathematical formulas and problems related to the operations of a wastewater treatment plant and collection system. Processes covered will include activated sludge, trickling filters, waste stabilization ponds, chemical dosages and laboratory calculations.

Prerequisites: ENVT 1500, or permission of the instructor.

ENVT 2525 - Water Treatment Plant Operation II (3CR)

(3L) Builds on the concepts presented in Water Treatment Plant Operation I and introduces advanced treatment concepts such as softening, iron manganese control, demineralization, instrumentation, laboratory procedures and drinking water regulations.

ENVT 2535 - Wastewater Treatment Plant Operation II (3CR)

(3L) Builds on the concepts presented in Wastewater Treatment Plant Operations I and introduces advanced treatment concepts such as sludge handling and digestion and nutrient removal.

ENVT 2981 - Cooperative Work Experience

(1-8CR) (Max. 16) (Environmental Science students) Supervised work and project experience for the purpose of providing an understanding of a specific topic area related to environmental science. Supervision is provided by both the instructional staff of the college and the cooperating agencies. Enrollment limited to majors in water quality technology or environmental science. See "Unit of Credit."

Prerequisites: Permission of the instructor.

ENVT 2990 - Topics: (Subtitle)

(1-12CR) For students who wish to work in greater depth in water treatment, or wastewater treatment, collection or distribution. Course content will be contracted individually with each student in order to provide greater emphasis and experience in that students' area of interest.

Prerequisites: Permission of the instructor.

Exceptional Children

EDEX 2484 - Introduction to Special Education (3CR)

(3L) [E] This course is designed to meet the needs of education majors for a required course in special education. It provides a broad overview of effective intervention models of instruction and/or behavior techniques for special needs students within an inclusion setting and/or other continuum of special education options which meet the least restrictive environment. Finally, this class would be helpful for individuals in other fields who need an introduction to the field of special education.

Prerequisites: EDFD 2020, ITEC 2360 and PSYC 2300.

Extractive Resources

EXTR 1500 - Geology of Extractive Resources (3CR)

(3L) The study of the basic concepts associated with understanding the geology of the occurrence of oil, gas, oil shale, coal, coal bed methane, uranium, trona, bentonite, industrial minerals, and precious minerals in Wyoming.

EXTR 2510 - Introduction to Well Drilling (3.5CR)

(3L, 1LB) An introduction to the basics of drilling in the extractive industries. Topics will include an overview of the purpose, type and mechanics of drilling. Emphasis will be placed on Wyoming industries such as oil and gas, coal bed methane,

uranium, and soda ash. The type and size of various rigs will be discussed. Drilling operations including the selection of rigs, bits, well control, and logging will be introduced. The course will include the discussion of casing runs, cementing, and a brief introduction to completion operations.

Prerequisites: Permission of the instructor.

EXTR 2520 - Introduction to Well Logging (3CR)

(3L) An introduction to the basics of modern electric well logs. Topics will include a quick overview of how a well is drilled and a brief history of logging tools. The main focus will be on modern electric log types and their interpretation and application, including resistivity and porosity logs. Specialty logs including dipmeters and borehole viewers will be examined.

EXTR 2530 - Oil and Gas Production (3.5CR)

(3L, 1LB) An introduction to the basics of oil and gas production. Topics will include a quick overview of the history of production, oil and gas reservoirs, drilling, testing, and completing wells. The main focus will be on oil and gas properties, production methods, enhanced recovery methods, field processing, and well maintenance.

Prerequisites: Permission of the instructor.

EXTR 2540 - Petroleum Refining (3CR)

(3L) This course will cover the process, technology and operations that are necessary for

the refinement of petroleum products.

Prerequisites: EXTR 2530.

EXTR 2550 - Geologic Computing Methods (3CR)

(1.5L, 3LB) This course is a beginner to intermediate level instructional course on how to use the geologic mapping software, Petra. Topics will include utilization of the various modules that comprise the Petra software (i.e. the mapping module, cross section module, etc.). Advanced subjects will include uses of other software such as Microsoft Office to facilitate data manipulation and integration into Petra. Basic computing skills recommended.

EXTR 2555 - Advanced Geologic Computing Methods (3CR)

(1.5, 3LB) This course is intended as a follow-up to EXTR 2550 Geologic Computing Methods. It is an advanced level instructional course on how to use the geologic computing software package, Petra. The course will feature advanced methods of geologic mapping, cross-section creation, well log interpretation, and the many special functions of the software. Data manipulation and integration techniques will be addressed.

Prerequisites: EXTR 2550 or permission of the instructor.

EXTR 2560 - Energy Policy and Economics (3CR)

(3L) Introduction to energy policy and economics. This course is designed to provide the student a basic understanding of the energy industry, current

socioeconomic and political conditions in the marketplace and future supply/demand scenarios based on policy initiatives. The student will be exposed to material through a large degree of research and self-discovery. The instructor will facilitate discussion, dialogue, and critique writing and presentation skills.

EXTR 2570 - Introduction to Seismic Interpretation (3CR)

(2L, 2LB) Intended to provide an introduction to the interpretation of seismic reflection data. Seismic interpretation is currently the leading method for the exploration and development of oil and gas reserves. Students will learn to understand the seismic process, identify different structural styles from seismic data, interpret seismic sections in both two and three dimensions, relate subsurface stratigraphy to well data, develop a geologic model, create a basic stratigraphic framework using seismic stratigraphy, and prepare structure and other geological/geophysical maps. A basic knowledge of geology and physics is helpful.

Family and Consumer Science

FCSC 1100 - Introduction to Food Science (4CR)

(3L, 3LB) This course will utilize food and food preparation as a model to examine basic scientific principles core to the life and physical sciences. Students will learn about food's nutritive value and basic biologic, chemical and physical concepts in food science. Basic skills in food preparation and

food processing will be introduced. Fundamental concepts in consumer science such as food choice and selection, unit pricing and meal planning are also explored.

FCSC 1141 - Principles of Nutrition (3CR)

(3L) [E] This course is designed to give students a general understanding of nutrition concepts. The course content emphasizes key nutrients and the human body's need for and utilization of those nutrients. Students will be informed of the importance of individualized nutrition plans, and will be exposed to some of the latest research in nutrition. Also addressed are nutritionally relevant topics such as eating disorders, nutritional supplements, dieting and food safety. Recommended for nutrition majors, physical education and early childhood education majors and other interested non-majors.

FCSC 1150 - Scientific Study of Food (3CR)

(2L, 3LB) Comprehensive introduction to the study of food. Food science concepts relevant to composition, physical, chemical and biological properties are applied through laboratory experiences.

Prerequisites: FCSC 1141.

FCSC 2122 - Child Development Lab (1CR)

(2LB) This course will serve as a bridge between theory and application through experience in the observation of child growth and development from birth to 12 years of age.

Prerequisites: PSYC 2300, or concurrent enrollment.

FCSC 2141 - Nutrition Controversies (2CR)

(2L) This course expands upon nutrition concepts covered in FCSC 1141 by exploring current nutrition-related controversies. Skills related to the interpretation of research literature will be emphasized. Fall semesters

Prerequisites: FCSC 1141, or permission of the instructor

Finance

FIN 2100 - Managerial Finance (3CR)

(3L) [E] Managerial finance deals with two main decisions that must be confronted by those managing the financial operations of corporations. First, there is the decision on which investment projects to undertake. Second, there is the decision on the best way to enhance projects. For the first task, the managers must forecast cash flows that might be generated by prospective projects and then select the appropriate discount rate with which to value such cash flows. The second task involves selecting the capital structure of the firm and includes for example, the choice between debt and equity.

Prerequisites: ACCT 1010, STAT 2050, or permission of the instructor.

Fire Technology

FIRE 1500 - Introduction to Fire Science (3CR)

(3L) A broad overview of fire service covering historical and

modern fire protection services including department organization, equipment, extinguishing agents, tactics, and detection systems.

FIRE 1510 - Fire Fighting Strategy and Tactics I (3CR)

(3L) An introductory course that covers a range of management principles and practices to help students develop effective decision-making skills at the fire scene.

FIRE 1520 - Fire Fighting Strategy and Tactics II (3CR)

(3L) An advanced course emphasizing skill development for effective decision making in fire and related emergency situations. Includes case studies and simulations.

Prerequisites: FIRE 1510, or fire service experience.

FIRE 1550 - Causes and Investigation (3CR)

(3L) An in-depth study of the causes and investigation of fires of all types and descriptions from the fire science point of view.

FIRE 1670 - Basic Emergency Care/First Responder (3CR)

(3L) Training in the fundamentals of emergency care. The course follows the state of Wyoming Office of Emergency Medical Services outline for basic emergency care. Excellent for students who are planning to enter the fire service or emergency medical services.

Prerequisites: Fire science or

criminal justice major, or permission of the instructor.

FIRE 1700 - Fundamentals of Fire Prevention (3CR)

(3L) The history and philosophy of fire prevention and administrative functions. Evaluation of prevention programs and research provide insight into the fire problem in modern societies.

FIRE 1760 - Building Construction (3CR)

(3L) A practical approach to assessing hazards in various types of buildings. Construction types and classes are examined with firefighter safety and occupant viability as the foremost considerations.

FIRE 1810 - Introduction to Wildland Fire Fighting (3CR)

(3L) Designed to expose the student to all of the classroom material required to be qualified as a wild-land firefighter Type Two (Basic) including introductory fire behavior, methods, tactics and safety.

FIRE 1818 - Wildland Leadership (3CR)

(3L) This course is designed to provide intermediate level instruction on wild-land fire fighting tactics, safety, and leadership.

FIRE 1830 - Intermediate Wildland Fire Behavior (3CR)

(3L) Designed to expose the students to a more in-depth look at wild-land fire behavior. Incorporates the relations between fuels, weather, and topography. Also, a more in-

depth look into firefighter safety is taken.

Prerequisites: FIRE 1810.

FIRE 1975 - Independent Study

(1-3CR) An opportunity for students to develop projects in their particular area of interest within the fire science discipline. Course is self-paced with individualized instruction..

FIRE 2515 - Advanced Firefighting (3CR)

(3L) This course prepares the student with the required skills needed in the fire service. This course assists students in developing an understanding of the physical and practical skills required to become a career firefighter.

Prerequisites: Sophomore level in fire science program.

FIRE 2525 - Rescue Practices for the Fire Service (3CR)

(3L) Designed to offer the student first-hand experience in the areas of high angle rescue, water rescue, and vehicle rescue/extrication.

FIRE 2530 - Hazardous Materials (3CR)

(3L) This course involves the application of NFPA 472 and OSHA's HAZWOPER Standard (29 CFR 1910.120) towards student involvement in hazardous materials emergency response. In order to pass this course each student must pass both state tests (Awareness and Operations). However, passing both state certified exams does not guarantee a passing grade in the class.

Prerequisites: General understanding of emergency response.

FIRE 2560 - Apparatus and Procedures (3CR)

(3L) Designed to acquaint the student with the evolution of fire apparatus and to provide an understanding of the uses for different pieces of fire-fighting vehicles.

FIRE 2570 - Managing Fire Service (3CR)

(3L) Designed for the pre-service student as well as the fire officer in management or preparing for a managerial position. The course includes budget forecasting, facility and equipment planning, personnel activities, and fire protection productivity.

FIRE 2960 - Firefighter Development (3CR)

(3L) To prepare the student for fire department entry-level testing through various exercises and community service projects.

FIRE 2970 - Fire Service Field Internship (3CR)

(1L, 3LB) To prepare the student for fire department entry-level testing through various exercises and community service projects.

Food Science

FDSC 2040 - Principles of Meat Animal Evaluation (3CR)

(2L, 2LB) [E] Live animal and carcass evaluation of beef, sheep, and swine. Slaughter, meat inspection and anatomy are discussed.

Prerequisites: ANSC 1010 or instructor permission.

FDSC 2100 - Principles of Meat Science (3CR)

(2L, 2LB) [E] Muscle growth, structure and metabolism, pre-harvest animal care, fabrication of carcasses into cuts and associated processing techniques; conversion of muscle into meat; fresh meat properties and quality; chemical properties of meat; meat processing; meat microbiology and safety.

Prerequisites: CHEM 1005 or CHEM 1025 and FDSC 2040 or instructor permission.

French

FREN 0900 - French for Travelers (1CR)

(1L) A course of simple French to help the traveler make plans, obtain tickets, order meals, ask for and understand general information as needed for travel in a French-speaking country.

FREN 1010 - First Year French I (4CR)

(4L) [E] This course is intended for students who have never studied French at the college level. Students will learn the fundamentals of the French language through listening, speaking, reading, and writing activities at the ACTFL (American Council on the Teaching of Foreign Languages) Novice High Level. The course will also introduce students to the culture of various French-speaking countries. Language laboratory times are required as needed. Students who want to take for credit the next course in the sequence must complete this

course with grade of a 'C' or better.

Prerequisites: None; however, the course is strongly recommended for students who have completed the equivalent of 0-5 semesters of high school French.

FREN 1020 - First Year French II (4CR)

(4L) [E] This course is a continuation of the objectives in FREN 1010. Students will become more proficient in listening, speaking, reading, and writing French and will further their grammatical study of the French language at the ACTFL (American Council on the Teaching of Foreign Languages) Intermediate Low Level. The course will continue to introduce students to the culture of various French-speaking countries. Language laboratory times are required as needed.

Prerequisites: A grade of "C" or better in FREN 1010, CLEP test result, equivalent of 6-8 semesters of high school French with a cumulative "B" average or better in those classes, or instructor's permission.

FREN 2030 - Second Year French I (4CR)

(4L) [E] This course focuses on the increased development of listening, speaking, reading, and writing skills in French. Students review and expand upon grammar points which facilitate successful communication at the ACTFL (American Council on the Teaching of Foreign Languages) Intermediate-Mid Level. Language laboratory times are required as needed.

Prerequisites: A grade of "C" or

better in FREN 1020, CLEP test result, equivalent of 5-6 years of middle/junior high and high school French with a cumulative "B" average or better in those classes, or instructor's permission.

FREN 2040 - Second Year French II (4CR)

(4L) [E] This course further emphasizes the development of all four communicative aspects of the French language through composition, conversation, oral presentations, and grammar study. Language laboratory times are required as needed.

Prerequisites: A grade of "C" or better in FREN 2030, CLEP test result, or instructor's permission.

FREN 2475 - Independent Study

(1-4CR) (Max. 4) Students meet with the instructor to discuss independently assigned reading and reports from sources of special interest to the student(s) and pertaining to francophone culture and/or current events which are selected in consultation with the French instructor or record. All coursework will be done in French. Some oral/aural work will be required and grammatical topics may be revisited and expanded upon. Students must pass with a "C" or better.

Prerequisites: FREN 2040 or permission of instructor.

FREN 2495 - Workshop: Topic

(.5-4CR) (Max 12) This class provides a specialized course of study in French to meet particular interests of students and community members. Various topics focus on the

development of practical French speaking skills and/or cultural awareness. This course may be repeated for a total of 12 credits under different topics. Student must pass with a "C" or better.

Prerequisites: Permission of instructor

Geography and Recreation

GEOG 1000 - World Regional Geography (3CR)

(3L) [E] An overview of the world's major physical regions: the physical features, climates, and natural resources of each region, and how the people living in each region have adapted to, and are affected by, their physical environment.

GEOG 1010 - Introduction to Physical Geography (4CR)

(3L, 2LB) [E] An introductory course that draws on many scientific fields to examine interactions between humans and their physical environment. Geology, meteorology, climatology, pedology, biology, and hydrology supply the background material, but the key word is interaction: how and why the weather affects our lives, food supply and soil formation, and where and how we can live within the limits imposed by the various environments of the earth. Because we live on the surface of the earth, the course will examine the major processes involved in shaping and landscape.

GEOG 1015 - Projects in GIS (1CR)

(2LB) Students will participate and work alongside GEOG 2100 students assisting them with their GIS/GPS projects.

GEOG 1040 - Snow and Ice Field Class (4CR)

(3L, 2LB) Of all of the environmental factors which shape the physical world in which we live, the snow and the ice (cryosphere) component is probably the least understood and appreciated by the layman and the scientist alike. At the same time, our existence is tremendously impacted in both positive and negative ways by these factors. Students will be required to attend field components including two local weekend excursions and a week-long field course in a location to be determined. Some field work may be physically strenuous; however, participation in these activities will be optional. Other approved exercises may be substituted if necessary.

Prerequisites: Permission of the instructor.

GEOG 1050 - Introduction to Environmental and Natural Resources (3CR)

(3L) Addresses the impact from natural and human interactions with the environment. Will discuss regional to global scales on issues such as: hazardous earth processes, human interaction with the environment, cultural and ethnic responses to the environment, minerals and energy extraction and use, land use and decision-making. The class will view both sides of environmental issues and approaches to environmental management.

GEOG 1080 - Introduction to GPS and Maps (3CR)

(3L) An introductory course in the use of GPS technology, maps and pre-GIS applications. The class was designed to complement GEOL 2080, General Field Geology, and for anyone interested in learning how to use a GPS hand-held unit in conjunction with all-topo digital mapping software and other map use.

GEOG 1100 - Introduction to GIS (4CR)

(4L)4 An introductory course in geographic information systems (GIS) and an accompanying laboratory session. The course will discuss different types of GIS and their capabilities; GIS data collection and input; GIS data types and basic mapping concepts. The laboratory session will introduce students to ArcView 8 software.

GEOG 1110 - Management and Implementation of GIS (4CR)

(4L)4 This course addresses strategies for successful GIS management and implementation in an organization-wide context and is organized around three primary issues: implementation planning, data management, and GIS problem solving in the workforce.

Prerequisites: GEOG 1100.

GEOG 2100 - Advanced GIS (4CR)

(2L, 4LB) An advanced GIS course. The students will be split into teams and given a case study from an outside client and solve the case study using GIS. At the end of the semester, the

teams will present the solution to the client in a presentation.

Prerequisites: GEOG 1100 and GEOG 1110, or concurrent enrollment in GEOG 1110.

GEOG 2150 - Map Use and Analysis (3CR)

(3L) Survey of the use of maps to communicate ideas and opinions about places, and the analysis and presentation of mapped data to solve spatial or geographic problems.

GEOG 2475 - Independent Study

(1-3CR) An opportunity for students to develop projects in their particular area of interest within the GIS field.

Prerequisites: Permission of instructor

GEOG 2480 - GIS Cooperative Work Experience

(1-8CR) (Max. 8) Students are afforded the opportunity to gain practical on-the-job experience in their specialties. The program coordinator and the student's employer will supervise the student. A minimum of 80 hours of on-the-job training represents one semester hour. Students must maintain 12 credit hours with at least a 2.0 GPA during the semester.

Prerequisites: Enrollment in GIS certificate, degree, or minor program; permission of the program director.

Geology

GEOL 1010 - DEEP Impact (1-3cr)

(1L) Students can repeat the course to earn up to 3 credits. DEEP Impact is a mentoring course for geoscience students regardless of major who participate in the Diverse Earth Education Project (DEEP Impact). The course is designed to assist students with their career and educational goals while students engage with undergraduate research projects. Student should take the course multiple times to earn up to 3 credits total. This course will be offered every semester starting in the Spring of 2020.

Prerequisites: None.
Concurrently: None
Cross-listed: None

GEOL 1015 - Geology in the Field (2CR)

(1L, 2LB) This course is designed to be lecture in the field about the spectacular geology of Wyoming. A great variety of Wyoming's minerals, rocks, fossils, and scenic geology will be explored during field trips.

GEOL 1020 - Geology of Wyoming (1CR)

(1L) Topics in the geology of Wyoming; lectures and field trips which illustrate a major facet of Wyoming's natural geological laboratory. Topics have included volcanoes, glaciers, Wyoming gem stones and precious metals, plate tectonics, and the oil and gas business.

GEOL 1021 - Geology of Wyoming Field Trip (1CR)

(2LB) Lecture in the field to observe first-hand the unique geological features of Wyoming.

Concurrently: Optional field trip to be taken concurrently with GEOL 1020.

GEOL 1040 - Gemstones and Their Geologic Origins (1CR)

(1L) This course is designed to acquaint the student with gemstone identification, faceting and the geology which produces these rare specimens.

GEOL 1070 - Earth Science for Elementary Education Majors (4CR)

(3L, 2LB) [E] Covers processes that resulted in the present topography and the past events and the fossil or evolutionary response to changing geography through time. Includes energy reserves, pollution, ecology, mineral resources, the earth framed as a planet, and the solar system.

GEOL 1100 - Physical Geology (4CR)

(3L, 2LB) [E] A lecture and laboratory survey of the composition and geologic features of the earth and the processes which have formed them.

GEOL 1200 - Historical Geology (4CR)

(3L, 2LB) [E] A lecture and laboratory survey of the physical and biological history of the earth as interpreted from the sequence of rocks and fossil remains. Field trips will be included in the spring semester.

Prerequisites: GEOL 1100 recommended.

GEOL 1250 - Paleontology and Geology Field Work (1CR)

Wyoming is one of the richest fossil regions in the world. This course offers the student an opportunity to look for and collect fossils from various field sites near Casper. These sites include fossils of early mammals as well as dinosaurs. All fossil specimens collected are the property of the Tate Geological Museum at Casper College. Exceptions for souvenir specimens can be made at the discretion of the Tate Museum staff.

GEOL 1500 - Water, Dirt, and Earth's Environment (4CR)

(3L, 3LB) Introductory environmental geology course focusing on water and soil both as hazards and as life-sustaining resources; exploring surface processes and climate change over geological and human timescales. Case studies illustrate the environmental tradeoffs of resource use.

Cross-listed: (Cross-listed with ENR 1500)

GEOL 2000 - Geochemical Cycles and the Earth System (4CR)

(3L, 2LB) Geology applied to the complete Earth system including Lithosphere, Hydrosphere, Atmosphere and Biosphere, emphasizing rock associations and geochemical cycles on a global scale.

Prerequisites: GEOL 1100.

GEOL 2005 - Introduction to Geophysics (4CR)

(3L, 2LB) Introduction to the processes and properties of the physical earth. Topics to be covered include: gravity and magnetics, heat flow, seismotectonics, earthquakes, global earth structure, electro-magnetism, and seismology.

Prerequisites: GEOL 2000 - Geochemical Cycles and the Earth System (4CR)

GEOL 1100 or GEOL/ENR 1500 or permission from instructor

GEOL 2010 - Mineralogy and Petrography I (5CR)

(2L, 3LB) [E] An in-depth introduction to the mineralogy of rock-forming minerals and minerals of economic interest. Lectures and labs will cover the chemical, physical and optical properties of minerals. The class will systematically cover minerals and mineral associations. Great emphasis will be placed on hand sample and microscopic identification of rock-forming minerals. Generally offered in the spring semester.

Prerequisites: GEOL 1100 Physical Geology or permission from instructor.

Concurrently: Concurrent enrollment in GEOL 2020 Introduction to Petrology is required.

GEOL 2020 - Introduction to Petrology (2CR)

(1L, 2LB) Introduces the study of igneous, sedimentary, and metamorphic rocks in hand specimens and thin sections. Covers textural and mineralogic classification of rocks and the tectonic environments in which

they occur.

Prerequisites: GEOL 1100 or instructor permission.
Concurrently: Concurrent enrollment in GEOL 2010 is required

GEOL 2030 - Introduction to Hydrology (3CR)

(2L, 2LB) Introduction to Hydrology covers the physical and chemical properties of water on Earth, processes of flow at the surface and in the subsurface, as well as fresh water as a finite global resource.

Prerequisites: GEOL 1100 recommended, or permission of the instructor.

GEOL 2050 - Principles of Paleontology (3CR)

(3L) [E] A systematic look at the evolution of life forms on Earth from the earliest traces of organic material in Archaen rocks billions of years ago to the great diversity of life we see today.

GEOL 2070 - Oceanography (4CR)

(3L, 2LB) Deals with the ocean as a major environment of the earth. Includes the physical make-up of the ocean and the ocean as a climate controller and a resource for humans. Future pollution factors will also be discussed.

GEOL 2080 - General Field Geology (4CR)

(3L, 2LB) [E] General Field Geology teaches students basic concepts of geology, field mapping, and sampling technique. Emphasizes recognition, recording, and interpretation of geologic and

paleontologic features in the field.

Prerequisites: GEOL 1100 and at least two other geology classes.

GEOL 2100 - Stratigraphy and Sedimentation (4CR)

(3L, 3LB) [E] A basic course in stratigraphy and sedimentation which stresses depositional, environmental, and age relationships of sedimentary rock.

Prerequisites: GEOL 1100, or permission of the instructor.

GEOL 2150 - Geomorphology (4CR)

(3L, 2LB) [E] The formation, description and study of land forms which are a result of destructional and constructional geologic processes. The study of topographic maps and aerial photographs are an integral part of the course.

Prerequisites: GEOL 1100 recommended, or permission of the instructor.

GEOL 2320 - Petroleum Geology (3CR)

(3L) The origin and properties of petroleum reservoirs with methods of exploring for structural and stratigraphic traps by subsurface and surface geologic techniques. Mode of petroleum genesis, preferential, habitat and migration, and accumulation will be discussed in depth.

Prerequisites: GEOL 1100 or EXTR 1500, or permission of the instructor.

GEOL 2465 - Research Problems in Geology

(1-3CR) (Max. 3) A comprehensive research study in geology is required, the topic must be selected in consultation with the instructor. Upon completing the project, the student will present a written and an oral report to the instructor.

Gender

GNDR 1000 - Introduction to Gender Studies (3CR)

(3L) This course is an introduction to the study of gender as a category for social and cultural analysis. We will study the intersections of gender, class, race/ethnicity, nationality, age and sexuality and will examine how those intersections shape our experiences, our culture, and the social institutions we inhabit. This course is a survey of gender construction and will use critical theory to examine gender within the areas of social institutions, literature, history, visual art, film, biological theories, psychology, and popular culture.

GNDR 2000 - Gender Studies Service Learning

(.5-1L, 1-4LB) (1-3CR) This course will provide students with the opportunity to apply their theoretical understanding of gender studies to practical and concrete situations in their community settings. Students will work in a variety of agencies including educational, political, and/or social service agencies; students will choose their site according to their interests and according to faculty recommendations. In addition to the on-site experience, students will meet regularly with the faculty and their classmates to

share and analyze their service-learning experience and to engage in critical reflection about gender theory.

Prerequisites: WMST 1080, GNDR 1000, PSYC 2060 or permission of the instructor.

German

GERM 0900 - German for Travelers (1CR)

(1L) A course of simple German to help the traveler make plans, obtain tickets, order meals, and ask for and understand general information as needed for travel in a German-speaking country.

GERM 1010 - First Year German I (4CR)

(4L) *[E]* This course is intended for students who have never studied German at the college level. Students will learn the fundamentals of the German language through listening, speaking, reading and writing activities of the ACTFL (American Council on the Teaching of Foreign Languages) Novice-High Level. This course will also introduce student to the culture of various German-speaking countries. Language laboratory times are required as needed. Students who want to take for credit the next course in the sequence must complete this course with grade of a 'C' or better.

Prerequisites: None; however, the course is strongly recommended for students who have completed the equivalent of 0-5 semesters of high school German.

GERM 1020 - First Year German II (4CR)

(4L) *[E]* This course is a continuation of the objectives in GERM 1010. Students will become more proficient in listening, speaking, reading, and writing German and will further their grammatical study of the German language at the ACTFL (American Council on the Teaching of Foreign Languages) Intermediate-Low Level. The course will continue to introduce students to the culture of various German-speaking countries. Language laboratory times are required as needed.

Prerequisites: A grade of "C" or better in GERM 1010, CLEP test result, equivalent of 6-8 semesters of high school German with a cumulative "B" average or better in those classes, or instructor's permission.

GERM 2030 - Second Year German I (4CR)

(4L) *[E]* This course focuses on increased development of listening, speaking, reading, and writing skills in German. Students review and expand upon grammar points which facilitate successful communication at the ACTFL (American Council on the Teaching of Foreign Languages) Intermediate-Mid Level. Language laboratory times are required as needed.

Prerequisites: A grade of "C" or better in GERM 1020, CLEP test result, equivalent of 5-6 years of middle/junior high and high school German with a cumulative "B" average or better in those classes, or instructor's permission.

GERM 2040 - Second Year German II (4CR)

(4L) *[E]* This course further emphasizes the development of all four communicative aspects of the German language through composition, conversation, oral presentations, and grammar study. Language laboratory times are required as needed.

Prerequisites: A grade of "C" or better in GERM 2030, CLEP test result, or instructor's permission.

GERM 2420 - Aktives Deutsch: Travel (2CR)

(2L) This travel course will focus on the unique culture found in the German-speaking countries. It will help students to more fully appreciate that culture while living in the midst of it as they attend full-immersion German language lessons. Students will be guided to negotiate the processes of ordering and paying for food, using public transportation, shopping and making purchases, and converting currency in real-life, hands-on situations. Also included are instructor-led tours and history lessons, which are given mostly in German. In response to the interests of students, various topics will focus on specific cultural aspects/sites and on cultural awareness. This course is required for all students participating in short-term study abroad trips to Germany sponsored by Casper College.

Prerequisites: Successful completion of GERM 1010 with a grade of C or better, or instructor's permission (based upon demonstration of equivalent German language skills). Students must be 18 years old by the trip's departure

date.

GERM 2475 - Independent Study, German

(1-4CR) (Max. 4) Students who want to take for credit the next course in the sequence must complete this course with a grade of "C" or better.

Prerequisites: GERM 2030, or permission of the instructor.

GERM 2495 - Workshop: (Subtitle)

(.5-3CR) (Max. 12) Offered in response to needs and interests of students and members of the community. Various topics will focus on development of practical German speaking skills and on cultural awareness. A student may repeat this course under different subtitles for a maximum of 12 credit hours. Students who want to take for credit the next course in the sequence must complete this course with a grade of "C" or better.

Health Technology

HLTK 1000 - Principles of Healthcare Calculations (2CR)

(2L) A review of basic arithmetic, an introduction to the metric and apothecary systems, and computation of medication dosages.

HLTK 1200 - Medical Terminology (3CR)

(3L) An introduction to medical vocabulary and terminology. The use of abbreviations, suffixes, and combining forms are stressed to give the student a working knowledge of medical terms.

HLTK 1300 - Nursing Boot Camp (1CR)

(1L) Provides students with academic skills and strategies for successful transition into the Casper College Nursing Program. Topics include resources available at Casper College, strategies for studying and test-taking, review of teaching-learning modalities used in the nursing program, introduction to the Nursing Student handbook, review of the application process, and development of an action plan to support success. Course has online, campus and group activities.

Prerequisites: HMDV 1300 or concurrent enrollment.

HLTK 1500 - Introduction to Health Care and Services (2CR)

(2L) Concepts of health care organization, finance, and delivery in the United States. Explores interrelationships among agencies, organizations, and personnel in the delivery of health care. (Fall semester.)

HLTK 1620 - American Heart Association Heart Saver First Aid, CPR and AED (.33CR)

(.33LB) Provides training in adult, child and infant cardiopulmonary resuscitation (CPR), foreign body airway obstruction, and the use of an automated external defibrillator (AED). Also provides training for laypeople in first aid assessments and actions. S/U grading only.

HLTK 1625 - American Heart Association BLS for the Provider (.33CR)

(.13L, .2LB) Designed to introduce the student to the cardiopulmonary resuscitation techniques needed by providers for adult, child and infant including use of the automatic external defibrillator (AED). S/U grading only.

HLTK 1660 - Advanced Cardiac Life Support (.66CR)

(.26L, .66LB) This course is designed to introduce the Allied Health Professional to the concepts and techniques of Advanced Cardiac Life Support and includes both lecture and hands on practical application of knowledge and skills necessary to provide Advanced Cardiac Life Support to a patient in need. S/U grading only.

Prerequisites: This course is designed for Allied Health students in their final semester of discipline-specific instruction. Participants must have a current AHA BLS for HCP Provider certification. Students are also required to complete a precourse self-assessment prior to the beginning of class. Those not completing the assessment will not be allowed into the class.

HLTK 1675 - AHA Pediatric Advanced Life Support (.66CR)

(.66LB) This course is designed to introduce the Allied Health Professional to the concepts and techniques of Pediatric Advanced Life Support and includes both lecture and hands on practical application of knowledge and skills necessary to provide Pediatric Advanced life Support to a patient in need.

S/U grading only.

Prerequisites: This course is designed for Allied Health students in their final semester of discipline-specific instruction. Participants must have a current AHA BLS for HCP Provider certification. Students are also required to complete a precourse self-assessment prior to the beginning of class. Those not completing the assessment will not be allowed into the class.

HLTK 1855 - Assistive Technology Practicum (3CR)

(6LB) This course is designed to provide hands-on experience with various areas of assistive technology. Students will participate in general assistive technology (AT) evaluation concepts, exploration of different types of assistive technology equipment and application of AT to various populations.

Prerequisites: HLTK 1625 or equivalent CPR certification.

HLTK 1860 - Introduction to Human Disease (3CR)

(3L) This course is designed to provide a general overview of common diagnoses and conditions addressed in healthcare settings. Emphasis will be on considerations of symptoms, ethical and safety considerations as well as organizational and healthcare collaboration.

HLTK 1865 - Equine Assisted Therapy Practicum (3CR)

(6LB) This course is designed to provide hands-on experience with various aspects of equine assisted therapy. Students will participate in activities to

incorporate concepts of general equine care and handling, utilizing riding and equine management from a therapeutic perspective and addressing mental health and physical disability through equine assisted therapy.

Prerequisites: HLTK 1625 or equivalent CPR certification.

HLTK 1870 - Professionalism in Healthcare (3CR)

(3L) This course is designed to introduce students to the concepts of professional interactions by facilitating a positive work environment. Emphasis is placed on learning aspects of effective communication, application of the team process, awareness and management of ethical dilemmas, utilizing professional boundaries, rapport building and crisis management.

HLTK 1875 - Gerontology Practicum (3CR)

(6LB) This course is designed to provide a general overview of the effects of aging, and the common diagnoses and conditions seen in geriatric clients. The course practicum will focus on educating the students about the importance of health, wellness, and safety of the geriatric population. Students will participate with community partners to immerse themselves in the needs of an aging population.

Prerequisites: HLTK 1625 or equivalent CPR certification.

HLTK 1975 - Spanish for Health Care Workers (3CR)

(3L) A course designed for health care workers or students in the health care industry who have little or no background in Spanish. The course presents the student with health care terminology, basic grammar and aspects of Hispanic culture. There is an emphasis on the basic language skills of conversation and comprehension to prepare individuals to work with Spanish-speaking clients in a variety of health care settings.

HLTK 2400 - Complementary and Alternative Therapies (CAT) and Nursing (3CR)

(3L) This elective course introduces the nurse or nursing student to the ever-expanding areas that are Complementary and Alternative Therapies (CAT) or Complementary and Alternative Medicine (CAM). The impact of these therapeutic modalities is explored as well as the implications for nursing practice. This course is informative only. You will not learn to be a practitioner of any of these modalities; you will be learning only about said therapies. This course will encompass many therapeutic modalities: music therapy, aroma therapy, massage therapy, acupuncture, acupressure, herbal remedies, and reflexology. Other information covered will include Reiki, therapeutic touch, and guided imagery. Additional topics will be covered as well.

**HLTK 2550 -
Understanding the
Economics, Ethics, and
Policies Influencing Health
Care (3CR)**

(3L) Legal, ethical, economical, and political issues related to health policy that impact the care of patients by health care providers. Rural and urban health care issues will be emphasized. Utilization of professional associations will be included.

**HLTK 2560 - The
Interprofessional Health
Care Team (3CR)**

(3L) This course covers leadership and development concepts that apply to the interprofessional health care team. Concepts covered will include team and group development, relationship-centered leadership, and building and sustaining collaborative interprofessional teams. Application of concepts will include: health care informatics, evidence based practices, interprofessional simulation activities, and behaviors that foster a collaborative culture.

History

**HIST 1110 - Western
Civilization I (3CR)**

(3L) [E] A general survey of the significant political, social, economic, cultural, and intellectual concepts and institutions of the West, from the Paleolithic origins of humans through the Reformation.

**HIST 1120 - Western
Civilization II (3CR)**

(3L) [E] A general survey of the modern world, from the Reformation to the present.

Emphasis is equally divided between national histories and the development of Europe as a whole, including the impact of the West on the entire world.

**HIST 1211 - United States
to 1865 (3CR)**

(3L) [E] A survey of the economic, social and political development of the United States from earliest exploration through the Civil War, with some emphasis on the American Constitution and its development as well as the Wyoming Constitution. This course will satisfy the statutory requirement of the U. S. and Wyoming Constitutions for Casper College and the University of Wyoming.

**HIST 1221 - United States
from 1865 (3CR)**

(3L) [E] A survey of the economic, social, and political development of the United States from reconstruction to the present. This course will satisfy the statutory requirement of the U.S. and Wyoming Constitution.

**HIST 1251 - History of
Wyoming (3CR)**

(3L) [E] A survey course which examines aspects of Wyoming's frontier history. This course will also satisfy the statutory requirement of the U.S. and Wyoming Constitution.

**HIST 2080 - Holocaust
(3CR)**

(3L) [E] This course will explore the foundations of the Third Reich beginning immediately after World War I and ending in May 1945. Among the issues that will be discussed are the economic, military and social factors that led to the rise of National Socialism, Adolf Hitler

and the other members of the NSDAP hierarchy that influenced the development of political and social doctrine in Germany, the legal maneuvering that legitimized genocide, the role of the SS including concentration camp administration and mobile killing operations in the East. The process of deportation, ghettoization and liquidation of the Jews of Europe in the death camps will be a central area of emphasis.

**HIST 2115 - Twentieth
Century Europe (3CR)**

(3L) History 2115 analyzes European history from 1900-1991. Special attention will be paid to the Great War, Russian Revolution, World War II and the Cold War.

**HIST 2240 - History of
Russia Since 1855 (3CR)**

(3L) General survey of modern Russian history from 1855 to present.

**HIST 2300 - World War II
(3CR)**

(3L) The Second World War is, arguably, the most significant military, political and social event of the Twentieth Century. The millions of military and civilian deaths, the destruction of infrastructure and the postwar Allied military governments in Germany and Japan all affected the way that the world was shaped. In this class we will examine the Second World War including the political and social upheaval in Europe following World War One that made possible the rise of National Socialism in Germany and Bolshevism in Russia. The expansionist goals of Imperial Japan and the resulting Pacific

war will also be discussed as will the Holocaust and the Nazis' war against the Jews of Europe.

HIST 2450 - History of Ireland (3CR)

(3L) This course surveys the history of Ireland beginning with the Celtic invasion of the island to 21st century efforts to establish a lasting peace in the North. Major topics include the impact of invasions (Celtic, Viking, and especially English) early modern, and modern Irish History.

HIST 2475 - Independent Study

(1-3CR) An opportunity for students to develop projects in their particular area of interest within the history discipline.

Hospitality

HOSP 1520 - Introduction to Hospitality and Tourism Management (3CR)

(3L) Overview of the components of the hospitality and tourism industry from a historical, social, philosophical, and organizational perspective. Includes the study of the industry from regional, state, national and international perspectives for those who want to pursue a career in the industry and for those who want to develop their job skills.

HOSP 1540 - Hotel Operations Management (3CR)

(3L) Examines the basic management functions of planning, budgeting, controlling, staffing, and operating a hotel property. Includes topics such as front office operations, night audit and financial procedures,

hospitality management information systems, and legal and human resources practices.

HOSP 1560 - Convention Sales and Management (3CR)

(3L) Defines the scope and various segments of the convention market, explains what is required to meet individual needs, and explores methods and techniques which lead to better sales and service.

HOSP 1570 - Human Resource Hospitality Management (3CR)

(3L) This course presents a systematic approach to human resource management in the hospitality industry. Students will analyze contemporary issues and practices, as well as the trends that transform the way people are managed.

HOSP 2520 - Marketing of Hospitality Services (3CR)

(3L) This course teaches how to use proven marketing techniques to improve business, and how to discover, identify and reach the desired customer by using marketing tactics specific to hospitality services.

HOSP 2525 - Recreation and Tourism Planning and Development (3CR)

(3L) Investigates the policy, planning, development, and management practices related to recreation; outdoor conservation practices; state and national park regulations; and other tourism opportunities.

HOSP 2530 - Tourism Management (3CR)

(3L) Explores major concepts in tourism and how tourism is an important factor in economic development on the local, state, regional, national and global stages. Provides an overview of the principles, practices, and philosophies that affect the cultural, social, economic, psychological, and marketing aspects of human travel and the tourism industry.

HOSP 2535 - Planning and Control for Food and Beverage Operations (3CR)

(3L) Students will be exposed to the most up-to-date control processes used to reduce costs in food and beverage operations worldwide. The course provides an increased focus on multi-unit-management and technology applications and exposing students to cutting-edge resources.

HOSP 2540 - Bar and Beverage Management (3CR)

(3L) This course provides an introduction to bar and beverage management; planning, equipping, staffing, operating, and marketing a facility; how beverages are made, purchased, controlled, and mixed into different kinds of drinks.

HOSP 2600 - Leadership and Management in the Hospitality Industry (3CR)

(3L) This course explores quality and leadership issues in today's hospitality industry. Topics include power and empowerment; communication; goal setting; high-performance teams; diversity; managing

organizational change; and strategic career planning. Students will learn why traditional management theories don't fit today's industry, and how a company's service strategy relates to guest perception of value.

HOSP 2620 - Training and Development for the Hospitality Industry (3CR)

(3L) Training is the key to keeping pace with the hospitality industry's changing demands for a qualified workforce. Learn how to develop, conduct, and evaluate one-on-one and group training that will reduce turnover, improve job performance, and help any organization attain its goals. Students will discover why training is an important investment for their property, how to train various levels of employees and how to implement effective instructional design techniques and processes.

HOSP 2980 - Cooperative Work Experience (Hospitality Management)

(1-3CR) (Max. 9) Students are afforded the opportunity to gain practical on-the-job experience in their area of hospitality management. Students will be supervised by the program coordinator and the employer. A minimum of 80 hours of on-the-job training represents one credit hour. Student must maintain 12 credit hours with a 2.0 GPA during the semester.

Prerequisites: full-time hospitality management major and permission of program coordinator.

Human Development

HMDV 1025 - Introduction to Online Learning (1CR)

(1L) This fully online course is designed to teach students how to use and navigate through the Moodle4Me course management system, learn the basics of internet use, email communication, file management, college resources, and library use. Students will use various tutorial materials and corresponding hands-on activities to complete requirements.

HMDV 1101 - First-Year Seminar (3CR)

(3L) A first-year seminar focused on critical thinking and college success strategies. As individuals, and in groups, students examine the personal, social, civic, and economic goals of a college education, with emphasis on cognitive, moral, aesthetic, and identity development. During the class, students do research, they think through complex issues, consult with others, and in the end, present samples of their work to the instructor and classmates,. Each semester, multiple sections

HMDV 1200 - Academic and Career Orientation (2CR)

(2L) This course consists of three primary components: self-assessment, including assessment of the student's interests, aptitudes, and values; job search skills, including learning how and where to look for employment, devising cover letters and a resume, proper completion of employment applications, interview skills, and follow-up techniques; and a series of guest speakers who

lecture and answer questions concerning a variety of careers, thereby expanding the student's knowledge about occupations.

HMDV 1300 - On Course (2CR)

(2L) Provides students with academic and personal strategies for a successful transition to the college. Topics include study skill techniques such as reading, note taking, test taking and organizing and rehearsing study materials. Other topics touched on include accepting responsibility, motivation, self-management, interdependence, and self-awareness. This course will also introduce students to campus resources.

Humanities

HUMN 2020 - Introduction to American Culture (3CR)

(3L) This course is designed as an overview of American culture. All students will develop a framework for a better understanding of some specific aspects of American life, such as family, education, religion, politics and business. This course will be particularly beneficial for students who have a limited knowledge of the values, perspectives, institutions, and traditions which bind Americans together.

HUMN 2045 - Asian Art and Culture (3CR)

(3L) A survey of the visual arts produced in Asia and the Pacific region from the Neolithic era forward. Emphasis will be placed on understanding the cultural, political and/or religious significance of the works in addition to the styles

and methods employed in their creation.

HUMN 2140 - World Literature I (3CR)

(3L) Although primarily a study of the literature of the Classical Period of ancient Greece and Rome, some attention will be paid to the other arts, to religion, and to philosophy. Literary values and the qualities of the greatness of selected works of Western civilization, including any ideas embodied in those works, will be the focus.

Prerequisites: ENGL 1010.
Cross-listed: (Cross-listed as ENGL 2140.)

HUMN 2150 - World Literature II (3CR)

(3L) Although primarily a study of the literature of the Middle Ages and beyond, attention will be paid to the other arts, to religion, and to philosophy. Literary values and the qualities of the greatness of selected works of Western Civilization, including any ideas embodied in those works, will be the focus. The class may also include works, including modern works, late in the semester.

Prerequisites: ENGL 1010.
Cross-listed: (Cross-listed as ENGL 2150.)

HUMN 2230 - Humanities in Europe: Study of the Origins of Western Culture (3CR)

(3L) A study of the origins of Western culture by participating in Casper College's "Humanities Program in Europe." Students will read certain European literary classics before leaving for Europe (Decameron, Autobiography of Benvenuto

Cellini, Life of St. Francis of Assisi, etc.). In Europe, students will take trips to historical and cultural sites, primarily in Florence, Italy and other nearby cities (Assisi, Rome, Venice, Pisa, etc.) in order to study Western cultural origins by directly experiencing the visual arts: painting, sculpture, and architecture. Lectures will be given in Europe in which an attempt will be made to integrate what students have read and experienced.

HUMN 2250 - Ideas in Ancient Literature, Greek, Roman, Hebrew

(2-3L) (2-3CR) The study of representative literary classics selected from Greek, Roman and Hebrew literature.

HUMN 2251 - Ideas in Medieval Literature

(2-3L) (2-3CR) The study of representative literary classics selected from Medieval literature.

HUMN 2252 - Ideas in Renaissance Literature

(2-3L) (2-3CR) The study of representative literary classics selected from Renaissance literature.

HUMN 2253 - Ideas in Modern Literature

(2-3L) (2-3CR) The study of representative literary classics selected from modern literature.

HUMN 2320 - The Quest for American Identity (3CR)

(3L) This interdisciplinary seminar explores the question of what it means to be an American. By learning from earlier debates over immigration

and the African American experience, we will shed light on the role of race and ethnicity in the quest for American identity in the postmodern era.

Prerequisites: admission into the honors program.

HUMN 2425 - World Health (3CR)

(3L) Health is defined by culture and is manifested in the daily life of a society through values, beliefs, health practices, family systems, finances, politics, education, arts and the environment. In addition, the ongoing issues of access, quality and cost of healthcare affect the health of individuals and communities. They also have an impact on the economy and the quality of life of a society. Students must enroll in the college tour attached to this course independently, to ensure travel arrangement to make this learning experience possible.

HUMN 2475 - Independent Reading in Humanistic Values

(1-3CR) (Max. 6) of credit under the tutelage of an instructor who agrees to work with the student. The instructor may also require some written work from the student, but this is left to the instructor's discretion.

HUMN 2485 - Seminar in Humanities: (Subtitle)

(1-3L) (1-3CR) (Max. 12)
Offered in answer to specific need or public interest. Includes intensive seminars with a concentrated focus.

Information Management

IMGT 2400 - Introduction to Information Management (3CR)
(3L) [E] Concerned with managing the use of information systems to make organizations more competitive and efficient. Specific topics include organizational and technical foundation of information systems and building and managing systems.

Prerequisites: COSC 1200.

Insect Biology

ENTO 2005 - Insect Biology (4CR)
(3L, 3LB) This course provides students with an introduction to insects and related arthropods. Aspects of insect biology, ecology, behavior and life history will be covered, with emphasis on their effect on humans. The lab will cover insect anatomy, taxonomy and diversity, with an insect collection required of all students.

Prerequisites: BIOL 1000 or equivalent.

Instructional Technology

ITEC 2360 - Teaching with Technology (3CR)
(3L) [E] Introduction to effective use of computers and other instructional technologies for instruction; software/hardware selection; integrated, professional, and instructional applications as applied to all areas and levels of P-12

education.

Prerequisites: EDFD 2020 and EDCI 1500.

ITEC 2525 - Teaching Online with Moodle (3CR)

(2L, 2LB) The purpose of this course is to assist faculty in becoming more familiar with the Moodle Learning Management System (LMS). Faculty will study the skills required for constructing and delivering a course in the Moodle platform.

International Studies

INST 1200 - Non-Western Political Cultures (3CR)
(3L) This course gives students an appreciation of non-Western political cultures and how these cultures have created different political institutions and practices. Non-Western nations of Asia, Africa, and the Middle East are used as case studies.

Cross-listed: POLS 1200

INST 2310 - Introduction to International Relations (3CR)

(3L,) A theoretical and practical survey of the international political system, including concepts of power and power relationship, elements of international organizations and contemporary international relations.

Prerequisites: Must have completed POLS 1000 or HIST 1120 or have permission of the instructor.

Cross-listed: POLS 2310

INST 2350 - Introduction to Global Studies (3CR)
(3L) This course introduces students to the main components of the interdisciplinary major in International Studies and to provide preparation for further study of key issues related to globalization.

Internet

INET 1590 - Web Page Design (3CR)
(2L, 2LB) This course is an introduction to web page authoring. Students develop basic skills in: designing, formatting, managing collections of related web pages, finding WWW resources, and publishing to a server. Extra laboratory work may be required. Windows and Word experience are recommended.

INET 1610 - Dynamic Web Graphics (3CR)
(2L, 2LB) This course introduces students to dynamic web graphics. Upon completion of this course, participants will have the skills to design and deliver low-bandwidth dynamic websites that incorporate vector graphics with bitmaps, audio, animation, and advanced interactivity to create web experiences that attract and engage visitors. Keyboarding ability is recommended.

INET 1650 - Web Programming I (3CR)
(2L, 2LB) This course covers the essential concepts of HTML, XML, CSS and beginning JavaScript. Students begin by developing a basic Web page and move on to developing a basic web site. Topics include: working with page design,

tables, and frames, creating Web page forms; working with cascading style sheets using multimedia on the Web;HTML and elementary JavaScript; working with objects special effects; windows and frames, and forms.

INET 1885 - Adobe Photoshop for the Web (3CR)

(2L, 2LB) This course will teach students key Photoshop concepts and techniques utilizing the industry standard digital imaging software, Adobe Photoshop CS3. Using clear, step-by-step, project based lessons, students will walk through the creation of a specific project with each class building on the student's growing knowledge of the program. The information will be geared toward GUI (Graphic User Interface) specifically based on current WC3 web standards and best practices.

INET 1890 - Introduction to Web Design (3CR)

(2L, 2LB) This course will allow students to explore and discuss, among many topics, the history of web design, web constraints and advantages, web vs print, design basics, site purpose/location/content, matrix design, accessibility, usability, style, look and feel, fixed vs liquid, liabilities, copyrights, inspiration and trends, etc. Students will also learn what is considered "good" vs "bad" in the subjective and ever-changing world of web design.

INET 2665 - New Media Communication (3CR)

(2L, 2LB) Students will receive an introduction into the field that includes all forms of computer-enhanced communication. They

will be exposed to the possibilities of utilizing facets of this realm within business and marketing initiatives. Mediums such as television and radio stand to gain from the advantages of two-way dialogue with consumers primarily through the Internet. Examples include video games and virtual worlds as they impact marketing and public relations, multimedia CD-ROMs and DVDs, interactive websites, blogs and vblogs, podcasting, mobile devices, streaming video and streaming audio, online communities, and much more as the technology progresses.

Prerequisites: permission of the instructor.

INET 2670 - Internet Ethics and Cyber Law (3CR)

(3L) This course will discuss current statutes and possible future trends in Internet ethics and cyber law. We will discuss such topics as intellectual property law vs the first amendment, copyrights, trademarks and the Web, cookies, email privacy, censorship, seminal legal cases and much more.

INET 2675 - Web Design Business Fundamentals (3CR)

(3L) This course will present proven techniques for building a successful web design business. It will include strategies to win more business and boost income and will assist students in overcoming the fear of selling themselves and their business. It will also offer practical advice on organizing a business and techniques to maximize revenue from existing and new clients.

Prerequisites: permission of the instructor.

INET 2895 - Web Design Capstone/Seminar (3CR)

(2L, 2LB) The student will participate in an individual or group class project whereas they research, design, construct and maintain a complete interactive website for a local nonprofit agency or group that is approved by the instructor. This will serve as a culminating activity implementing all appropriate modalities taught within the degree parameters. The website(s) will be handed over to the nonprofit at the end of the course free of charge for them to carry forward.

Prerequisites: permission of the instructor.

Japanese

JAPN 0900 - Japanese for Travelers (1CR)

(1L) This course uses a multi-skill approach; listening, speaking, reading and writing of vocabulary appropriate to travelers who visit Japanese-speaking areas. Students will also become familiar with the culture of Japan.

JAPN 1010 - First Year Japanese I (4CR)

(4L) This course provides an introduction to the Japanese language through a multi-skill approach and understanding of the Japanese culture/society. Students who want to take for credit the next course in the sequence must complete this course with a grade of "C" or better.

**JAPN 1020 - First Year
Japanese II (4CR)**

(4L) This course is a continuation of JAPN 1010. Students who want to take for credit the next course in the sequence must complete this course with a grade of "C" or better.

Prerequisites: JAPN 1010.

**JAPN 2030 - Second Year
Japanese I (4CR)**

(4L) [E] This course is a continuation of Japanese language study at a higher level. Students who want to take for credit the next course in the sequence must complete this course with a grade of "C" or better.

Prerequisites: JAPN 1020.

Kinesiology

**KIN 1020 - Taping and
Wrapping for Orthopedic
Injuries (1CR)**

(2LB) This course introduces students to basic taping and wrapping techniques used to prevent and treat common orthopedic pathologies. Students will obtain both didactic information and practical application of taping and wrapping techniques, splinting and ambulatory devices, as well as guidelines for fitting protective equipment.

**KIN 1052 - Introduction to
Athletic Training (3CR)**

(3L) [E] The purpose of this course is to provide the prospective athletic trainer with the skill and knowledge necessary to implement a risk management and preventative

program for athletes and others involved in physical activity.

**KIN 1058 - Emergency
Management of Athletic
Injury/Illness (3CR)**

(3L) [E] The purpose of this course is to provide the prospective athletic trainer with the skill and knowledge necessary to provide for emergency care, triage, and management of emergencies and life-threatening situations for the physically active.

Concurrently: Concurrent Enrollment in KIN 2068 is required

**KIN 1960 - Kinesiology
and Health Promotion
Experience I (1CR)**

(2LB) This course introduces students to basics of Health Club / Fitness Center Operations. Students will obtain both didactic information and practical application of the day to day operations in all areas of a Health Clubs / Fitness Centers. Students will have experiences in each of the following areas: 1) Front Desk 2) Programming / Group Ex. / Fitness / Social 3) Facilities / Maintenance 4) Back of House / Business Operations 5) Sales / Marketing 6) Management. As needed

**KIN 2050 - Functional
Kinesiology (3CR)**

(2L, 2LB) Building from anatomy knowledge, this course provides a study of normal mechanics of human movement and functional limitations related to disabling conditions. Upper and lower extremity function is studied. Range of motion and manual muscle testing of kinesthetic movement are

practiced. Neuroanatomy concepts related to disabling conditions are presented.

Prerequisites: ZOO 2040/ZOO 2041.

**KIN 2057 - Assessment
and Evaluation of Athletic
Injuries/Illness I (3CR)**

(3L) This course provides the prospective athletic trainer with the skill and knowledge necessary to evaluate and recognize upper extremity, cervical spine, and head injuries that occur to the athlete and the physically active.

**KIN 2058 - Assessment
and Evaluation of Athletic
Injuries/Illness II (3CR)**

(3L) This course provides the prospective athletic trainer with the skill and knowledge necessary to evaluate and recognize lower extremity and spine injuries that occur to the athlete and physically active.

**KIN 2068 - Athletic
Training Clinical I (1CR)**

(2LB) This course provides clinical and field experience for the athletic training student. Skill and knowledge learned in KIN 1052 and KIN 1058 are applied in the clinical and field settings.

**KIN 2078 - Athletic
Training Clinical II (1CR)**

(2LB) This course provides clinical and field experience for the athletic training student. Skill and knowledge learned in KIN 1052 and KIN 1058 are applied in the clinical and field settings.

KIN 2098 - Athletic Training Clinical III (1CR)
(2LB) This course provides clinical and field experience for the athletic training student. Skill and knowledge learned in KIN 1052, KIN 1058 and KIN 2057 are applied in the clinical and field settings.

KIN 2135 - Directed Study in Human Prosection (3CR)
(1L, 4LB) In this course students will engage in detailed regional dissection of the human body with an emphasis on dissection techniques. It is designed to provide students who already have experience working with a human anatomical donor an additional opportunity to enhance their knowledge of human structure. The donor used for this course will serve as the prosection specimen in ZOO 2140.

Prerequisites: ZOO 2140, or permission of the instructor.

KIN 2960 - Kinesiology and Health Promotion Experience II (2CR)
(4LB) This course will build on the knowledge gained from KIN 1960. The students will pick 3 areas of the previous experience to get a more in depth training and instruction in each of those areas. As needed

Prerequisites: KIN 1960: Kinesiology and Health Promotion Experience I

KIN 2970 - Kinesiology & Health Promotion Experience III (4CR)
(8LB) This course provides a clinical / field internship experience where the student

will be able to apply the skills and knowledge previously learned. This can be a rotating offering depending upon where the individual student is in their program

Prerequisites: KIN 1960 and KIN 2960

Latin

LATN 1010 - First Year Latin I (4CR)
(4L) The course will cover reading and writing the Latin language; Latin grammar and vocabulary; principles of English grammar and structure; Latin mottoes and proverbs in use today; English derivatives; study of Roman life, history and mythology; and study of how the Romans have influenced architecture, English, literature, medicine, law, government, science, Romance languages, math, advertising, business, and many other subjects. Students who want to take for credit the next course in the sequence must complete this course with a grade of "C" or better.

LATN 1020 - First Year Latin II (4CR)
(4L) The course will expand on the material covered in LATN 1010. Students who want to take for credit the next course in the sequence must complete this course with a grade of "C" or better.

Prerequisites: LATN 1010.

LATN 2030 - Second Year Latin I (4CR)
(4L) Students will read simple texts, short stories and dramas of Roman authors and review Latin grammar and conversation. The

course will build on information learned in LATN 1010 and LATN 1020, including: reading and writing the Latin language; Latin grammar and vocabulary; principles of English grammar and structure; Latin mottoes and proverbs in use today; English derivatives; study of Roman life, history and mythology; study of Roman influence in architecture, literature, medicine, law, government, science, Romance languages, math, advertising, business, English, and many other subjects. Students who want to take for credit the next course in the sequence must complete this course with a grade of "C" or better.

Prerequisites: LATN 1020 or equivalent.

Legal Assistance

LEGL 1610 - Introduction to the Paralegal Profession (3CR)

(3L) An introduction to the skills necessary to perform paralegal tasks such as briefing cases and interviewing clients. Will introduce students to substantive legal concepts, ethics, and to careers in the paralegal profession.

LEGL 1620 - Transactional Law (3CR)

(3L) Transactional law for the paralegal covers contracts, corporations, probate, and real property skills necessary for the practicing paralegal. Students also participate in a job search seminar.

Prerequisites: LEGL 1610.

LEGL 1700 - Legal Analysis (3CR)

(3L) Covers briefing, legal analysis, and synthesizing skills. Students will brief, analyze and synthesize cases on substantial law issues.

Prerequisites: LEGL 1610 or concurrent enrollment.

LEGL 1710 - Legal Research and Writing I (3CR)

(3L) Covers the basic tools of legal research: citation, federal and state decisions, digests, statutes, law reviews, the use of Shepard's and Westlaw. Students complete research exercises and write an interoffice memorandum.

Prerequisites: LEGL 1610, or permission of the instructor.

LEGL 1720 - Legal Research and Writing II (3CR)

(3L) Covers legal writing, fact investigation, interviewing fact witnesses, drafting witness statements and legal drafting.

Prerequisites: LEGL 1710.

LEGL 2500 - Civil Procedure (3CR)

(3L) Uses the Federal Rules of Civil Procedure and the Wyoming Rules of Civil Procedure to teach service of process, filing, discovery, and execution of judgments. Includes the drafting of pleadings and discovery documents, digesting depositions, compiling a medical chronology and case management.

Prerequisites: LEGL 1610.

LEGL 2550 - Litigation Support (3CR)

(3L) Covers substantive tort law in the framework of a trial. Students learn skills necessary to perform as litigation assistants by organizing a trial notebook, working with experts, preparing exhibits, and researching motions.

Prerequisites: LEGL 2500.

LEGL 2610 - Family Law (3CR)

(3L) Covers the substantive law of domestic relations with specific emphasis on the role of the paralegal in these cases.

LEGL 2970 - Legal Assistant Internship

(1-3CR) (Max. 6) Students are placed in a law firm, clerk's office, public defender's office, district attorney's office, or other appropriate legal environment. Students will be provided the opportunity to work as paralegals under the supervision of a lawyer and the instructor.

Prerequisites: LEGL 1710 and LEGL 2500.

LEGL 2975 - Independent Studies for the Legal Assistant

(1-3CR) (Max. 6) Faculty-guided research in areas of law relevant to a paralegal career. Students will be given the opportunity to research legal cases, law review articles and other materials. Students will be required to complete projects which will refine their paralegal skills.

Prerequisites: LEGL 1710.

Life Science

LIFE 1020 - Life Science (4CR)

(3L, 3LB) [E] Life Science is an introductory course emphasizing principles of biology including cell structure and function, genetics, ecology, evolution and organismal biology. The applications of these principles to societal issues such as the conservation of biodiversity, overpopulation and global environmental changes, biotechnology, and human wellness and disease are also considered. This course fulfills a laboratory science requirement for non-biology majors such as those in the social and behavioral sciences, humanistic studies, etc.

Concurrently: This course is a requirement of elementary education majors and should be taken prior to or concurrently with EDCI 1430.

LIFE 2400 - General Ecology (3CR)

(3L) [E] An introduction to the principles of ecology. Topics stressed include ecosystems, communities, populations, succession, aquatic and terrestrial habitats, natural selection, abiotic interactions, and speciation.

Prerequisites: BIOL 1000, BIOL 1010 or equivalent
Cross-listed: BIOL 2400

LIFE 2410 - Field Ecology I (2CR)

(5LB) [E] A field and laboratory course to introduce research methods in general ecology. Includes required field trips.

Prerequisites: BIOL 1010, or

permission of the instructor.
Cross-listed: BIOL 2410

LIFE 2480 - Cooperative Work Experience

(1-8CR) This course provides the opportunity to gain life science and/or wildlife management concepts from a vocational or employment experience within the student's area of specialization. A minimum of 80 hours of on-the-job training represents one semester credit hour. The instructor and the employer will supervise students.

Prerequisites:
Preapproval/consent of instructor; Life Sciences, Environmental Science, or Wildlife Management major. Students must have a 2.0 GPA.
Cross-listed: ENR 2480

Machine Tool Technology

MCHT 1570 - Machine Trades Computations (2CR)

(2L) Practical application of mathematical problems and formulas directly related to the machine shop.

MCHT 1610 - Machine Tool Technology I (2CR)
(1L, 2LB) An introduction to machine tools and processes. Includes theory and operation of the engine lathe, vertical and horizontal milling machines, bore development and conditioning, sawing, grinding, threading, layout, and machine maintenance.

MCHT 1620 - Machine Tool Technology II (2CR)

(1L, 2LB) A continuation of MCHT 1610 with more complicated operations and in depth theory. Topics include shapers, indexing, boring, and broaching.

Prerequisites: MCHT 1610.

MCHT 1640 - Basic Machining Practice (10CR)

(4L, 12LB) Introduction to bench work and machining processes. Includes work on saws, drilling machines, engine lathes, and milling machines.

MCHT 1650 - Intermediate Machining Practice (10CR)

(4L, 12LB) A continuation of MCHT 1640 with more complicated machining operations and theory.

Prerequisites: MCHT 1640.

MCHT 1680 - Blueprint Reading (2CR)

(2L) Introduces the student to the fundamentals of blueprint reading and freehand sketching as it applies to the machine shop.

MCHT 1700 - Introduction to CNC Plasma Operations (2CR)

(1L)(2LB) An introduction to the operation and basic programming of the CNC Plasma cutting machine. Also covered will be a beginning class on simple CAD software (utilized with the plasma machine).

Prerequisites: None

MCHT 1900 - Basic Machine Shop for Gunsmithing (4CR)

(2L, 4LB) An introduction to machine tools and processes with an emphasis on gunsmithing applications. Class will include theory and operation of the lathe, milling machines, sawing, grinding, threading, layout, precision measuring devices and tool sharpening.

MCHT 1980 - Cooperative Work Experience (Machine Shop)

(1-8CR) (Max. 8) On-the-job training with a cooperative machine shop. Weekly work reports and 80 hours of work for each hour of credit.

Prerequisites: permission of the instructor.

MCHT 2650 - Advanced Machining Practice (5CR)

(2L, 6LB) Advanced theory and machine operation for second year students.

Prerequisites: MCHT 1650

MCHT 2680 - Metallurgy (3CR)

(2L, 2LB) Introduction in different grain structures of commonly used metals and their reaction to heat treatment, welding, machining, surface treatments, and mechanical stress. Various laboratory exercises on stress relief, shrinkage, fatigue, and cooling rates will be presented. The course is designed for anyone interested in welding, machining or technical education requiring knowledge of classification and characteristics of metals.

MCHT 2780 - Computer Numerical Control (CNC) Machining Center (4CR)
(2L, 4LB) An introductory course in 3-axis CNC machining center programming and 2-axis CNC plasma cutter programming. The course is structured so no prior experience with CNC machining center or CNC plasma programming or operation is required. The time will be divided between classroom and shop.

MCHT 2790 - Computer Numerical Control (CNC) Turning Center (4CR)
(2L, 4LB) An introductory course in two-axis CNC turning center programming. The course is structured so no prior experience with CNC lathe programming or operation is required. The time will be divided between classroom and shop.

MCHT 2800 - Computer Assisted Manufacturing (3CR)
(2L, 2LB) Computer applications in programming machine tools. CNC Machining Center and CNC plasma cutter software will be used to acquaint students with CAD/CAM systems.

MCHT 2965 - Directed Studies
(1-2CR) (Max. 8) An option for students with sufficient background to pursue special problems in the machine shop under contract with the instructor.

Prerequisites: MCHT 1610 and permission of the instructor.

Management

HOSP 2320 - Food and Beverage Management (3CR)
(3L) Provides a basic understanding of food production and service management, reviewing sanitation, menu planning, purchasing, storage, and beverage management.

HOSP 2330 - Food and Beverage Services (3CR)
(3L) Provides students with practical skills and knowledge for effective management of food and beverage services in outlets ranging from cafeteria and coffee shops to room service, banquet areas, and high check average dining room. Presents basic service principles while emphasizing the special needs of guests.

MGT 1000 - Introduction to Supervision (2CR)
(2L) A practical course in business supervision covering communication, attitude perception and modification, group dynamics, orientation and training, discipline, grievances, and termination. Role playing is emphasized as a learning tool.

Prerequisites: BADM 1000 or MGT 2100, or permission of the instructor.

MGT 1200 - Human Resources Management (3CR)
(3L) Designed to present the methods, functions, and techniques of personnel administration. Emphasis is placed in recruiting, interviewing, selecting, placement, training, and

evaluation of personnel. Class discussions and projects will include topics of job design and analysis, compensation and benefit administration, human resource planning, and union/management relations.

Prerequisites: MGT 2100, or permission of the instructor.

MGT 2050 - Leading Organizational Change (3CR)
(3L) This class will combine leadership concepts with models of organizational change. Change will be examined at the individual, team, and organizational or systems level. The focus is on uncovering traps that create stress, waste resources, slow change efforts, or lead to outright failure and discovering how to lead, cope and win in the face of great change. Class participants become familiar with a variety of change models as they are utilized in real organizations attempting change. The class will examine how organizational culture is an ever-present barrier to lasting change and how that impacts the decision on the part of organizations to initiate change.

Prerequisites: MGT 2100 and completion of or concurrent enrollment in MGT 2150.

MGT 2100 - Principles of Management (3CR)
(3L) [E] Analyzes objectives, policies, organizational structure, material and human resource utilization, human relations, planning, innovating, and controlling as management responsibilities. Students also study and discuss current

activities in specific areas of business and industry.

MGT 2110 - Organizational Behavior (3CR)

(3L) This is an introductory course exposing students to theoretical assumptions of organizational change. Students will be introduced to such topics as organizational structure, recruitment, retention and succession planning, employee motivation, and diversity and culture within the workplace. Students will explore how diversity and culture impact individuals, organizations and society. Students will learn practical operations of recruiting, retention and development of employees by focusing on matching employees' needs and aspirations within the organization. They will study the different types of organizational structures and their influence on organizational intelligence, employee development, learning and performance.

Prerequisites: MGT 2100.

MGT 2150 - Leadership (3CR)

(3L) This course will focus on the application of leadership skills in the classroom and in the context of management. There will be a thorough study of leadership theory up to the present, with a focus on how this theory has to be modified to accommodate our changing global environment in business. This course will also focus on how leadership will play a role in restructuring of our organizations, both profit and nonprofit, as business moves into the 21st century.

Prerequisites: MGT 1000, MGT 2100, or permission of the instructor.

MGT 2480 - Cooperative Work Experience (Management)

(1-3CR) (Max. 6) Students are afforded the opportunity to gain practical, on-the-job experience in their specialties. Students will be supervised by the program coordinator and the employer. A minimum of 80 hours of on-the-job training represents one semester hour. Students must maintain 12 credit hours with a 2.0 GPA during the semester.-

Prerequisites: full-time management major and permission of the program coordinator.

Manufacturing

MANF 1060 - Excel Technical Applications (3CR)

(3L) This course will focus on the technical application of Microsoft Excel and its use in an engineering/drafting office environment. Students will learn productivity tools in Excel and explore how to integrate Excel with computer aided drafting software to increase productivity.

Cross-listed: ENTK 1060

MANF 1610 - Introduction to Robotics (2CR)

(4LB) Students will explore the principles of robotics by building, programming, and modifying a robot. Students will gain experience in the following areas: fabrication, electronics, computer programming, physics, and teamwork.

MANF 1616 - Robot Construction (2CR)

(4LB) Advanced class in robotics. Students will be working on complex projects in designing, building, and programming a robot. Students will gain advanced experience in fabrication, electronics, computer programming, physics, and teamwork.

MANF 2525 - Design and Manufacturing Methods (4CR)

(2L, 4LB) A course emphasizing solid modeling and manufacturing techniques involved with various CNC equipment and the impacts of CAD on design and production. Manufacturing techniques utilizing CNC plasma, CNC router, laser engraver, machining/turning center and 3D printer will be covered in this course.

Concurrently: ENTK 2510 or instructor approval.

Cross-listed: ENTK 2525

MANF 2550 - Automation Control (3CR)

(2L, 3LB) Students will design, assemble, and program an automated system. Every other spring semester

Prerequisites: ELTR 2815 and ENTK 2525 or Permission of Instructor

MANF 2690 - Robot Welding (3CR)

(2L, 4LB) Students will learn the fundamentals of safely programming a robot for welding applications.

Prerequisites: WELD 1770 or WELD 1820 or permission of the instructor.

MANF 2975 - Independent Study Manufacturing

(1-3CR) Manufacturing majors who have completed the introductory courses may be permitted to contract with the instructor for special advanced problems in manufacturing applications.

Prerequisites: Sophomore standing and permission of instructor.

Marketing

MKT 1010 - Sales and Customer Relationship Management (3CR)

(3L) A survey of the principles and methods of the selling process and customer relationship management strategies. Covers topics needed to develop and manage long-term relationships with customers and suppliers. An emphasis is placed on relationship selling, presentation, prospecting, handling objectives, closing techniques, customer service, and service recovery strategies.

Prerequisites: None

MKT 1100 - Retailing (3CR)

(3L) The fundamentals of retail store organization and management such as the types of retail stores, site selection, store layout, pricing, display, promotion, and personnel policies.

MKT 1300 - Advertising (3CR)

(3L) National, regional, and local media, layouts, and promotional policies.

MKT 2000 - E-Marketing (3CR)

(3L) This course will teach students about the ever-changing world of e-marketing on the internet. The internet is the first marketing tool on earth that allows for instant networking to billions of potential customers within a personalized relationship model. As businesses all over the world transition their marketing resources to take advantage of this phenomenon, e-marketing has become a necessary and powerful tool. Students will incorporate contemporary software platforms related to digital marketing and apply foundational knowledge as it relates to the foundation of e-commerce, the role of independent third-parties, security standards and payment systems and software.

MKT 2100 - Principles of Marketing (3CR)

(3L) *[E]* Management's approach to analyzing and solving problems in product planning, pricing, promotion, and distribution of goods and services. Consumer orientation and marketing's key role in profitable business operations are emphasized.

MKT 2200 - Consumer Behavior (3CR)

(3L) This course is an analysis of the psychological and sociological aspects of consumer decision-making and behavior including learning, consumer perception, influence of individual predispositions or buying processes, and group influences.

Prerequisites: MKT 2100, or permission of the instructor.

MKT 2480 - Cooperative Work Experience (Marketing)

(1-3CR) (Max. 9) Students are afforded the opportunity to gain practical on-the-job experience in their specialties. Students will be supervised by the program coordinator and the employer. A minimum of 80 hours of on-the-job training represents one semester hour. The student must maintain 12 credit hours with a 2.0 GPA during the semester.

Prerequisites: full-time retail merchandising major and permission of the program coordinator.

Mathematics

MATH 0900 - Pre-Algebra Arithmetic (4CR)

(4L) The study of rational numbers, the operations of addition, subtraction, multiplication and division of same without a calculator; also includes the study of basic order of operations, unit conversion and percent problems, and linear equations.

Prerequisites: ACT Math score of 0-18, or an appropriate placement score within the last year. A 'C' or better in this class allows the student to take MATH 0920, MATH 0934 or MATH 1000 within the next academic year.

MATH 0920 - Elementary Algebra (4CR)

(4L) The study of integer exponents and their properties; linear equations and inequalities; to solve and to graph; also includes the study of function notation and system of equations; and the study of the

four basic operations of polynomials and factoring of polynomials.

Prerequisites: ACT Math score of 19-20, or an appropriate placement score within the past year, or a "C" or better in MATH 0900. A 'C' or better in the class allows the student to take MATH 0930 or MATH 1000 within the next academic year.

MATH 0925 - Math Study Skills (1CR)

(1L) Research-based procedures and skills to improve student's math learning and grades and reduce test anxiety. S/U grading only.

MATH 0930 - Intermediate Algebra (4CR)

(4L) The study of rational expression; the operations of addition, subtraction, multiplication and division of same; also includes the study of solutions and properties of rational, quadratic, exponential and logarithmic equations; in addition, students will study applications of same.

Prerequisites: ACT Math score of 21-22, or an appropriate placement score within the past year, or a C or better in MATH 0920. A 'C' or better in this class allows the student to take MATH 1100, MATH 1400 or MATH 1450 within the next academic year.

MATH 0934 - Elementary and Intermediate Algebra (5CR)

(5L) The study of integer exponents and their properties; linear equations and inequalities: to solve and to graph; also includes the study of function

notation and system of equations; and the study of the four basic operations of polynomials and factoring of polynomials; also includes the study of rational expressions; the operations of addition, subtraction, multiplication and division of same; also includes the study of solutions and properties of rational, quadratic, exponential and logarithmic equations; in addition, students will study applications of same. This class is an accelerated course that combines MATH 0920 and MATH 0930 content in one semester and is designed for the student who needs a review of these topics.

Prerequisites: ACT Math score of 19-20, an appropriate placement score within the past year, or a "C" or better in MATH 0900. A 'C' or better in this class allows the student to take MATH 1100, MATH 1400, or MATH 1450 within the next academic year.

MATH 1000 - Problem Solving (3CR)

(3L) [E] Focuses on the strategies of problem solving. Topics in the course are taken from financial mathematics, set theory, logic, probability, statistics and discrete mathematics and "just in time" algebra topics, such as exponents that are necessary to students in their success in this class and in their major.

Prerequisites: A "C" or better in MATH 0900; or an ACT Math score of 19 or better; or an appropriate placement score within the past year.

MATH 1100 - Number and Operations for Elementary School Teachers (3CR)

(3L) [E] This course is for prospective elementary school teachers. Its purpose is to prepare students to be competent in teaching the major concepts of the real number system with the four arithmetic operations. The course includes a study of problem solving, patterns, the origin of numeration systems, sets, number theory, the properties of whole, integer, rational and real numbers, and algorithms for addition, subtraction, multiplication and division.

Prerequisites: A "C" or better in MATH 0930 or MATH 0934 or an ACT Math score of 23 or better; or an appropriate placement score within the past year.

Concurrently: Must be taken concurrently with EDEL 1410.

MATH 1105 - Data, Probability and Algebra for Elementary School Teachers (3CR)

(3L) [E] This course is a continuation of MATH 1100 and is for prospective elementary school teachers. Its primary emphasis is asking and answering questions intelligently about our world through the use of algebra, probability, and data analysis in order to prepare students to be competent in teaching these major concepts. Explorations focus on representing, analyzing, generalizing, formalizing, and communicating patterns and the chances of future events.

Prerequisites: A "C" or better in MATH 1100.

MATH 1400 - Pre-Calculus Algebra (4CR)

(4L) [E] Elementary functions and graphing for mathematics, science, business, and engineering majors preparing for the regular calculus sequence. Includes exponential and logarithmic functions.

Prerequisites: A "C" or better in MATH 0930 or MATH 0934; or an ACT Math score of 23 or better; or an appropriate placement score within the past year.

MATH 1405 - Pre-Calculus Trigonometry (3CR)

(3L) [E] The study of the Unit Circle and right triangle approaches, including identities, trigonometric equations, applications of trigonometric functions, and conics. Designed for mathematics, science and engineering majors preparing for the regular calculus sequence.

Prerequisites: A "C" or better in MATH 1400; or an ACT score of 26 or better; or an appropriate placement score within the past year. Deletes two hours credit from MATH 1450.

MATH 1450 - Pre-Calculus Algebra and Trigonometry (5CR)

(5L) [E] Elementary algebraic and trigonometric functions and graphing for mathematics, science, and engineering majors preparing for the regular calculus sequence. Includes the material in both MATH 1400 and MATH 1405, as described above.

Prerequisites: ACT Math score of 24-25; or an appropriate placement score within the past year; or a "C" or better in MATH 0930 or MATH 0934.

Deletes credit for MATH 1400, and two hours of MATH 1405.

MATH 2120 - Geometry and Measurement for Elementary School Teachers (3CR)

(3L) [E] This course is a continuation of MATH 1105 and is for prospective elementary school teachers. Its primary emphasis is on the development of spatial reasoning. Explorations focus on the investigations of two- and three-dimensional shapes, including their properties, measurements, constructions, and transformations with the intent of preparing students to be competent in teaching these major concepts.

Prerequisites: A "C" or better in MATH 1105. Concurrent enrollment in EDEL 2410.

MATH 2200 - Calculus I (4CR)

(5L) [E] Introduction to the calculus of single variables. Covers derivatives of polynomial, trigonometric, exponential and logarithmic functions. Includes limits, applications of derivatives and related theorems.

Prerequisites: A "C" or better in MATH 1405 or MATH 1450; or an ACT Math score of 27 or better; or an appropriate placement score within the past year.

MATH 2205 - Calculus II (4CR)

(5L) [E] Completion of the calculus of single variables. Cover integrals of polynomial, trigonometric, exponential and logarithmic functions. Theory includes applications of

integration, methods of integration, elementary differential equations, and infinite sequences and series.

Prerequisites: A "C" or better in MATH 2200.

MATH 2210 - Calculus III (4CR)

(5L) [E] Multivariable calculus, including limits and continuity of functions of several variables, partial differentiation, multiple integration, and introduction to vector calculus.

Prerequisites: A "C" or better in MATH 2205.

MATH 2250 - Elementary Linear Algebra (3CR)

(3L) [E] The study of matrices, systems of equations, vector spaces, linear transformations, eigenvectors and applications of linear algebra.

Prerequisites: A "C" or better in MATH 2355 or MATH 2200.

MATH 2300 - Discrete Structures (3CR)

(3L) Dual listing. See COSC 2300 for course description.

MATH 2310 - Applied Differential Equations I (3CR)

(3L) [E] Solution of first order differential equations, differential operators, LaPlace transforms, systems, power series solutions, and applications.

Prerequisites: A "C" or better in MATH 2210.

MATH 2350 - Business Calculus I (4CR)

(4L) [E] The study of single variable calculus emphasizing applications in business, social and behavioral, or life sciences.

Prerequisites: A "C" or better in MATH 1400; or an ACT Math score of 26 or better; or an appropriate placement score within the past year.

MATH 2355 - Business Calculus II (4CR)

(4L) [E] This course is a continuation of MATH 2350. It is a study of integral calculus, emphasizing business, behavioral and social sciences. Topics include finance, matrix theory, probability, statistics and linear programming.

Prerequisites: A "C" or better in MATH 2350.

MATH 2800 - Math Majors Seminar (2CR)

(2L) Introduces mathematics majors to mathematical investigation, proof, and problem-solving techniques. Students will reinforce skills from previous mathematics courses and will be introduced to concepts from more advanced courses. Emphasis is placed on oral and written communication skills in mathematics.

Prerequisites: Completion of MATH 2250 with a C or better.

Medical Laboratory Technician**MLTK 1500 - Clinical Hematology and Hemostasis (3CR)**

(2L, 4LB) An introductory course in the theoretical

principles and procedures of hematology and hemostasis combined with relevant application to clinical laboratory medicine. This course provides background knowledge and opportunities to develop technical competencies for laboratory testing of blood, blood products, coagulation, and anticoagulant therapy. Emphasis is on the formed elements of the blood and components of the coagulation cascade and their correlation with pathophysiology.

Prerequisites: BIOL 1000 or BIOL 1010, or MOLB 2210 or MOLB 2240 or instructor permission.

MLTK 1600 - Clinical Immunohematology (3CR)

(2L, 4LB) Introductory course on the theoretical principles and procedures in immunohematology and serology (immunology) and their application in the medical laboratory. Emphasis is on blood banking procedures and potential problems that may be encountered in blood bank testing relative to antibody identification, compatibility testing, transfusion reactions and maternal/neonatal screening for hemolytic disease of the newborn. Course provides students with lectures and laboratory experience on immunohematology techniques.

Prerequisites: BIOL 1000 or BIOL 1010, or MOLB 2210, or MOLB 2240 or instructor permission.

MLTK 1700 - Microscopy: Urinalysis and Body Fluids (2CR)

(1L, 4LB) A variety of microscopic techniques are demonstrated and the advantages of each discussed. Theory and laboratory practice of routine and specialized procedures in analysis of urine and selected body fluids is presented. Clinical correlation between test results and disease states is emphasized.

Prerequisites: BIOL 1000 or BIOL 1010, or MOLB 2210, or MOLB 2240, or instructor permission.

MLTK 1800 - Principles of Phlebotomy (3CR)

(2L, 4LB) This didactic and laboratory course will introduce the student to the profession and practice of phlebotomy. Course activities and projects provide the student with knowledge and skills necessary to perform a variety of blood collection methods using proper techniques and precautions including: vacuum collection devices, syringes, capillary skin puncture, butterfly needles and blood culture specimen collection on adults, children and infants. Emphasis will be placed on infection prevention, universal precautions, proper patient identification, specimen acquisition, handling, processing, labeling, and quality assurance. Professional conduct, certification and federal regulatory issues will be covered as well.

MLTK 1970 - Clinical Practicum: Phlebotomy (2CR)

(120 Clinical Hours) This clinical laboratory practicum will introduce the student to the

profession and practice of phlebotomy. Students will observe and practice phlebotomy skills and job tasks. Emphasis is placed on the application of phlebotomy knowledge and skills necessary to perform a variety of blood collection methods using proper techniques and precautions including: vacuum collection devices, syringes, capillary skin puncture, butterfly needles and blood culture specimen collection on adults, children and infants. Infection prevention, universal precautions, proper patient identification, specimen acquisition, handling, processing, labeling, and quality assurance are essential tasks associated with the profession. Patient confidentiality must be maintained at all times and professional conduct is expected and assessed as part of the student grade.

Prerequisites: MLTK 1800 or concurrent enrollment or instructor permission.

MLTK 2500 - Clinical Chemistry (3CR)

(2L, 4LB) This course provides fundamental theory and principles of clinical chemistry, advanced instrumentation, and techniques used in clinical laboratories, pharmaceutical research and design, and biotechnology. Primary focus will be on student performance of diagnostic testing and its clinical correlation to disease states, preventive medicine and healthcare. Advanced topics in quality assurance, therapeutic drug monitoring and endocrinology will be discussed.

Prerequisites: CHEM 1005 and CHEM 1006, or CHEM 1025 and CHEM 1028, MATH

1000 or MATH 1400, and MLTK 1800 or permission of instructor.

MLTK 2600 - Clinical Microbiology I (2CR)

(1L, 4LB) Concentrated laboratory instruction in clinical microbiology including methods for recovery, identification of pathogens, culture techniques, procedures, antibiotic testing and interpretation of clinical data. Emphasis is on clinical specimens, testing algorithms and data correlation including diagnostics, public health, and quality control. This course provides the essential overview of information and technical competencies needed for the clinical experience for medical laboratory technician majors.

Prerequisites: MOLB 2210 or MOLB 2240 or instructor permission.

MLTK 2650 - Clinical Microbiology II (2CR)

(1L, 4LB) Concentrated laboratory instruction in clinical microbiology focusing on fastidious microorganisms, mycobacterium, parasites, viruses and pathogenic fungi. Laboratory skill will include the identification of pathogens, culture techniques, procedures, and interpretation of clinical data. This course provides an essential overview of information and technical competencies needed for the clinical experience for medical laboratory technician majors.

Prerequisites: MLTK 2600 or Instructor Permission.

MLTK 2700 - Immunology (4CR)

(3L, 3LB) Advanced biology course of immune systems: cellular and molecular mechanisms; host resistance to infectious agents; as well as hypersensitivities, autoimmunity, tumor and tissue rejection. Includes laboratory for molecular and immunological techniques.

Prerequisites: MLTK 2650 or concurrent enrollment or permission of the instructor.

MLTK 2800 - Clinical Pathophysiology (4CR)

(3L, 4LB) Advanced topics in clinical chemistry, microbiology, immunohematology, serology, hematology, laboratory management, professional development and laboratory regulatory issues. Students are presented with clinical scenarios for evaluation, interpretation, development of decision-making strategies and resolution. Clinical cases involve advanced principles of clinical laboratory medicine and management.

Prerequisites: MLTK 1500, MLTK 1600, MLTK 1700, MLTK 2500, MLTK 2600, MLTK 2650 and MLTK 2700.

Access to computer technology and internet services.

MLTK 2971 - Clinical Practicum: Hematology (2CR)

(160 clinical hours) This is an advanced course and clinical laboratory experience in the principles and procedures of hematology. It is an online supported, off-campus clinical laboratory experience taught by clinical faculty. Emphasis is on

the application of knowledge and technical skills to clinical testing, methodology, instrumentation, quality control, correlation of laboratory data with pathophysiology, OSHA practices and medical laboratory technician professionalism are included.

Prerequisites: MLTK 1500, MLTK 1600, MLTK 1700, MLTK 2500, MLTK 2600, MLTK 2650 and MLTK 2700. Access to computer technology and internet services.

MLTK 2972 - Clinical Practicum: Chemistry (2CR)

(160 clinical hours) This is an advanced course and clinical laboratory experience in the principles and procedures of chemistry. It is an online supported, off-campus clinical laboratory experience taught by clinical faculty. Emphasis is on the application of knowledge and technical skills to clinical testing, methodology, instrumentation, quality control, correlation of laboratory data with pathophysiology, OSHA practices and medical laboratory technician professionalism are included.

Prerequisites: MLTK 1500, MLTK 1600, MLTK 1700, MLTK 2500, MLTK 2600, MLTK 2650 and MLTK 2700. Access to computer technology and internet services.

MLTK 2973 - Clinical Practicum: Immunohematology (2CR)

(160 clinical hours) This is an advanced course and clinical laboratory experience in the principles and procedures of Immunohematology. It is an

online supported, off-campus clinical laboratory experience taught by clinical faculty. Emphasis is on the application of knowledge and technical skills to clinical testing, methodology, instrumentation, quality control, correlation of laboratory data with pathophysiology, OSHA practices and medical laboratory technician professionalism are included.

Prerequisites: MLTK 1500, MLTK 1600, MLTK 1700, MLTK 2500, MLTK 2600, MLTK 2650 and MLTK 2700. Access to computer technology and internet services.

MLTK 2974 - Clinical Practicum: Microbiology (2CR)

(160 clinical hours) This is an advanced course and clinical laboratory experience in the principles and procedures of microbiology. It is an online supported, off-campus clinical laboratory experience taught by clinical faculty. Emphasis is on the application of knowledge and technical skills to clinical testing, methodology, instrumentation, quality control, correlation of laboratory data with pathophysiology, OSHA practices and medical laboratory technician professionalism are included.

Prerequisites: MLTK 1500, MLTK 1600, MLTK 1700, MLTK 2500, MLTK 2600, MLTK 2650 and MLTK 2700. Access to computer technology and internet services.

MLTK 2976 - Clinical Practicum: Serology (1CR)

(80 clinical hours) This is an advanced course and clinical laboratory experience in the

principles and procedures of serology. It is an online supported, off-campus clinical laboratory experience taught by clinical faculty. Emphasis is on the application of knowledge and technical skills to clinical testing, methodology, instrumentation, quality control, correlation of laboratory data with pathophysiology, OSHA practices and medical laboratory technician professionalism are included.

Prerequisites: MLTK 1500, MLTK 1600, MLTK 1700, MLTK 2500, MLTK 2600, MLTK 2650 and MLTK 2700. Access to computer technology and internet services.

MLTK 2977 - Clinical Practicum: Urinalysis and Body Fluids (1CR)

(80 clinical hours) This is an advanced course and clinical laboratory experience in the principles and procedures of urinalysis and body fluid analysis. It is an online supported, off-campus clinical laboratory experience taught by clinical faculty. Emphasis is on the application of knowledge and technical skills to clinical testing, methodology, instrumentation, quality control, correlation of laboratory data with pathophysiology, OSHA practices and medical laboratory technician professionalism are included.

Prerequisites: MLTK 1500, MLTK 1600, MLTK 1700, MLTK 2500, MLTK 2600, MLTK 2650 and MLTK 2700. Access to computer technology and internet services.

MLTK 2978 - Clinical Practicum: Medical Laboratory Technician Professionalism (1CR)

(1L) This is an advanced course and clinical laboratory experience in the principles, procedures, and practice of the medical laboratory technician professional. It is an on-line supported, off-campus clinical laboratory experience taught by clinical faculty. Emphasis is on the career planning, continued professionalism, patient and interdisciplinary interaction, cultural diversity, phlebotomy technical skills, and clinical laboratory testing workflow. This course will be offered in the spring and fall terms to coincide with the MLTK clinical rotation.

Prerequisites: Prerequisites: MLTK 1500, MLTK 1600, MLTK 1700, MLTK 2500, MLTK 2600, MLTK 2650 and MLTK 2700. Access to computer technology and internet services.

Molecular Biology

MOLB 2210 - General Microbiology (4CR)

(3L, 3LB) [E] The characteristics of microorganisms will be studied in lecture and laboratory. Lecture will focus on microbiology physiology and classification. Laboratory exercises will emphasize techniques used to culture, isolate and diagnose various types of microorganisms.

MOLB 2220 - Pathogenic Microbiology (4CR)

(3L, 4LB) [E] A study of disease-producing microorganisms and the

laboratory techniques used in the study of these organisms. (Spring semester.)

Prerequisites: MOLB 2210.

MOLB 2240 - Medical Microbiology (4CR)

(3L, 3LB) A study of microorganisms, focusing microbial diversity, microbial physiology, identification, medical significance, basics of immune systems, epidemiology and the laboratory techniques used to study these microorganisms.

Prerequisites: A passing grade in BIOL 1000 or BIOL 1010 or the permission of the instructor. An understanding of general biological and chemical concepts is needed.

Music

MUSC 0200 - Convocation (0CR)

Convocation is a twice-monthly recital hour for students and guest performers. In addition to the scheduled convocations, students will be required to attend 10 additional approved concerts. Grading will be S/U. Completion of four semesters with a grade of S is required for all music majors pursuing a music degree. Full-time music students shall enroll in Convocation as long as they remain music majors.

Prerequisites: music majors only.

MUSC 1000 - Introduction to Music (3CR)

(3L) [E] A one-semester course in music appreciation designed for students with little or no music background. Covers many

genres of music to aid students in developing listening skills.

MUSC 1003 - Introduction to Life as a Music Major (3CR)

(3L) A course designed to prepare students for study in the entire music core curriculum through study of informational literacy, research methods, study skills, music technology, and the early history of the Western Music tradition. Fall semesters

MUSC 1010 - Music Fundamentals (2CR)

(2L) A general background course in the vocabulary and terminology of music, the structure of the melodic line through scales and solfeggio, the relationship of keys through the key circle, fundamental chord structure, rhythm, and the survey of smaller forms in music.

MUSC 1020 - Music Technology (1CR)

(2LB) Introduction in computer-based music applications and basic MIDI technology that students will use in music classes.

MUSC 1024 - The Art of Mixing (2CR)

(1L, 2LB) Become familiar with the steps and techniques necessary to create an audio mix that is pleasing to listeners. Learn the different steps required in the mixing process including techniques for balancing and blending music by utilizing faders, equalizers, compressors, and digital audio workstation (DAW) controls.

Prerequisites: Freshman standing preferred. Community and BOCES students welcome.

MUSC 1025 - Introduction to Music Education (2CR)
(2L) This course is designed to help music majors explore music education. It is a required course for admission into the teacher education program. Course materials will explore: motivation for teaching; the structure of the American public school and public school music programs; the changing nature of education; and an introduction to the historical and philosophical foundations of music education. A field experience is required.

Prerequisites: music majors only, or permission of the instructor.

MUSC 1030 - Written Theory I (3CR)
(3L) [E] This course will cover: the fundamentals of music including pitch and clefs, meter and rhythm, scales and modes, intervals, triads, and seventh chords; melodic structure, including motives, cadences, and embellishments; two- and three-part counterpoint; and an introduction to harmony and figured bass. This course is designed to be taken with MUSC 1035; MUSC 1010 may also be required as a co-requisite course depending on the results of the placement exam. Required for all music majors.

MUSC 1031 - Music Theory I for Musical Theatre (3CR)
(3L) This course focuses on practical music theory concepts specifically designed for Musical Theatre majors. The principal goal is to build fundamental music structure understanding, music reading, and rhythmic reading. Every fall.

MUSC 1035 - Aural Theory I (1CR)
(2LB) [E] Instruction in how to hear (dictate) and read (sight-sing) music fluently. Includes simple and compound meters; basic rhythms (beats and first division of the beat); and diatonic melodies in major and minor featuring stepwise motion and skips within the tonic and dominant triads. This course is designed to be taken with MUSC 1030; MUSC 1010 may also be required as a co-requisite course depending on the results of the placement exam. Required for all music majors.

MUSC 1040 - Written Theory II (3CR)
(3L) [E] A continuation of MUSC 1030. Covers diatonic harmony; structural schemas from the common practice era; two-, three-, and four-part writing; periods and binary forms; and variation techniques. This course is designed to be taken with MUSC 1045. Required for all music majors.

Prerequisites: MUSC 1030.

MUSC 1041 - Music Theory II for Musical Theatre (3CR)
(3L) This course continues to focus on practical music theory concepts specifically designed for Musical Theatre majors. The principal goal is to continue to build fundamental music structure understanding, music reading, and rhythmic reading. Every spring

Prerequisites: MUSC 1031

MUSC 1045 - Aural Theory II (1CR)
(2LB) [E] A continuation of MUSC 1035. Instruction in how to hear (dictate) and read (sight-sing) music fluently. Includes continued instruction in rhythms (second division of the beat and syncopation); diatonic and pentatonic melodies in major, minor, and modes featuring stepwise motion and skips within diatonic triads and seventh chords; and diatonic harmonies. This course is designed to be taken with MUSC 1040. Required for all music majors.

Prerequisites: MUSC 1035.

MUSC 1046 - Studio: Musical Theatre Voice (1CR)
(Max. 4) This course requires a one-half hour private lesson per week. This studio music course will provide instruction in both classical and musical theatre voice for musical theatre majors. A fee will be assessed.

MUSC 1070 - Studio: Music Composition (1-2CR)
(1-2CR) 30- or 60-minute weekly private instruction in music composition for majors and non-majors. Majors have a juried piece performed on a convocation, recital, or concert. Course content changes each semester. Fall and spring semesters

Prerequisites: MUSC 1030 or instructor's permission

**MUSC 1080 - Studio:
Baritone Horn I**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument for majors and non-majors. Majors attend scheduled studio classes and perform a final jury. A course fee is assessed. Course content changes each semester.

**MUSC 1090 - Studio:
Bassoon I**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument for majors and non-majors. Majors attend scheduled studio classes and perform a final jury. A course fee is assessed. Course content changes each semester.

MUSC 1100 - Studio Cello I

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument for majors and non-majors. Majors attend scheduled studio classes and perform a final jury. A course fee is assessed. Course content changes each semester.

**MUSC 1110 - Studio
Clarinet I**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument for majors and non-majors. Majors attend scheduled studio classes and perform a final jury. A course fee is assessed. Course content changes each semester.

**MUSC 1120 - Studio:
Double Bass I**

(1-2CR) (Max. 8) 30- or 60-minute weekly private

instruction in the specific instrument for majors and non-majors. Majors attend scheduled studio classes and perform a final jury. A course fee is assessed. Course content changes each semester.

MUSC 1130 - Studio: Flute I

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument for majors and non-majors. Majors attend scheduled studio classes and perform a final jury. A course fee is assessed. Course content changes each semester.

**MUSC 1140 - Studio:
French Horn I**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument for majors and non-majors. Majors attend scheduled studio classes and perform a final jury. A course fee is assessed. Course content changes each semester.

**MUSC 1150 - Studio:
Guitar I**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument for majors and non-majors. Majors attend scheduled studio classes and perform a final jury. A course fee is assessed. Course content changes each semester.

MUSC 1160 - Studio: Harp I

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument for majors and non-majors. Majors attend scheduled studio classes and perform a

final jury. A course fee is assessed. Course content changes each semester.

**MUSC 1170 - Studio:
Oboe I**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument for majors and non-majors. Majors attend scheduled studio classes and perform a final jury. A course fee is assessed. Course content changes each semester.

**MUSC 1180 - Studio:
Organ I**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument for majors and non-majors. Majors attend scheduled studio classes and perform a final jury. A course fee is assessed. Course content changes each semester.

**MUSC 1190 - Studio:
Percussion I**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument for majors and non-majors. Majors attend scheduled studio classes and perform a final jury. A course fee is assessed. Course content changes each semester.

**MUSC 1200 - Studio:
Piano I**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument for majors and non-majors. Majors attend scheduled studio classes and perform a final jury. A course fee is assessed. Course content changes each semester.

**MUSC 1210 - Studio:
Saxophone I**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument for majors and non-majors. Majors attend scheduled studio classes and perform a final jury. A course fee is assessed. Course content changes each semester.

**MUSC 1220 - Studio:
Trombone I**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument for majors and non-majors. Majors attend scheduled studio classes and perform a final jury. A course fee is assessed. Course content changes each semester.

**MUSC 1230 - Studio:
Trumpet I**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument for majors and non-majors. Majors attend scheduled studio classes and perform a final jury. A course fee is assessed. Course content changes each semester.

**MUSC 1240 - Studio:
Tuba I**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument for majors and non-majors. Majors attend scheduled studio classes and perform a final jury. A course fee is assessed. Course content changes each semester.

**MUSC 1250 - Studio:
Violin I**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument for majors and non-majors. Majors attend scheduled studio classes and perform a final jury. A course fee is assessed. Course content changes each semester.

**MUSC 1260 - Studio: Viola
I**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument for majors and non-majors. Majors attend scheduled studio classes and perform a final jury. A course fee is assessed. Course content changes each semester.

**MUSC 1270 - Studio:
Voice I**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument for majors and non-majors. Majors attend scheduled studio classes and perform a final jury. A course fee is assessed. Course content changes each semester.

**MUSC 1272 - Class Voice
(1CR)**

(2LB) Class instruction in the fundamentals of correct breathing, tone production and diction. Laboratory course designed for students with little or no previous voice training to aid in developing a pleasing tone quality produced with ease and proper enunciation.

**MUSC 1292 - Class Guitar
I (1CR)**

(2LB) The study of guitar utilizing traditional techniques

and approaches, designed to allow the student to utilize the guitar as a lifelong learning tool. No previous experience is necessary for enrollment. This course is open to all Casper College students.

**MUSC 1300 - Class Piano
I (1CR)**

(2LB) Group instruction for music majors concurrently enrolled in MUSC 1030. Designed to equip students with the practical aspects of keyboard fundamentals including technique, rhythm, note reading, scales, intervals, and primary chords. Non-music majors must have permission of the instructor.

**MUSC 1301 - Class Piano
II (1CR)**

(2LB) A continuation of MUSC 1300 for the music majors concurrently enrolled in MUSC 1040. Designed to equip students with late-elementary keyboard activities including improvisation, harmonization, sight reading, primary and secondary chords, major and minor scales, solo and ensemble literature. Non-music majors must have permission of the instructor.

Prerequisites: MUSC 1300, or permission of the instructor.

**MUSC 1310 - Public
School Methods: Brass
Methods I (1CR)**

(2LB) Group instruction in brass instruments for the major in music education. Instruments are supplied. This course is designed to provide sufficient background, technique, materials and methods to assist the student in starting elementary and secondary brass players for their

ensembles. Additionally, this course is designed to provide the student with ready-made references for their student teaching and future teaching experiences.

Prerequisites: MUSC 1030, MUSC 1035, MUSC 1040, MUSC 1045.

MUSC 1315 - Public School Methods: Brass Methods II (1CR)

(2LB) [E] Continued group instruction in brass instruments for the major in music education. Instruments are supplied.

Prerequisites: MUSC 1030, MUSC 1035, MUSC 1040, MUSC 1045 MUSC 1310.

MUSC 1330 - PSM: String Methods I (1CR)

(2LB) This course is designed to provide music education majors the opportunities for growth both as a teacher and as a player of bowed string instruments. Ample experiences will be provided for students to learn to play both cello and violin. Fall Semester

Prerequisites: Co-Requisites: MUSC 1030 and MUSC 1035

MUSC 1335 - PSM: String Methods II (1CR)

(2LB) This course is designed to provide music education majors the opportunities for growth both as a teacher and as a player of bowed string instruments. Ample experiences will be provided for students to learn to play both bass and viola. Students will also review concepts presented in MUSC 1330. Spring Semester only

Prerequisites:

Prerequisites: MUSC 1030, 1035, and 1330

MUSC 1350 - PSM: Woodwind Methods I (1CR)

2LB Introduction to teaching and playing woodwind instruments, geared toward music education majors. Semester I will focus on Flute, Clarinet, and Saxophone. Two 50 minute sessions per week.

Prerequisites: Sophomore Status. Must have received a C or higher in MUSC 1030 and MUSC 1040.

MUSC 1355 - PSM: Woodwind Methods II (1CR)

(2LB) Introduction to teaching and playing woodwind instruments, geared toward music education majors. This semester will focus on double reeds (oboe and bassoon). Two 50 minute sessions per week.

Prerequisites: Sophomore Status. Must have received a C or higher in MUSC 1030 and MUSC 1040.

MUSC 1378 - College Band (1CR)

(3LB) (Max. 4) Open to all students with experience on brass, woodwind, and percussion instruments. Ensemble prepares standard wind band repertoire for one concert performance per semester. Course content changes each semester.

Prerequisites: permission of the instructor.

MUSC 1380 - Wind Ensemble (1CR)

(3LB) The goal of this music performance course is to provide the opportunity for you as a woodwind, brass, or percussion performer to come together with other like-minded (and like-spirited) musicians in an ensemble setting to rehearse and perform standard and emerging literature from the wind ensemble repertoire.

In this course we will focus on overall concepts of self and ensemble expression, engagement, participation, and performance. We will also address musical concepts of ensemble and individual balance, blend, intonation, phrasing, dynamics, articulation, tone, rhythmic precision, color, and ensemble clarity. We are going to LISTEN – to ourselves, to each other, and to the music. Course content changes each semester. Fall and Spring Semesters

Prerequisites: Audition. Instructor Permission.

MUSC 1388 - Jazz Combo (1CR)

(2LB) (Max. 4) Small-group performance in various jazz styles. Emphasis on ensemble play and individual improvisation. Student arrangements encouraged. Course content changes each semester.

Prerequisites: MUSC 2060, concurrent enrollment in MUSC 2060, or permission of the instructor.

MUSC 1390 - Jazz Ensemble I (1CR)

(3LB) (Max. 4) [E] This laboratory group is open to all students with previous instrumental music experience. The jazz ensemble performs at assemblies, concerts, shows, and on tour. Course content changes each semester.

Prerequisites: permission of the instructor.

MUSC 1400 - Collegiate Chorale (1CR)

(3LB) (Max. 4) [E] A large non-auditioned mixed choir open to all students regardless of their field of study. Emphasis is on a wide variety of choral literature, including music of diverse cultures. The choir rehearses once each week and performs 1-2 times per semester. Course content changes each semester. Fall and Spring

MUSC 1406 - Women's Choir (1CR)

(2LB) (Max. 4) A performance class open to all sopranos and altos on campus designed to cover a variety of literature both traditional and multi-cultural, specifically for female voices. The course offers the non-audition student an opportunity to participate in a choral activity with fewer performance requirements than the two auditioned choral organizations. Course content changes each semester.

MUSC 1408 - Men's Choir (1CR)

(2LB) (Max. 4) A performance class open to all tenors and basses on campus designed to cover a variety of literature both traditional and multi-cultural, specifically for male voices. The

course offers the non-audition student an opportunity to participate in a choral activity with fewer performance requirements than the two auditioned choral organizations. Course content changes each semester.

MUSC 1410 - Contemporary Singers (1CR)

(3LB) (Max. 4) [E] A small vocal ensemble open to all students. The course provides an opportunity to study and perform a variety of diverse popular styles, and culminates in a number of performances in various venues. An audition determines the final roster of ensemble members. Course content changes each semester.

Prerequisites: audition with the instructor.

MUSC 1412 - Chamber Singers (1CR)

A selected mixed chamber ensemble of 20-35 voices open to all students on campus regardless of their field of study. An audition with the instructor determines the final list of singers. Credit is given for attendance at four weekly rehearsals and concert performances. Emphasis is on a wide variety of choral literature appropriate for chamber choirs, including music from diverse cultures, musical time periods, and language. Course content changes each semester. Fall and Spring

Prerequisites: Audition with Instructor

MUSC 1420 - Opera Workshop (1CR)

(3LB) (Max. 4) [E] Opera

Workshop is a performance-based class designed to provide experience and opportunities for singers interested in exploring the genre. Students will learn basic performance techniques and will improve their dramatic abilities through the performance of an operatic scene. Course content changes each semester.

Prerequisites: Permission of the instructor.

MUSC 1440 - Chamber Orchestra (1CR)

(2LB) (Max. 4) [E] A performance class open to all string players on campus. This course is designed to cover a variety of literature from primarily the Baroque era. Open to all students on campus, BOCES students and community members regardless of their field of study. Credit is given for attendance at the two weekly rehearsals and concert performances. Emphasis is placed on the study of stylistic concerns of string performance including bowings, articulations, dynamics and ensembles. Course content changes each semester.

Prerequisites: permission of the instructor.

MUSC 1450 - Percussion Ensemble (1CR)

(3LB) (Max. 4) [E] Performs selected diverse chamber music for various combinations of percussion instruments and is open to all students with previous percussion experience who can qualify by audition for participation. Course content changes each semester.

MUSC 1460 - Brass Ensemble (1CR)

(2LB) (Max. 4) [E] This group performs selected diverse chamber music and is open to all students with previous brass experience. Course content changes each semester.

Prerequisites: permission of the instructor.

MUSC 1462 - Trombone Ensemble (1CR)

(2LB) (Max. 4) For trombone players only. Emphasis is placed upon performance quality of selected chamber music in both the classical and jazz styles. Course content changes each semester.

Prerequisites: permission of the instructor.

MUSC 1470 - Woodwind Ensemble (1CR)

(2LB) (Max. 4) [E] Performs selected works at various student and public recitals and generally consists of woodwind quintet, quartet, trio, and duet. This group is open to all students with previous instrumental music experience. Course content changes each semester.

Prerequisites: permission of the instructor.

MUSC 1480 - Chamber Music I: (Subtitle) (1CR)

(2LB) (Max. 4) [E] Designed to provide students with training in the ideal medium of chamber music (small ensembles, such as trio, string quartet, etc...), where they can apply and integrate all elements of their musical knowledge. These include, but are not limited to, rhythm, intonation, tone production, blend, musical interpretation,

concept of style, etc... Subtitle will vary in accordance with student needs.

Prerequisites: permission of the instructor.

MUSC 1500 - Introduction to Pro Tools (1CR)

(1L) Introduction to Pro Tools Digital Audio Workstation Software. Familiarization with the user interface and understanding of the various features and capabilities.

Prerequisites: Freshman standing preferred, community and BOCES students welcome.

MUSC 2021 - Women in Music (3CR)

(3L) This course explores women's contribution to the field of Western music from Ancient Greece to modern times.

Prerequisites: None.
Cross-listed: WMST 2021

MUSC 2023 - Jazz History

3 This course examines the social, cultural, and stylistic history of jazz music, beginning with important musical precedents such as ragtime and dixieland, and progresses through bebop, hardbop, postbop, and free jazz into current global varieties and hybrids of jazz. Throughout the history, cultural and social contexts are presented and analyzed for their impact on the art form. In a three-semester rotation with History of Rock and World Music.

MUSC 2024 - History of Rock (3CR)

(3L) This course examines the social, cultural, and stylistic history of rock n' roll music,

beginning with important musical precedents such as blues and jazz, and progresses through punk and metal into current global varieties of rock n' roll. Throughout the history, cultural and social contexts are presented and analyzed for their impact on the art form.

MUSC 2025 - World Music (3CR)

(3L) Students learn strategies for how to listen to and compare the sound of various musical cultures. Students will also gain a deeper understanding of the local contexts of these musical expressions and how music carries meaning through complex networks of signification (e.g., ethnic identity, race, class, political, religious, economic, historical, technological, etc.).

MUSC 2026 - Intro to Film and Video Game Music (3CR)

(2L, 2LB) This course examines the history, musical elements, and musical styles of film and video game music. Beginning in the late 1800s with silent films and continuing to the present day, this course provides an overview of the major stylistic trends and musical influences that led to the development of film and video game scoring as a vital and living dramatic art form. Throughout the course, the interaction between sound, image, and narrative is explored. Spring semesters

MUSC 2030 - Written Theory III (3CR)

(3L) [E] A continuation of MUSC 1040. Covers chromatic harmony and modulation; vocal forms and analysis of art and pop songs; contrapuntal techniques

including fugue; composite ternary, rondo, and sonata forms. Required for all music majors.

Prerequisites: MUSC 1040.

MUSC 2035 - Aural Theory III (1CR)

(2LB) [E] A continuation of MUSC 1045. Instruction in how to hear (dictate) and read (sight-sing) music fluently. Includes continued instruction in rhythms (supertriplets and hemiola); chromatic melodies in major and minor featuring stepwise motion and chromatic skips; and chromatic harmonies. This course is designed to be taken with MUSC 2030. Required for all music majors.

Prerequisites: MUSC 1045.

MUSC 2040 - Written Theory IV (3CR)

(3L) [E] A continuation of MUSC 2030. Covers linear chromaticism and basic neo-Riemannian theory; Impressionistic scales and modes; atonality, basic set theory, and basic serial techniques; and other rhythmic, formal, and melodic processes of 20th-century music. This course is designed to be taken with MUSC 2045. Required for all music majors.

Prerequisites: MUSC 2030.

MUSC 2045 - Aural Theory IV (1CR)

(2LB) [E] A continuation of MUSC 2035. Instruction in how to hear (dictate) and read (sight-sing) music fluently. Includes continued instruction in meter and rhythms (asymmetric and changing meters, quintuplets, and septuplets); melodies and harmonies featuring modulation;

melodies featuring whole tone and octatonic scales and other common non-diatonic pitch collections; and aural recognition of musical forms. This course is designed to be taken with MUSC 2040. Required for all music majors.

Prerequisites: MUSC 2035.

MUSC 2050 - Music History Survey I (3CR)

(3L) [E] A comprehensive study of the history of music with emphasis on period method of study, beginning with the music of the ancient world. This takes the student through the Gregorian Chant and the modes of the 13th and 14th centuries, the Renaissance, church music, both vocal and instrumental, and to the closing of the period known as Baroque, at the death of J. S. Bach in 1750.

MUSC 2055 - Music History Survey II (3CR)

(3L) [E] Beginning with the period known as the Classical following the Baroque, the course continues into the Romantic period, Beethoven, 19th-century opera, impressionism, music drama of R. Wagner, and closes with music of the 20th century.

MUSC 2060 - Jazz Improvisation I (1CR)

(2LB) Offers the jazz-oriented student an organized approach to learning the extemporaneous creation of music in the jazz idiom. This creation is expressed by music performance.

Prerequisites: permission of the instructor.

MUSC 2065 - Jazz Improvisation II (1CR)

(2LB) A continuation of Jazz Improvisation I. Students will apply skills acquired in Improvisation I to jazz standards while learning more advanced scales, chord structures and techniques.

Prerequisites: MUSC 2060.

MUSC 2071 - Studio: Vocal or Instrumental

(1-2CR) 30- or 60- minute weekly private instruction in the specific instrument for majors and non-majors. Majors attend scheduled studio classes and perform a final jury. A course fee is assessed. Course content changes each semester.

MUSC 2080 - Studio: Baritone Horn II

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument. Scheduled studio classes and final jury are required. The 30-minute lesson is open to non-majors. The 60-minute lesson is open to non-majors with the permission of the instructor. A course fee is assessed. Course content changes each semester.

MUSC 2090 - Studio: Bassoon II

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument. Scheduled studio classes and final jury are required. The 30-minute lesson is open to non-majors. The 60-minute lesson is open to non-majors with the permission of the instructor. A course fee is assessed. Course content changes each semester.

**MUSC 2100 - Studio:
Cello II**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument. Scheduled studio classes and final jury are required. The 30-minute lesson is open to non-majors. The 60-minute lesson is open to non-majors with the permission of the instructor. A course fee is assessed. Course content changes each semester.

**MUSC 2110 - Studio:
Clarinet II**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument. Scheduled studio classes and final jury are required. The 30-minute lesson is open to non-majors. The 60-minute lesson is open to non-majors with the permission of the instructor. A course fee is assessed. Course content changes each semester.

**MUSC 2120 - Studio:
Double Bass II**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument. Scheduled studio classes and final jury are required. The 30-minute lesson is open to non-majors. The 60-minute lesson is open to non-majors with the permission of the instructor. A course fee is assessed. Course content changes each semester.

**MUSC 2130 - Studio: Flute
II**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument. Scheduled studio classes and final jury are required. The 30-minute lesson

is open to non-majors. The 60-minute lesson is open to non-majors with the permission of the instructor. A course fee is assessed. Course content changes each semester.

**MUSC 2140 - Studio:
French Horn II**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument. Scheduled studio classes and final jury are required. The 30-minute lesson is open to non-majors. The 60-minute lesson is open to non-majors with the permission of the instructor. A course fee is assessed. Course content changes each semester.

**MUSC 2150 - Studio:
Guitar II**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument. Scheduled studio classes and final jury are required. The 30-minute lesson is open to non-majors. The 60-minute lesson is open to non-majors with the permission of the instructor. A course fee is assessed. Course content changes each semester.

**MUSC 2160 - Studio: Harp
II**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument. Scheduled studio classes and final jury are required. The 30-minute lesson is open to non-majors. The 60-minute lesson is open to non-majors with the permission of the instructor. A course fee is assessed. Course content changes each semester.

**MUSC 2170 - Studio:
Oboe II**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument. Scheduled studio classes and final jury are required. The 30-minute lesson is open to non-majors. The 60-minute lesson is open to non-majors with the permission of the instructor. A course fee is assessed. Course content changes each semester.

**MUSC 2180 - Studio:
Organ II**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument. Scheduled studio classes and final jury are required. The 30-minute lesson is open to non-majors. The 60-minute lesson is open to non-majors with the permission of the instructor. A course fee is assessed. Course content changes each semester.

**MUSC 2190 - Studio:
Percussion II**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument. Scheduled studio classes and final jury are required. The 30-minute lesson is open to non-majors. The 60-minute lesson is open to non-majors with the permission of the instructor. A course fee is assessed. Course content changes each semester.

**MUSC 2200 - Studio:
Piano II**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument. Scheduled studio classes and final jury are required. The 30-minute lesson

is open to non-majors. The 60-minute lesson is open to non-majors with the permission of the instructor. A course fee is assessed. Course content changes each semester.

**MUSC 2210 - Studio:
Saxophone II**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument. Scheduled studio classes and final jury are required. The 30-minute lesson is open to non-majors. The 60-minute lesson is open to non-majors with the permission of the instructor. A course fee is assessed. Course content changes each semester.

**MUSC 2220 - Studio:
Trombone II**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument. Scheduled studio classes and final jury are required. The 30-minute lesson is open to non-majors. The 60-minute lesson is open to non-majors with the permission of the instructor. A course fee is assessed. Course content changes each semester.

**MUSC 2230 - Studio:
Trumpet II**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument. Scheduled studio classes and final jury are required. The 30-minute lesson is open to non-majors. The 60-minute lesson is open to non-majors with the permission of the instructor. A course fee is assessed. Course content changes each semester.

**MUSC 2240 - Studio:
Tuba II**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument. Scheduled studio classes and final jury are required. The 30-minute lesson is open to non-majors. The 60-minute lesson is open to non-majors with the permission of the instructor. A course fee is assessed. Course content changes each semester.

**MUSC 2250 - Studio:
Violin II**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument. Scheduled studio classes and final jury are required. The 30-minute lesson is open to non-majors. The 60-minute lesson is open to non-majors with the permission of the instructor. A course fee is assessed. Course content changes each semester.

**MUSC 2260 - Studio: Viola
II**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument. Scheduled studio classes and final jury are required. The 30-minute lesson is open to non-majors. The 60-minute lesson is open to non-majors with the permission of the instructor. A course fee is assessed. Course content changes each semester.

**MUSC 2270 - Studio:
Voice II**

(1-2CR) (Max. 8) 30- or 60-minute weekly private instruction in the specific instrument. Scheduled studio classes and final jury are required. The 30-minute lesson

is open to non-majors. The 60-minute lesson is open to non-majors with the permission of the instructor. A course fee is assessed. Course content changes each semester.

**MUSC 2302 - Class Piano
III (1CR)**

(2LB) A continuation of MUSC 1301 for music majors currently enrolled in MUSC 2030. Designed to equip students with intermediate-level skills including improvisation, harmonization, sight reading, chord progressions, all scales and arpeggios, Baroque and Classic keyboard styles. Non-music majors must have permission of the instructor.

Prerequisites: MUSC 1301.

**MUSC 2303 - Class Piano
IV (1CR)**

(2LB) A continuation of MUSC 2302 for music majors concurrently enrolled in MUSC 2040. Designed to introduce the student to accompanying techniques, instrumental and vocal score reading, C clefs, late intermediate skills including transposition, improvisation, harmonization, sight reading, chord progressions, all scales and arpeggios, romantic and 20th century keyboard styles. Non-music majors must have permission of the instructor.

Prerequisites: MUSC 2302.

**MUSC 2320 - Diction for
Singers I (2CR)**

(2L) [E] A course to facilitate proper enunciation in English and Italian and help voice students with their repertoire of art songs and operatic arias.

MUSC 2325 - Diction for Singers II (2CR)

(2L) [E] A course to facilitate proper enunciation in German and French and help voice students with their repertoire of art songs and operatic arias.

MUSC 2395 - MUSC 2395-01: Piano Proficiency Exam

The Piano Proficiency Examination is required of all music majors seeking the Associate of Arts or the Associate of Fine Arts. A student who passes the Class Piano sequence (MUSC 1300, 1301, 2302, 2303) with a "B" or better for each course must still register for MUSC 2395, but will not be required to take the exam and will receive a passing grade, "S," for the course. Every semester

MUSC 2410 - Sound Reinforcement I (2CR)

(2L) Introduction to the theory, techniques, and equipment used in sound recording and reinforcement. Topics include acoustics, microphones, recorders, editing, mixing, and effects. (Fall semester.)

MUSC 2420 - Sound Reinforcement II (2CR)

(2L) A study of the basic concepts, equipment and techniques used in the operation of an audio recording console. Topics include console function, mixing, effects, microphone placement and choice, patchbay, and console flow logic. (Spring semester.)

Prerequisites: MUSC 2410.

MUSC 2465 - Directed Studies in Music: (Subtitle)

(1-3CR) (Max. 6) Individualized

investigation of selected topics under the supervision of a faculty member.

Prerequisites: permission of the instructor.

MUSC 2475 - Independent Study Audio/Recording

(1-3CR) Students will independently produce and engineer a recording project.

Prerequisites: completion of or concurrent enrollment in MUSC 2410, MUSC 2420, or permission of the instructor.

Nursing

NURS 1100 - Professional Nursing Care in Health Promotion (10CR)

(5L, 15LB) This semester introduces the learner to the concepts of health promotion, safety, clinical judgment, leadership, patient centeredness, and professionalism. Health promotion includes learning about self-health and health in children, adults, older adults, and the family experiencing a normal pregnancy and delivery.

Learners will value evidence about healthy lifestyle patterns and risk factors for disease and illness, apply growth and development theory, develop therapeutic relationships, conduct an age appropriate and culturally sensitive health assessment, and promote health using the nursing process and standards of professional nursing. Guided learning experiences in various community settings and facilities are correlated with classroom and laboratory instruction.

Prerequisites: Admission to the nursing program.

Concurrently: ZOO 2110 (if not taken previously).

NURS 1200 - Professional Nursing Care of the Patient with Chronic Illness (10CR)

(5L, 15LB) This semester introduces the learner to the patient and family with chronic illness using the concepts of health promotion, safety, clinical judgment, leadership, patient centeredness, and professionalism. Learners will use caring behaviors, therapeutic communication and advocacy when providing care to patients with chronic illness across the lifespan. The learner will identify the roles and values of the members of the interprofessional healthcare team. The patient-and family-lived experience is emphasized. Guided and/or precepted learning experiences in various community settings and facilities are correlated with classroom and laboratory instruction.

Prerequisites: NURS 1100
Concurrently: Concurrent enrollment in PSYC 1000 (if not taken previously).

NURS 2300 - Professional Nursing Care of the Patient with Acute Illness (10CR)

(5L, 15LB) This semester introduces the learner to the patient and family with acute illness using the concepts of health promotion, safety, clinical judgment, leadership, patient centeredness, and professionalism. Learners will use caring behaviors, therapeutic communication and advocacy when providing care to patients with acute illness across the lifespan, including acute

complication of pregnancy and delivery. The learner will facilitate the effectiveness of the interprofessional healthcare team. The patient-and family-lived experience is emphasized. Guided and/or precepted learning experiences in various community settings and facilities are correlated with classroom and laboratory instruction.

Prerequisites: NURS 1200
Concurrently: ENGL 1020 OR
ENGL 2005 OR ENGL
2020/COM2 (if not taken
previously)

NURS 2400 - Professional Nursing Care of the Patient with Complex Illness (10CR)

(5L, 15LB) This semester introduces the learner to the patient and family with complex illness using the concepts of health promotion, safety, clinical judgment, leadership, patient centeredness, and professionalism. This semester is focused on the vulnerable patient which could include multisystem acute and chronic disease processes and physiological, mental and socioeconomic factors that put the patient at risk, including complication of pregnancy and delivery. The patient-and family-lived experience is emphasized. Guided and/or precepted learning experiences in various community settings and facilities are correlated with classroom and laboratory instruction.

Prerequisites: NURS 2300
Concurrently: POLS 1000 (if not
taken previously)

Occupational Therapy

OCTH 2000 - Introduction to Occupational Therapy (2CR)

(2L) This course is designed to introduce students to the occupational therapy profession. As the history, scope of practice, objectives and functions of occupational therapy are addressed, students will affirm their academic decision.

Pharmacy Technology

PHTK 1000 - Pharmacy Calculations I (1CR)

(1L) A review of basic arithmetic, an introduction to the metric and apothecary systems, and computation of medication dosages.

Prerequisites: Admission to the Pharmacy Technology program or permission of the instructor. Students must have an ACT score of 21 or better if out of high school less than two years, a COMPASS placement score of 40 or better in the algebra placement domain, or have a "C" or better in MATH 0920.

PHTK 1600 - Pharmacy Simulation Laboratory I (4CR)

(2L, 4LB) This course introduces the student to the actual working of a pharmacy. Students are introduced and allowed to train towards the performance of operational procedures in the retail pharmacy setting. May be used as CE for licensed technicians.

Concurrently: Concurrent

enrollment in PHTK 1650 and PHTK 1710.

PHTK 1610 - Pharmacy Simulation Laboratory II (4CR)

(2L, 4LB) This course introduces the student to the actual working of a pharmacy. Students are introduced and allowed to train towards the performance of operational procedures in the institutional pharmacy setting. May be used as CE for licensed technicians.

Prerequisites: PHTK 1600.
Concurrently: Concurrent enrollment in PHTK 1630, PHTK 1720 and PHTK 2971.

PHTK 1630 - Pharmacy Calculations II (2CR)

(1L, 2LB) Application of basic mathematics as it applies to compounding and dispensing prescriptions.

Prerequisites: PHTK 1600.
Concurrently: Concurrent enrollment in PHTK 1610, PHTK 1720 and PHTK 2971 or permission of the instructor. May be used as CE for licensed technicians.

PHTK 1650 - Pharmacy Law and Ethics (2CR)

(2L) Provides federal and state laws for pharmacy and sets the ethical standards for pharmacy technicians.

Concurrently: Concurrent enrollment in PHTK 1600 and PHTK 1710, or permission of the instructor. Maybe used as CE for licensed technicians.

**PHTK 1710 -
Pharmacology I (3CR)**

(3L) This course provides an introductory study of therapeutic drug categories which will involve not only a consideration of commonly used drugs, but also basic principles of pharmacology and pharmaceutics.

Prerequisites: admission to the Certificate or Associate of Science in pharmacy technology program or instructor permission.

Concurrently: Concurrent enrollment in PHTK 1600 and PHTK 1650. May be used as CE for licensed technicians.

**PHTK 1720 -
Pharmacology II (3CR)**

(3L) The course provides an introductory study of therapeutic drug categories which will involve not only a consideration of commonly used drugs, but also basic principles of pharmacology and pharmaceutics.

Prerequisites: PHTK 1710.
Concurrently: Concurrent enrollment in PHTK 1610, PHTK 1630, PHTK 2971, or permission of the instructor.

**PHTK 2971 - Pharmacy
Experiential Training I
(5CR)**

(2L, 6LB) Provides the study of the theory and the practical applications of procuring, manipulating and preparing drugs for dispensing in actual pharmacy environments or college laboratory.

Prerequisites: PHTK 1000, PHTK 1600, PHTK 1650, PHTK 1710.
Concurrently: Concurrent

enrollment in PHTK 1610, PHTK 1630, PHTK 1720, or permission of the instructor.

**PHTK 2972 - Pharmacy
Experiential Training II
(5CR)**

(2L, 6LB) Provides practical application and integration of pharmacy skills in an actual retail pharmacy environment (on-the-job training).

Prerequisites: PHTK 1600, PHTK 1610, PHTK 1630, PHTK 1720, PHTK 2971.

**Paramedic
Technology**

**PTEP 2500 - Introduction
to Paramedic Technology
(8CR)**

(7L, 3LB) This course covers the preparatory, airway management and ventilation, and patient assessment sections of the EMT -Paramedic National Standard Curriculum. Students will participate in classroom lecture and discussion as well as practical lab exercises designed to prepare the student to provide emergency care to those in need.

Prerequisites: Students must apply for entrance, and be accepted into the paramedic technology program prior to enrollment.

**PTEP 2600 - Paramedic
Technology Medical
Emergencies (8CR)**

(7L, 3LB) This course covers the medical emergencies section of the EMT - Paramedic National Standard Curriculum. Students will participate in classroom lecture and discussion as well as practical lab exercises designed to prepare the student to provide

emergency care to those who are experiencing a medical emergency along with the appropriate care and intervention(s) necessary to insure safe, effective and efficient transport to the most appropriate facility.

Prerequisites: Students must successfully complete PTEP 2500 and be concurrently enrolled in PTEP 2610.

**PTEP 2610 - Paramedic
Practical 1 (2CR)**

(6LB) This clinical time is dedicated to initiating intravenous access, medication administration and airway management in the clinical setting.

Prerequisites: Successful completion of PTEP 2500
Concurrently: Concurrent enrollment in PTEP 2600 and permission of the instructor.

**PTEP 2800 - Paramedic
Technology Trauma (7CR)**

(2L, 15LB) This course covers the trauma section of the EMT-Paramedic National Standard Curriculum. Students will participate in classroom lecture and discussion as well as clinical and field experiences designed to prepare the student to provide emergency care to those who have experienced a traumatic injury along with the appropriate care and intervention(s) necessary to ensure safe, effective and efficient transport to the most appropriate facility.

**PTEP 2850 - Paramedic
Advanced Placement
Bridge (7CR)**

(2L, 15LB) This course is for students who have applied for and been accepted into the

Casper College Paramedic Technology Advanced Placement Program. This course will get students up to date and current with their classroom, lab and competencies so that they are prepared to join the current students as they enter the 2nd year.

Prerequisites: Students must hold a current Wyoming Intermediate Emergency Medical Technician license; current National Registry as an Emergency Medical Technician at a minimum. Students will have successfully completed the application process as specified, including the written and practical skills evaluations.

PTEP 2900 - Paramedic Technology Advanced Cardiology and Special Considerations (8CR)

(7L, 3LB) This course covers the trauma and special considerations section of the EMT - Paramedic National Standard Curriculum. Students will participate in classroom lecture and discussion as well as practical lab exercises designed to prepare the student to provide emergency care to those who have experienced a traumatic injury along with the appropriate care and intervention(s) necessary to insure safe, effective and efficient transport to the most appropriate facility. This course will also explore the pediatric and geriatric populations as well as those who are technology dependent and how to best provide care and transport for those people.

Prerequisites: Students must successfully complete PTEP 2500, PTEP 2610, PTEP 2600 and be concurrently

enrolled in PTEP 2910 and have permission of the instructor.

PTEP 2910 - Paramedic Practical 3 (3CR)

(9LB) This clinical time is dedicated to medical emergencies, respiratory emergencies, cardiology and obstetrics/gynecology with the student having exposure to and participating in the management of medical emergencies in the emergency room, cath lab, cardiopulmonary lab, respiratory therapy and labor and deliver settings.

Prerequisites: Successful completion of PTEP 2600
Concurrently: Concurrent enrollment in PTEP 2900, and permission of the instructor.

PTEP 2950 - Paramedic Capstone (10CR)

(3L, 21LB) This clinical time is to solidify and put into practice all that has been learned to this point. The student will be able to apply the skills and knowledge gained in previous classroom and clinical experience in order to provide quality and appropriate patient care and transportation to the most appropriate facility. This will be accomplished through extensive clinical and field internship time as well as classroom time preparing for state and national certifying examinations, both written and practical.

Prerequisites: Successful completion of PTEP 2500, PTEP 2610, PTEP 2600, PTEP 2910, PTEP 2900 and permission of the instructor. Students must also have a current AHA BLS for HCP card, AHA ACLS card and AHA PALS card.

PTEP 2961 - Community EMS Technician (4CR)

(3L, 2LB) The Community Emergency Medical Services Technician course prepares the student to assist patients in the home to access appropriate healthcare resources. Community resources and needs are discussed along with advanced assessment techniques, environmental assessment and safety concerns in order to assist the patient in gaining access to the most appropriate level of medical services in a timely manner that is beneficial to the patient, and the healthcare system as a whole. This course will be offered annually in the fall semester as long as there is a demonstrated need.

Prerequisites: Students are required to be currently licensed at the EMT, AEMT, IEMT or paramedic level.
Concurrently: PTEP 2962

PTEP 2962 - Community EMS Technician Clinical (1CR)

(2LB) The Community Emergency Medical Services Technician Clinical course prepares the student to assist patients in the home to access appropriate healthcare resources by providing supervised experiences within the local community. Community resources and needs are discussed and utilized, along with advanced assessment techniques, environmental assessment and safety concerns, in order to assist the patient in gaining access to the most appropriate level of medical services in a timely manner that is beneficial to both the patient and the healthcare system. This

course will be offered annually in the fall semester as long as there is a demonstrated need.

Prerequisites: Students are required to be currently licensed at the EMT, AEMT, IEMT or paramedic level.
Concurrently: PTEP 2961 Community EMS Technician (4CR).

PTEP 2971 - Community EMS Clinician (8CR)

(5L, 6LB) The Community Emergency Medical Services Clinician course prepares the student to expand upon the CEMS Technician role by increasing the level of assistance provided to patients in the home to access appropriate healthcare resources. Community resources and needs are discussed along with advanced assessment techniques, environmental assessment and safety concerns in order to assist the patient in gaining access to the most appropriate level of medical services in a timely manner that is beneficial to the patient, and the healthcare system as a whole. This course will be offered annually as required to meet local and statewide needs.

Prerequisites: Students must apply for entrance, and be accepted into the Community EMS Program prior to enrollment. Successful completion of PTEP 2961 and PTEP 2962. In addition, applicants must meet the requirements prescribed by the Community EMS program director.
Concurrently: PTEP 2972 Community EMS Clinician Clinical (3CR)

PTEP 2972 - Community EMS Clinician Clinical (3CR)

(3LB) The Community Emergency Medical Services Clinician course prepares the student to expand upon the CEMS Technician role by increasing the level of assistance provided to patients in the home to access appropriate healthcare resources. Community resources and needs are discussed along with advanced assessment techniques, environmental assessment and safety concerns in order to assist the patient in gaining access to the most appropriate level of medical services in a timely manner that is beneficial to the patient, and the healthcare system as a whole. This course will be offered annually as required to meet local and statewide needs.

Prerequisites: Students must apply for entrance, and be accepted into the Community EMS Program prior to enrollment. Successful completion of PTEP 2961 and PTEP 2962. Concurrent enrollment in PTEP 2971 is required. In addition, applicants must meet the requirements prescribed by the Community EMS program director.
Concurrently: Concurrent enrollment in PTEP 2972 is required.

Philosophy

PHIL 1000 - Introduction to Philosophy (3CR)

(3L) [E] An introduction to some of the main problems confronting the philosophical thinker, including those concerning truth, knowledge, language, morality, the existence of God, the nature of reality,

freedom, and the meaning of life. Possible solutions to these problems will be considered.

Prerequisites: ENGL 1010

PHIL 2300 - Ethics in Practice (3CR)

(3L) [E] An in-depth examination of the two seminal questions in ethics: What is happiness? How do you achieve it? Study includes works of major ancient and modern ethical thinkers and deductions of certain ethical principles by which we will judge contemporary ethical issues in medicine, business, environment, etc.

Prerequisites: ENGL 1010.

PHIL 2420 - Critical Thinking (3CR)

(3L) [E] The art of critical thinking: how to analyze logical arguments, to construct logical arguments, and to expose fallacies in fallacious reasoning.

Prerequisites: ENGL 1010.

Physical and Health Education

HLED 1006 - Personal and Community Health (3CR)

(3L) [E] Designed to develop the understanding, attitudes, and practices which contribute to better individual and community health.

HLED 2006 - Health for Elementary Educators (1CR)

(1L) This course acquaints elementary education students with methods of teaching and assessing health education standards to elementary students.

PEPR 2136 - Sports Nutrition (3CR)

(3L) This course introduces the student to evidence-based information relating directly effective nutrition for the active as well as Athletes looking for performance enhancement.

Physical Education Activities

PEAC 1020 - Fitness Training (1CR)

(2LB) Students will learn how to test their fitness, set goals, and develop a fitness program to specifically target their fitness goals. Students will participate in professionally designed workouts as well as their own created workouts. Additional course topics include basic nutrition, muscular anatomy, and more. Students wishing to use the Casper College Fitness Center should sign up for the in class option and those planning to participate off campus should register for the online section.

PEAC 1030 - Dance Aerobics (1CR)

(2LB) A fitness class using a variety of exercises that stimulates heart and lung activity for a time period sufficiently long to produce beneficial changes in the body. Strength development by weight training is also included.

PEAC 1041 - Basic Self-Defense (1CR)

(2LB) A basic course in self-defense covering some home self-defense breakaway techniques and how to handle general distress situations.

PEAC 1042 - Basic Self-Defense II (1CR)

(2LB) Continuation of basic self-defense. Combination strikes, counter techniques, throws and falls, advanced kicks, takedowns and further awareness of personal safety issues.

PEAC 1044 - Beginning Tae Kwon Do (1CR)

(2LB) A basic course in the art of Tae Kwon Do teaches the mental training and techniques of unarmed combat for self-defense.

PEAC 1045 - Kickboxing (1CR)

(2LB) This kickboxing course is a martial arts fitness class. Students learn proper kicking and punching techniques and self-defense skills. The course provides students an opportunity to increase martial arts skills, flexibility, and improved cardiovascular performance.

PEAC 1048 - Kickboxing II (1CR)

(2LB) This kickboxing course is a martial arts fitness class. Students learn proper kicking and punching techniques and self-defense skills. The course provides students an opportunity to increase martial arts skills, flexibility, and improved cardiovascular performance.

Prerequisites: PEAC 1045.

PEAC 1050 - Beginning Tennis (1CR)

(2LB) Beginning co-ed activity class of tennis basic skills and techniques.

PEAC 1053 - Bowling (1CR)

(2LB) A basic activity class providing background and instruction in the lifetime sport of bowling. Instruction is given with emphasis on developing skills.

PEAC 1255 - Beginning Golf (1CR)

(2LB) A basic activity class providing background in golf. Golf instruction is given at the driving range and in the gymnasium with emphasis on beginning skill level.

PEAC 1257 - Beginning Racquetball (1CR)

(2LB) Will provide the student the opportunity to learn the basic skills, rules, and strategy of the game.

PEAC 1266 - Trapshooting (1CR)

(2LB) Designed to acquaint students with firearm safety, gun anatomy, reloading techniques, and in trapshooting techniques and rules. Students provide their own ammunition and pay for the clay birds used.

PEAC 1267 - Advanced Trapshooting (1CR)

(2LB) Designed for the more accomplished trapshooter. Singles, doubles, modified clay bird, and handicap shooting will be stressed. Gun safety and reloading techniques. Students provide their own ammunition and pay for the clay targets used.

Prerequisites: PEAC 1266, or permission of the instructor.

PEAC 1271 - Weight Loss Conditioning (1CR)

(2LB) Promotes fitness and safe weight loss techniques through exercise and diet.

PEAC 1273 - Heavy Resistance Conditioning (1CR)

(2LB) Individual training in the Fitness and Wellness Center, emphasizing large muscle activity and cardiovascular development.

PEAC 1274 - Advanced Weight Training (1CR)

(2LB) A continuation of PEAC 1273. This course is designed for students who want to set up an individualized program for large muscle activity and cardiovascular development.

Prerequisites: PEAC 1273 or permission of the instructor.

PEAC 1275 - Circuit Training (1CR)

(2LB) Introduces basics of circuit training and develops improvements in cardiovascular endurance, body composition, flexibility, muscular endurance, and strength.

PEAC 1279 - Tae Kwon Do II (1CR)

(2LB) Tae Kwon Do is a martial art that teaches the mental training and techniques of unarmed combat for self-defense as well as health involving the skilled application of punches, kicks, blocks, and dodges with bar hands and feet to neutralize opponents.

PEAC 1281 - Fly Fishing (1CR)

(2LB) This is an introductory course in techniques and skills essential to fly-fishing. Class will be conducted in the classroom, gym and the outdoor environment. The course will include field trips to local fishing areas. All fish caught during class will be released.

PEAC 1287 - Rock Climbing (1CR)

(2LB) An introductory course in technical rock climbing conducted at an indoor climbing gym with a field trip to a local outdoor climbing area.

PEAC 1290 - Mat Pilates (1CR)

(2LB) A fitness class performed on a mat using the classical method developed by Joseph Pilates.

PEAC 1294 - Yoga (1CR)

(2LB) A basic course in yoga covering the yoga postures, some breath work, meditation and relaxation. A basic yoga class will go a long way toward retaining optimal health.

PEAC 1460 - Modern Dance I (1CR)

(3LB) This course is an introduction to the principles and techniques of Modern Dance. Dancers will focus on technique, terminology and the execution of the basic steps, as well as the discovery of movement in space and time. This class will serve the student as a study in exploration of the basic ideas of Modern Dance.

Cross-listed: DANC 1460

PEAC 1470 - Modern Dance II (1CR)

(3LB) This course will be an introduction to the principles and techniques of Modern Dance. Dancers will focus on technique, terminology, and the execution of the basic steps, as well as the discovery of movement in space and time.

PEAC 1680 - Extreme Fitness (1CR)

(2LB) This course is designed to give students an understanding of the importance of physical fitness, cardiovascular conditioning, muscular strength, muscular endurance and flexibility.

PEAC 1681 - Extreme Fitness II (1CR)

(2LB) This course is designed to give students an understanding of the importance of physical fitness, cardiovascular conditioning, muscular strength, muscular endurance and flexibility, and its relevance to the fire service. We will focus on developing strength through weight training Spring Only

PEAC 2001 - Physical Fitness and Wellness I (1CR)

(2LB) [E] This physical education activity course is open to all students. It is designed as an open laboratory to accommodate each student's needs. Emphasis is placed in three areas of physical fitness: strength, flexibility, and cardiovascular endurance. Pin select weight machines will be used in circuit training concept to develop more effectively one's level of physical fitness. Free weights are also available. Orientation for the class is required.

PEAC 2002 - Physical Fitness and Wellness II (1CR)

(2LB) This physical education activity course is open to all students. It is designed as an open laboratory to accommodate each student's needs. Emphasis is placed in three areas of physical fitness: strength, flexibility, and cardiovascular endurance. Pin select weight machines will be used in circuit training concept to develop more effectively one's level of physical fitness. Free weights are also available. Orientation for the class is required.

PEAC 2003 - Physical Fitness and Wellness III (1CR)

(2LB) This physical education activity course is open to all students. It is designed as an open laboratory to accommodate each student's needs. Emphasis is placed in three areas of physical fitness: strength, flexibility, and cardiovascular endurance. Pin select weight machines will be used in circuit training concept to develop more effectively one's level of physical fitness. Free weights are also available. Orientation for the class is required.

PEAC 2004 - Physical Fitness and Wellness IV (1CR)

(2LB) This physical education activity course is open to all students. It is designed as an open laboratory to accommodate each student's needs. Emphasis is placed in three areas of physical fitness: strength, flexibility, and cardiovascular endurance. Pin select weight machines will be used in circuit training concept to develop more effectively one's level of

physical fitness. Free weights are also available. Orientation for the class is required.

PEAC 2005 - Personal Fitness

Audit only course. Designed as open laboratory to accommodate each student's needs. Emphasis on strength, flexibility, and cardiovascular endurance. Universal equipment used in circuit training concept. Free weights also available.

PEAC 2007 - Express Fitness (1CR)

(2LB) This physical education activity course is designed as an open laboratory to allow each student the benefit of setting his or her own schedule. Emphasis is placed in four areas of physical fitness: muscle strength, muscle endurance, flexibility, and cardiovascular endurance. The Fitness Center contains aerobic equipment, a universal circuit, and free weights to develop more effectively one's level of physical fitness. The student is responsible for meeting the minimum exercise standards in order to receive credit. All students must complete an orientation and initial meeting prior to starting their program.

PEAC 2013 - Scuba Certification (1CR)

(2LB) Safe diving procedures, proper use of scuba equipment, and dive tables. The course is presented in three segments: lectures, pool, and open water dives. Upon satisfactory completion of the course, the student will be certified in accordance with the Professional Association of Diving Instructors (PADI) for open water dives.

Prerequisites: instructor permission only.

PEAC 2044 - Tae Kwon Do III (1CR)

(2LB) An intermediate course in the art of Tae Kwon Do. Teaches the mental training and techniques of unarmed combat for self-defense.

Prerequisites: PEAC 1279.

PEAC 2050 - Intermediate Tennis (1CR)

(2LB) Continuation of the basic skills and techniques of tennis. Students will learn strategies of singles and doubles play. Beginning tennis not a requirement if the student has prior tennis experience.

PEAC 2053 - Intermediate Bowling (1CR)

(2LB) Online course for the intermediate to advanced bowler who does not need hands on instruction for practice. Material covered will include terminology, bowling history, bowling strategies, and game variations. Students will also be required to participate in bowling activities which must be signed off by a staff member at their chosen location. Any fees associated with participation will be paid by the student. It is highly recommended that students have bowling experience before taking this course.

PEAC 2054 - Tae Kwon Do IV (1CR)

(2LB) An intermediate course in the art of Tae Kwon Do. Teaches the mental training and techniques of unarmed combat for self-defense.

Prerequisites: PEAC 2044.

PEAC 2055 - Intermediate Golf (1CR)

(2LB) Online course for the intermediate to advanced golfer who does not need hands on instruction for practice. Material covered will include terminology, golf history, and basic to advanced rules and strategies of the game. Students will also be required to participate in golf activities which must be signed off by a staff member at their chosen location. Any fees associated with participation will be paid by the student. It is highly recommended that students have golf experience before taking this course.

PEAC 2084 - Outdoor Living Skills (1CR)

(2LB) An introductory course conducted in a back-country setting. Fitness Center orientation, a physical conditioning program, and classroom sessions are required prior to the trip.

Physical Education Varsity Sports

PEAT 1010 - Cheerleading (1CR)

(2LB) Current enrollment limited to cheerleaders. Selection is to be made at fall semester.

Prerequisites: permission of instructor.

PEAT 1075 - Varsity Basketball I (1CR)

(2LB) (Max. 4) [E] Team competition with regular practice sessions.

Prerequisites: permission of instructor.

PEAT 1076 - Varsity Basketball II (1CR)

(2LB) (Max. 4) [E] Team competition with regular practice sessions.

Prerequisites: permission of instructor.

PEAT 1080 - Varsity Volleyball I (1CR)

(2LB) (Max. 4) [E] Team competition with regular practice sessions.

Prerequisites: permission of instructor.

PEAT 1085 - Varsity Volleyball II (1CR)

(2LB) (Max. 4) [E] Team competition with regular practice sessions.

Prerequisites: permission of instructor.

PEAT 2025 - Rodeo (1CR)

(2LB) (Max. 4) Designed to prepare rodeo athletes for competition in the nine different rodeo events. Emphasis is put on improving and developing the techniques needed to perform in the rodeo arena along with instruction in the interpretation of the rules regulating all rodeo events.

Prerequisites: must become an active NIRA member and participate in all CRMR rodeos or have instructor's approval.

PEAT 2075 - Varsity Basketball III (1CR)

(2LB) (Max. 4) [E] Team competition with regular practice sessions.

Prerequisites: permission of instructor.

PEAT 2076 - Varsity Basketball IV (1CR)

(2LB) (Max. 4) [E] Team competition with regular practice sessions.

Prerequisites: permission of instructor.

PEAT 2080 - Varsity Volleyball III (1CR)

(2LB) (Max. 4) [E] Team competition with regular practice sessions.

Prerequisites: permission of instructor.

PEAT 2085 - Varsity Volleyball IV (1CR)

(2LB) (Max. 4) [E] Team competition with regular practice sessions.

Prerequisites: permission of instructor.

Physics

PHYS 1050 - Concepts of Physics (4CR)

(3L, 3LB) [E] One semester course for those students whose curricula call for an introduction to elementary physical concepts.

Prerequisites: MATH 0900.

PHYS 1090 - The Fundamentals of the Physical Universe (4CR)

(3L, 2LB) [E] One semester introduction to the physical sciences (physics and chemistry) designed only for students majoring in elementary education. (Does not qualify as a lab science for non-elementary education majors.)

PHYS 1110 - General Physics I (4CR)

(3L, 3LB) [E] First course of two-semester sequence. Introduces elementary college physics without calculus. Primarily for pre-medical, pre-dental, pre-optometry, pre-physical therapy, vocational, technical, and other students requiring insight into workings of the physical world. Includes classical mechanics, gravitation and heat. Required laboratory sessions will illustrate principles studied.

Prerequisites: MATH 1400

PHYS 1120 - General Physics II (4CR)

(3L, 3LB) [E] Follows PHYS 1110 and completes introduction to physics without calculus. Includes electricity, magnetism, optics and modern physics. Required laboratory sessions illustrate principles studied.

Prerequisites: PHYS 1110

PHYS 1310 - College Physics I (4CR)

(4L, 2LB) [E] First semester course in physics designed for those majoring in physics, engineering, mathematics, or physical sciences. Topics covered are mechanics and heat.

Prerequisites: MATH 2200.

PHYS 1320 - College Physics II (4CR)

(4L, 2LB) [E] Follows PHYS 1310 and continues introduction to physics with calculus. Includes electricity, magnetism and thermodynamics. Laboratory sessions illustrate principles studied and meaning of physical measurement.

Prerequisites: MATH 2205

PHYS 2310 - Physics III: Waves and Optics (4CR)

(4L, 2LB) [E] Third-semester course primarily for majors in physics, astronomy, engineering, mathematics, and other sciences. Includes Gaussian Optics and matrix calculations, wave equations, interference, superposition principle, elementary Fourier Analysis, Fraunhofer and Fresnel Diffraction, application to optical instruments.

Prerequisites: PHYS 1320 concurrently and MATH 2205.

PHYS 2320 - Physics IV: Modern Physics (4CR)

(4L, 2LB) Fourth semester course primarily for majors in physics, astronomy, engineering, mathematics, and other physical sciences. Topics include introductory quantum mechanics, nuclear and particle physics, lasers, Planck's Blackbody Radiation, photoelectric effect, electron diffraction, wave-particle duality, deBroglie Wavelength, Bohr Atom, Heisenberg Uncertainty Principle, Schrodinger Equation, and Einstein's Special Theory of Relativity.

Prerequisites: PHYS 1320 concurrently and MATH 2205.

Political Science

POLS 1000 - American and Wyoming Government (3CR)

(3L) [E] The organization and nature of the American national government and Wyoming state government and their

constitutional development. This course meets the statutory requirement for instruction in the constitutions of the United States and Wyoming.

POLS 1020 - Issues in Foreign Relations I (3CR)

(3L) (BOCES class.) This year-long course entails an introduction to the concepts, institutions, and issues of contemporary foreign relations from the perspective of the United States. The focal point of the course are group analyses of selected prominent issues in the post-Cold War world, which will include extensive research, writing, discussions, and oral presentations of the groups' findings.

Prerequisites: Application and permission of the instructor.

POLS 1030 - Issues in Foreign Relations II (3CR)

(3L) (BOCES class.) This course is the second semester of the year-long seminar which entails an introduction to the concepts, institutions and issues of contemporary foreign relations from the perspective of the United States. The focal point of this course is the group research assignment.

Prerequisites: Application, POLS 1020, and permission of the instructor.

POLS 1100 - Wyoming Government (1CR)

*(3L, *) [E]* If a student successfully completes a U.S. Government or U.S. History course with a grade of C or better at another institution, this course satisfies the statutory requirement of instruction in the constitutions of the United States and Wyoming for Casper

College, but does not meet requirements for the University of Wyoming.

POLS 1200 - Non-Western Political Cultures (3CR)

(3L) [E] This course gives students an appreciation of non-Western political cultures and how these cultures have created different political institutions and practices. Non-Western nations of Asia, Africa, and the Middle East are used as case studies.

Cross-listed: INST 1200

POLS 2000 - Current Issues in American Government (3CR)

(3L) This course examines current political topics in the United States. It focuses on key public policy problems, the policy-making process and the final policy choice. Students must keep abreast of political events on a daily basis and apply basic concepts in American government to current affairs.

Prerequisites: POLS 1000, or permission of the instructor.

POLS 2128 - Terrorism (3CR)

3L This course studies the theories, psychologies, motives, methods, forms, and counter measures associated with terrorism in history and the 21st century. Biannually

Prerequisites: POLS 1000 or permission of the instructor.

POLS 2200 - Politics of Europe (3CR)

(3L) [E] Examines formal and informal aspects of politics in Britain, other West European

countries, and the European Union.

Prerequisites: POLS 1000, or HIST 1120, or have permission of the instructor.

POLS 2290 - Governments and Politics of Latin America (3CR)

(3L) This course studies chief cultural and historical factors influencing Latin American political process by drawing on six country case studies as well as regional information. It also surveys major institutions and political patterns of the region.

Prerequisites: POLS 1000, or HIST 1120, or have permission of the instructor.

POLS 2310 - Introduction to International Relations (3CR)

(3L) [E] A theoretical and practical survey of the international political system, including concepts of power and power relationships, elements of international organizations and contemporary international relations.

Prerequisites: HIST 1120, or POLS 1000, or permission of the instructor.

Cross-listed: INST 2310

POLS 2410 - Introduction to Public Administration (3CR)

(3L) [E] Public administration involves the core activities of government that are performed, for the most part, by highly trained experts and specialized organizations; its purpose is the development and implementation of public policy. This broad definition encompasses a large dynamic

portion of government at all three levels of the federal system, engaging even nonprofit and private enterprise.

Prerequisites: POLS 1000

or have permission from the instructor

POLS 2460 - Introduction to Political Philosophy (3CR)

(3L) [E] A survey of selected writings in the history of Western political theory from the classical period to the present.

Prerequisites: POLS 1000, or sophomore standing, or permission of the instructor.

POLS 2465 - Directed Studies in Political Science

(1-3L) (1-3 CR) This course will center on faculty-guided research in an area of mutual interest to the student and instructor within the political science, international studies, or pre-law majors. This course has the option of including internship experience as part of the directed studies.

POLS 2470 - Internship (3CR)

(3L) This course will differentiate from POLS 2465 Directed Study in POLS, which has been used in the past for students taking internships for credit. The 2470 number is in line with the transfer guide for POLS internships. POLS 2470 will be offered every semester.

Prerequisites: Permission of the instructor.

Process Technology

PTEC 1020 - Introduction to Mechanical Fundamentals (2CR)

(2L) Students explore the mechanical concepts commonly found in a plant setting. They will examine piping systems including dimension, connections, blinding and more. Students become familiar with common hand tools and terminology found in many plants. They examine steam traps, strainers and their applications. They are also introduced to common pumps and drivers, compressors fans and heat exchangers.

PTEC 1500 - Introduction to Process Technology (2CR)

(2L) This course is the foundation for all of the other courses in the PTEC program. Introduction to Process Technology provides a general overview of the Process Industry, the roles and responsibilities of Process Technicians, types of equipment and processes handled on the job, and the general knowledge, skills, and attitudes needed to succeed as a Process Technician. It is expected that students will use this course as an opportunity to explore the industry and the occupation of Process Technician before making a long-term commitment to become a Process Technician.

PTEC 1550 - Foundations of Quality (2CR)

(2L) Foundations of Quality introduces students to many process industry-related quality concepts including operating consistency, continuous

improvement, plant economics, team skills and statistical process control (SPC).

PTEC 1600 - Process Technology I (3CR)

(2L, 2LB) The purpose of this course is to provide an overview or introduction into the field of Process Technology I - Equipment within the process industry. Within this course, students will be introduced to many process industry-related equipment concepts including purpose, components, operation, and the Process Technician's role for operating and troubleshooting the equipment.

PTEC 1605 - Process Technology II (3CR)

(2L, 2LB) Fundamentals of automatic control - including the operation of selected sensors and conditioning circuits. Several process control systems will be analyzed and reproduced using single loop digital controllers. Additional topics include: data communications in the industrial process and programmable logic controllers.

Prerequisites: ELTR 1515 or ELTR 1570 or permission of instructor.

Cross-listed: ELTR 1605

Professional Physical Education

PEPR 1005 - Introduction to Physical Education and Sport (2CR)

(2L) [E] Provides a general concept of the meaning and interpretation of physical education, giving specific information for the professional student of physical education and the nature of the field, its

professional opportunities, personal rewards and satisfactions, and requirements of a sound program of professional preparation.

PEPR 1052 - Care and Prevention of Athletic Injuries (3CR)

(3L) [E] Theory and practical application in the field of athletic training. Emphasizes prevention and care of athletic injuries, wrapping and taping techniques.

PEPR 2012 - Physical Education for Elementary School (3CR)

(2L, 2LB) [E] Fundamental skills and principles of movement and the progressions as they would be presented in the elementary education program. Students have practical experience in participation and teaching. Includes rhythmic and dance, gymnastics, games, and sports skills.

PEPR 2030 - Motor Learning (3CR)

(3L) Exploration and explanation of material and methods that underlie the learning and performance of motor skills.

PEPR 2090 - Foundations of Athletic Coaching (3CR)

(3L) Provides prospective coaches with current information about scientific foundations of coaching: theory, methodology, administration, management, and psychology. Required for athletic coaching permit in Wyoming.

PEPR 2091 - Athletic Officiating I (2CR)

(1L, 2LB) [E] For physical education majors wishing to acquaint themselves with the

skills and techniques of officiating the major sports: football, basketball, volleyball and soccer.

PEPR 2100 - Theory of Coaching: Volleyball (2CR)

(2L) Study of the skill analysis, strategy and training involved in coaching volleyball. Includes methods of coaching.

PEPR 2135 - Personal Trainer Education (3CR)

(3L) This course introduces students to exercise science principles, client assessment, and exercise program design. Students learn how to utilize multiple tools, skills, and knowledge to assess clients' health and fitness. Students will further learn how to design and implement programs to improve muscular strength, cardiovascular endurance, body composition, and other health related components of fitness.

PEPR 2150 - Theory of Coaching: Basketball (2CR)

(2L) Methods of coaching offense and defense, styles of play, strategy, training and diet, and rules of interpretation. (Fall semester.)

PEPR 2460 - Field Experience (Physical Education)(2CR)

(2-4LB) (1-2CR) Thirty hours per credit of hands-on experience observing/assisting/instructing in various physical education activities: swimming, fitness, gymnastics, adaptive physical education, elementary physical education and coaching.

Prerequisites: permission of the instructor.

Psychology

PSYC 1000 - General Psychology (3CR)

(3L) [E] One semester introductory psychology course designed to familiarize the student with the major areas of psychological research. Course orientation is directed toward understanding behavior through an experimental approach. Application of course content to everyday behavior situations is emphasized.

PSYC 2000 - Research Psychological Methods (4CR)

(4L) [E] Introduces students to some of the methods of investigating psychological questions. Exposes students to various research strategies ranging from observational to experimental, using representative laboratory exercises, lectures, readings, films and demonstrations. Requires written and oral reports. Requires extra research time outside of class.

Prerequisites: an introductory course in psychology, completion of ENGL 1020, STAT 2050, STAT 2070 or other four-hour statistic course with lab. Earned letter grade of "C" or better is required in each prerequisite course.

PSYC 2020 - Positive Psychology (3CR)

(3L) This course introduces one of the fastest growing subfields and an emerging shift in the field of psychology from pathology to strengths and resiliency. Positive

psychology explores mental health as building on the best in life by seeking to fulfill the lives of healthy individuals. Course content includes research in the areas of happiness/well-being, optimism, creativity, resilience, meaning, and gratitude, as well as practical application of these and other strength-based psychological concepts.

Prerequisites: PSYC 1000 or SOC 1000.

PSYC 2050 - Introductory Counseling/Clinical Theories (3CR)

(3L) An introductory course featuring a review of the development of psychotherapy, a study of psychological concepts basic to the therapeutic process, and understanding of the major models and principles of psychotherapy.

Prerequisites: PSYC 1000.

PSYC 2060 - Psychology of Gender (3CR)

(3L) This course provides students with an opportunity to explore human behavior from a gender perspective. The study of gender has generated controversy and historically, psychologists focused on discovering differences between women and men. The feminist movement has shifted the focus to the lived experiences of women which include the social construction of institutions, race/ethnicity, social class, sexual orientation, and other categories of difference.

PSYC 2080 - Biological Psychology (3CR)

(3L) [E] Introduces biological bases of behavior. Includes ethnology and comparative

behavior, psychobiological development, physiological and sensory mechanisms of behavior and evolution and behavioral genetics. Presents basic structural and functional properties of the nervous system.

Prerequisites: PSYC 1000 and BIOL 1000 or equivalent.

PSYC 2155 - Motivational Interviewing (3CR)

(3L) Behavioral change is a goal of many human service professionals. This course will examine the process of how change occurs and how to apply evidence based practices to assist clients with the change process thorough the use of motivational interviewing. Through a combination of lecture, skill practice, discussion, and personal exploration, this course will serve as a 'hands on' experience for the change process.

Cross-listed: ADDN 2155

PSYC 2200 - Human Sexuality (3CR)

(3L) An interdisciplinary course designed to acquaint the student with the major factors affecting human sexuality. Relevant research is reviewed in biology, psychology, sociology, and anthropology, as well as religious and historical perspectives.

Prerequisites: three to four hours of a 1000 level introductory psychology or biology course.
Cross-listed: (Cross-listed as SOC 2200.)

PSYC 2210 - Drugs and Behavior (3CR)

(3L) [E] A survey of the drugs which affect behavior, emphasizing both psychotherapeutic agents and drugs with abuse potential. Includes a brief introduction to the chemistry of the brain and pharmacological aspects of each major class of psychoactive drugs will be discussed.

Prerequisites: PSYC 1000 and three to four hours of 1000 level psychology or biology courses.

PSYC 2230 - Sports and Exercise Psychology (3CR)

(3L) An introduction to the field of sport and exercise psychology that focuses on the major areas of psychological research and application regarding sports and exercise environments, processes, performance enhancement, health and well-being.

Prerequisites: PSYC 1000.

PSYC 2260 - Alcoholism (3CR)

(3L) Patterns of alcohol use and theories of abuse and addiction will be presented along with current knowledge on the incidence, health effects, economic costs, and trends in treatment. Theoretical concepts will be based on constitutional, psychological and socio-cultural approaches. Issues ranging from pharmacology to societal concerns with problem drinking will be covered.

Prerequisites: PSYC 1000.

PSYC 2300 - Developmental Psychology (3CR)

(3L) [E] Provides an overview of child growth and development through adolescence using a lifespan approach, the theoretical bases for the area of child study, application of solutions to developmental problems, and the physical, psychological, social and emotional aspects of child psychology, as well as current research on the topic.

Prerequisites: three to four hours of 1000 level introductory psychology

PSYC 2340 - Abnormal Psychology (3CR)

(3L) [E] A general study of abnormal behaviors including types, etiology, and treatment approaches.

Prerequisites: A grade of C or better in PSYC 1000

PSYC 2350 - Introduction to Death and Dying (3CR)

(3L) This course introduces the psychological aspects of death and dying. Topics include attitudes toward and preparation for death; the understanding of and care for terminally ill patients; funeral rituals; burial, mourning and grief practices; grief work; suicide and euthanasia. Focuses on psycho-socio-cultural, and religious views of death and ways of handling its personal and social implications.

PSYC 2360 - Lifespan: Adulthood and Aging (1CR)

(1L) [E] An overview of the lifespan from adulthood to later maturity, the theoretical bases

for adult development, and the psychological, physical, social and emotional aspects of adult transitions. Current research methodology on adulthood will be emphasized.

Prerequisites: PSYC 2300, or concurrent enrollment with consent of instructor.

PSYC 2380 - Social Psychology (3CR)

(3L) [E] Social Psychology familiarizes students with the psychology of human interaction. Topics addressed include aggression, altruism, attitudes, attraction, conformity, group dynamics, perception of self and others, prejudice, social roles and social power.

Prerequisites: PSYC 1000 or equivalent.

PSYC 2390 - Acquired Brain Injuries (3CR)

(3L) An introductory course that focuses on the major areas of research and treatment application in the field of acquired brain injuries (ABI). Various types of brain injuries, etiologies of these injuries, and treatments of these injuries will be presented.

Prerequisites: PSYC 1000, BIOL 1000 (or equivalent), HLTK 1200.

PSYC 2465 - Special Problems in Psychology

(1-3CR) Directed study and research reserved for students who have successfully completed previous course work in psychology. A comprehensive research project or in-depth literature review is required. Topics must meet with the approval of the instructor the

semester prior to initiating the course. Special problem work shall proceed under direct supervision of a Casper College psychology instructor.

Prerequisites: PSYC 2000 or concurrent enrollment, or permission of the instructor.

PSYC 2970 - Cognitive Retraining Practicum (3CR)

(1L, 4LB) Supervised experience in working with individuals who have acquired brain injuries (ABI) in community based settings. Weekly on campus classes are conducted and students complete a minimum of 60 hours in off-campus practicum locations at cooperating treatment agencies/facilities. The class provides opportunities for students to gain practical field experience in working with individuals with brain injuries and to apply knowledge acquired in previous courses. The off-campus practicum time will be scheduled, structured, and supervised by a certified or licensed professional. S/U grading only.

Prerequisites: PSYC 2390, HLTK 1625, HLTK 1620, CPR and AED.

Radiology Technology

RDTK 1500 - Introduction to Radiologic Technology (1CR)

(4LB) An orientation of the radiologic technology profession. Emphasis is on history, medical ethics, radiology administration, certification, and professional

organizations. Class size is limited so preference will be given to students applying to the program.

RDTK 1530 - Patient Care and Management (2CR)*

(2L) *Three week minimester session. Orienting student health professionals into patient care methodology in the clinical environment. Emphasis is placed on the illness process and specific nursing and radiologic patient care procedures.

RDTK 1580 - Radiographic Positioning I (2CR)*

(1L, 2LB) *Three week minimester session. Positioning skills of the chest and abdomen; hand and wrist; forearm, elbow and humerus are emphasized.

Prerequisites: acceptance into the Radiography Program.

RDTK 1610 - Radiographic Imaging I (3CR)

(2L, 3LB) Identifying and demonstrating essential operating principles of x-ray machines, and the factors and ancillary equipment that contribute to the production of optimum diagnostic quality radiographs.

Prerequisites: MATH 1400

RDTK 1640 - Radiographic Imaging II (3CR)

(2L, 3LB) Skills that facilitate the production of quality radiographs. Analyzing different modes of imaging and intensification systems. Emphasis is placed on primary and secondary exposure factors,

recording media, and special imaging techniques. Computed radiography and digital imaging will be covered in detail.

Prerequisites: RDTK 1610.

**RDTK 1680 -
Radiographic Positioning II (2CR)**

(1.5L, 1.5LB) Positioning skills and anatomy of the lower extremity, myelography, spine radiography and arthrography. Mobile and surgical radiographic procedures will be demonstrated when applicable.

Prerequisites: RDTK 1580.

**RDTK 1710 - 1st Yr-
Clinical Education I (2CR)**

(28LB/week) This course involves a practical learning experience in the clinical radiographic environment. Students participate at pre-scheduled time periods and practice their radiographic skills for a total of 144 clinical education hours at various clinical locations. Students will be under the supervision of clinical instructors or registered radiographers during their experience. Basic skills necessary to perform entry level tasks in the clinical setting will be reviewed. Positioning skills of the chest, abdomen, hand, wrist, elbow and forearm will be covered. Radiation protection principles will be reviewed. See program policies for clinical clock hours vs credit hours description.

Prerequisites: currently passing RDTK 1580.

**RDTK 1810 - 1st Yr-
Clinical Education II (3CR)**

(13.5LB) A continuation of

RDTK 1710. This course involves a practical learning experience in the clinical radiographic environment. Students participate at pre-scheduled time periods and practice their radiographic skills for a total of 195 clinical education hours at various clinical locations. Students will be under the supervision of clinical instructors or registered radiographers during their experience. Skills necessary to perform entry level tasks in the clinical setting will be reviewed. Positioning skills of the shoulder, humerus, clavicle, scapula, AC joints, and lower extremities including the pelvic girdle will be covered. See program policies for clinical clock hours vs credit hours description.

Prerequisites: RDTK 1710.

**RDTK 1830 -
Pharmacology for
Radiographers (1CR)**

(1L) This course is designed to introduce the radiography student to common drugs the radiographer should be familiar with and those stocked for emergency use. The course will also include an overview of the laws governing drug administration. Venipuncture procedures and skill will be reviewed.

Prerequisites: current enrollment in the radiography program.

**RDTK 1910 - 1st Yr-
Clinical Education III (3CR)**

(13.5LB) A continuation of RDTK 1810. This course involves a practical learning experience in the clinical radiographic environment.

Students participate at pre-scheduled time periods and practice their radiographic skills for a total of 195 clinical education hours at various clinical locations. Students will be under the supervision of clinical instructors or registered radiographers during their experience. Skills necessary to perform entry level tasks in the clinical setting will be reviewed. Positioning skills of the spine and contrast studies will be covered. See program policies for clinical clock hours vs credit hours description.

Prerequisites: RDTK 1610 and RDTK 1810.

**RDTK 1915 - Introduction
to Computed Tomography (2CR)**

(2L) This course is designed to introduce the medical imaging student to basic aspects of computed tomography. An overview of history and technical advances related to CT, patient care and assessment specific to CT procedures, contrast media, radiation protection practices, as well as screening procedures and patient education. A basic introduction to the clinical setting will also be included.

Prerequisites: Admission to the Computed Tomography Program.

**RDTK 1920 - Computed
Tomography Procedures I (3CR)**

(3L) This course covers the anatomy and common pathology associated with computer tomography. The anatomical structures will be demonstrated in the axial, sagittal and coronal imaging planes. Scanning

protocols, contrast administration, and contraindications for computed tomography of the head, neck, chest, musculoskeletal, abdomen, and pelvis will be presented. Content provides detailed coverage of procedures for CT imaging. Procedures include, but are not limited to, indications for the procedure, patient education, preparation, orientation and positioning, patient history and assessment, contrast media usage, scout image, selectable scan parameters, filming and archiving of the images. CT procedures will be taught for differentiation of specific structures, patient symptomology and pathology images studied will reviewed for quality, anatomy and pathology. CT procedures vary from facility to facility and normally are dependent on the preferences of the radiologists. Patient Care, contrast media, venipuncture, CT injection procedures, radiation safety and protection will be emphasized for each of the scanning procedures.

Prerequisites: Admission to the Computed Tomography Program, RDTK 2200.

RDTK 1925 - Computed Tomography Physics and Instrumentation I (3CR)

(3L) Content is designed to impart an understanding of the physical principles and instrumentation involved in computed tomography. Physics topics covered include the characteristics of X-radiation, CT beam attenuation, linear attenuation coefficients, tissue characteristics and Hounsfield numbers application. Data acquisition and manipulation techniques, image reconstruction

algorithms such as filtered back-projection will be explained. Radiation protection and ethical issues associated with CT will be discussed.

Prerequisites: RDTK 1610, RDTK 1640.

RDTK 1930 - Computed Tomography Clinical I (3CR)

(13.5LB/week) Clinical education involves a practical learning experience in the patient care environment. Students participate in pre-scheduled time periods and practice their CT skills in a hospital or clinic setting. Students will be under the supervision of an experienced CT technologist. Emphasis will be placed on equipment utilization, exposure techniques, patient care, evaluation of CT procedures, evaluate image quality, radiation safety practices, contrast administration, positioning protocols and image acquisition. A specified number of clinical exam competencies will be required.

Prerequisites: RDTK 1915.

RDTK 1940 - Introduction to MRI (2CR)

(2L) This course introduces the basic principles of MR safety and covers the concepts of patient management during MRI procedures. Educating patients and ancillary staff on magnet safety also is presented. Patient and magnet-related emergencies represent a unique situation to an MR technologist; recommended procedures and responsibilities of the technologist will be discussed for these situations. This content also covers MR contract agents and

contraindications.

Prerequisites: Admission to the MRI Program.

RDTK 1945 - MRI Clinical Education I (3CR)

(13.5LB/week) Clinical education involves a practical learning experience in the patient care environment. Students participate in pre-scheduled time periods and practice their MRI skills in a hospital or clinic setting. Students will be under the supervision of an experienced MRI technologist. Emphasis will be placed on equipment utilization, exposure techniques, patient care, evaluation of MR procedures, evaluation of image quality, MR safety practices, contrast administration, positioning protocols and image acquisition. A specified number of clinical exam competencies will be required. A total of 195 supervised clinical hours will be completed.

Prerequisites: Admission to the MRI Program, RDTK 1940.

RDTK 1950 - MRI Procedures I (3CR)

(3L) This content provides the student with imaging techniques related to the head, neck, spine, chest, thorax and abdominopelvic regions. The content covers specific clinical application, coils that are available and their use, considerations in the scan sequences, specific choices in the protocols (e.g., slice thickness, phase direction and flow compensation), and positioning criteria. Anatomical structures and the plane that best demonstrates anatomy are discussed as well as signal

characteristics of normal and abnormal structures. This content outlines the critical criteria relevant to acquiring high-quality images of various anatomical regions. Due to different considerations for the various regions in the body, imaging protocols vary. The student studies the variations in imaging parameters for specific body regions and the resultant effect on signal characteristics and the anatomy represented. Evaluation criteria for determining the quality of images provides MR technologists with a better understanding of what constitutes a high-quality image. In a competency-based educational system, this content is completed prior to competency examinations. Review of appropriate patient care, contrast agents, and safety considerations while working in a magnetic field will be emphasized for each procedure. Pathologies associated with the areas discussed in this course will be reviewed.

Prerequisites: Admission to MRI program, RDTK 2200.

RDTK 1955 - MRI Principles I: Physics of Magnetic Resonance Imaging (3CR)

(3L) This unit provides the student with a comprehensive overview of MR imaging principles. Topics include the history of MR, nuclear MR signal production, tissue characteristics, pulse sequencing, imaging parameters/options and image formation. This course is required to understand the basic principles of MR image acquisition. The course provides information on the fundamentals

of MR image acquisition. This information is useful to enable the student to maximize MR image quality by understanding the fundamentals of MR imaging. Other areas covered include: magnetism, properties of magnetism, MR system components, MR magnets (permanent, resistive, superconducting, hybrid), radio frequency (RF) systems, gradient systems, shim systems and system shielding.

Prerequisites: Admission into MRI program, RDTK 1940.

RDTK 2200 - Sectional Anatomy (3CR)

(2L, 2LB) Comprehensive coverage of head, neck, thorax, abdomen, pelvis and extremities in sagittal, transverse and coronal planes. A background in imaging is highly recommended but not required.

Prerequisites: ZOO 2040, ZOO 2041, and ZOO 2110.

RDTK 2550 - Mammography Fundamentals (3CR)

(3L) This course covers the anatomy, pathology, and instrumentation involved in mammographic imaging. Topics covered will include: Patient Care, preparation and education; Instrumentation and Quality Assurance; Anatomy, Physiology and Pathology; Mammographic Technique and Image Evaluation; and Breast Imaging Procedures. Procedures will be covered in depth to include exam protocol, dose considerations, special patient care issues, interventional/special examinations, and diagnostic imaging. Special exams will

include Needle Localization, Breast MRI, Breast Ultrasound: imaging, biopsy or FNA, Stereotactic Procedure, Breast Implant Imaging, Ductography, and Diagnostic Work-Up. Content is designed to impart an understanding of the physical principles, technique, quality control and image evaluation involved in mammography. Analog and digital acquisition and documentation will be discussed. Image processing and display will be examined from data acquisition through post processing and archiving.

Prerequisites: ARRT registered & licensed and acceptance into the program.

RDTK 2555 - Mammography Clinical (2CR)

(8LB) Clinical education involves a practical learning experience in the patient care environment. Students participate in pre-scheduled time periods and practice their Mammography skills in a hospital or clinic setting. Students will be under the supervision of an experienced Mammo technologist. Emphasis will be placed on Mammography equipment set-up, patient care, anatomy, pathology, mass documentation, understanding image quality, radiation safety practices, position, image acquisition and Quality Control. Post processing techniques will also be included. A specified number of clinical exam competencies will be required.

Prerequisites: ARRT registered & licensed and acceptance into the program.

**RDTK 2580 -
Radiographic Positioning
III (2CR)**

(1.5L, 1.5LB) Positioning skills of the cranium, sella turcica; petrous pyramids; facial bones; zygomatic arches; nasal bones; mandible; temporomandibular joints; temporal bone; optic foramen; coccyx, bony thorax, digestive, and urinary systems including a study of contract media and fluoroscopy. Pediatric studies will also be included.

Prerequisites: RDTK 1680.

**RDTK 2630 -
Radiographic Pathology
(2CR)**

(2L) General principles of pathology as well as disease processes and radiographic manifestations of specific body systems will be covered. A portion of the course will be devoted to the study of cancer and its radiographic appearance for the various systems. (Fall semester.)

Prerequisites: ZOO 2040, ZOO 2041, ZOO 2110, and RDTK 2810.

**RDTK 2640 - Radiation
Biology and Protection
(2CR)**

(2L) The effects of ionizing radiation on biological systems and essential radiation protection guidelines to minimize radiation exposure to the radiographer, the patient, and the public.

Prerequisites: RDTK 1610, RDTK 2710, and ZOO 2040, and ZOO 2041.

**RDTK 2710 - 2nd Yr-
Clinical Education IV
(2CR)**

(28LB/week) A continuation of RDTK 1910. This course involves a practical learning experience in the clinical radiographic environment. Students participate at prescheduled time periods and practice their radiographic skills for a total of 144 clinical education hours at various clinical locations. Students will be under the supervision of clinical instructors or registered radiographers during their experience. Skills necessary to perform entry level tasks in the clinical setting will be reviewed. Contrast studies, mammography, computerized tomography, myelography and arthrography will be emphasized. Students will also be scheduled in rotations through specialty imaging and therapeutic modalities. See program policies for clinical clock hours vs credit hours description.

Prerequisites: RDTK 1910.

**RDTK 2810 - 2nd Yr-
Clinical Education V (5CR)**

(22.5LB) A continuation of RDTK 2710. This course involves a practical learning experience in the clinical radiographic environment. Students participate at pre-scheduled time periods and practice their radiographic skills for a total of 330 clinical education hours at various clinical locations. Students will be under the supervision of clinical instructors or registered radiographers during their experience. Skills necessary to perform entry level tasks in the clinical setting will be reviewed. Skull, facial bones, CT,

pediatric, contrast studies, trauma, surgical and mobile procedures will be reviewed. Students will also be scheduled in rotations through specialty imaging and therapeutic modalities. See program policies for clinical clock hours vs credit hours description.

Prerequisites: RDTK 2710.

**RDTK 2910 - 2nd Yr-
Clinical Education VI
(5CR)**

(22.5LB) A continuation of RDTK 2810. This course involves a practical learning experience in the clinical radiographic environment. Students participate at pre-scheduled time periods and practice their radiographic skills for a total of 330 clinical education hours at various clinical locations. Students will be under the supervision of clinical instructors or registered radiographers during their experience. Skills necessary to perform entry level tasks in the clinical setting will be reviewed. Review sessions will cover all imaging procedures in preparation for graduation and the national ARRT examination. Students will also be scheduled in rotations through specialty imaging and therapeutic modalities. See program policies for clinical clock hours vs credit hours description.

Prerequisites: RDTK 2810.

**RDTK 2915 - MRI Clinical
Education II (3CR)**

(13.5LB/week) Clinical education involves a practical learning experience in the patient care environment. Students participate in pre-scheduled time periods and practice their MRI

skills in a hospital or clinic setting. Students will be under the supervision of an experienced MRI technologist. Emphasis will be placed on equipment utilization, exposure techniques, patient care, evaluation of MR procedures, evaluation image quality, MR safety practices, contrast administration, positioning protocols and image acquisition. A specified number of clinical exam competencies will be required.

Prerequisites: RDTK 1945.

RDTK 2920 - MRI Procedures II (3CR)

(3L) This content provides the student with imaging techniques related to the musculoskeletal system, upper and lower extremities and vascular systems. The course will also present detailed content covering MRI pediatric procedures and specialized MR imaging exams to include: Magnetic resonance angiography, MR arthrography, and fMRI. The content covers specific application, coils that are available and their use, considerations in the scan sequences, specific choices in the protocols (e.g., slice thickness, phase direction and flow compensation), and positioning criteria. Anatomical structures and the plane that best demonstrates anatomy are discussed as well as signal characteristics of normal and abnormal structures. Content outlines the critical criteria relevant to acquiring high-quality images of various anatomical regions. Due to different considerations for the various regions in the body, imaging protocols vary. The student will study the variations in imaging parameters for

specific body regions and the resultant effect on signal characteristics and the anatomy represented. Evaluation criteria for determining the quality of images provides MR technologists with a better understanding of what constitutes a high-quality image. In a competency-based educational system, this content is completed prior to competency examinations. Pathologies associated with the areas discussed in this course will be reviewed.

Prerequisites: RDTK 1950.

RDTK 2925 - MRI Principles II: Instrumentation and Imaging (3CR)

(3L) This unit is designed to provide the student with a comprehensive overview of MR pulse sequences, image formation and image contrast. Pulse sequences include spin echo, inversion recovery, echo planar, parallel imaging and spectroscopy. In addition, tissue characteristics, contrast agents and post processing techniques are covered. This course provides the student with knowledge of the parameters and imaging options used to create MR images. In addition, the content introduces quality assurance measures used in maintaining image quality.

Prerequisites: RDTK 1955.

RDTK 2930 - Transition from Student to Radiographer (2CR)

(2L) Provides the advanced student technologist an opportunity to review previously learned radiologic material and effectively prepare for the

national certification examination. Résumé preparation, interviewing skills and professional organization participation will be included. Continuing personal and professional growth will be emphasized in this course.

Prerequisites: RDTK 2910.

RDTK 2935 - Computed Tomography Clinical II (3CR)

(13.5LB/week) Clinical education involves a practical learning experience in the patient care environment. Students participate in pre-scheduled time periods and practice their CT skills in a hospital or clinic setting. Students will be under the supervision of an experienced CT technologist. In this second clinical course students will be expected to perform more advanced procedures in a solo capacity under supervision. Emphasis will be placed on CT technique, selection, patient care, anatomy, pathology, understanding image quality, radiation safety practices, contrast administration, positioning and image acquisition. Post processing techniques will also be included. A specified number of clinical exam competencies will be required.

Prerequisites: RDTK 1930.

RDTK 2941 - Computed Tomography Physics and Instrumentation II (3CR)

(3L) Content is designed to impart an understanding of the physical principles and instrumentation involved in computed tomography. Physics topics covered include computed tomography systems and

operations will be explored with full coverage of radiographic tube configuration, collimator design and function, detector type, characteristics and functions and the CT computer and array processor. CT image processing and display will be examined from data acquisition through post processing and archiving and patient factors related to other elements affecting image quality will be explained, as well as artifact production and reduction and image communication.

Prerequisites: RDTK 1925.

RDTK 2945 - Computed Tomography Procedures II (3CR)

(3L) This course covers the anatomy and common pathology associated with computer tomography. The anatomical structures will be demonstrated in the axial, sagittal and coronal imaging planes. Scanning protocols, contrast administration, and contraindications for computer tomography of the pediatric procedures will be covered in depth to include: exam protocol, radiation protection and dose considerations, special patient care issues and contrast media and injections. Pediatric exams will cover CT of the head, neck, spine, abdomen, chest, musculoskeletal system, and CT angiography. Special applications in CT will be presented. Specialized CT procedures will include breast imaging, interventional CT studies, CT fluoroscopy, PET and CT fusion, cardiac scanning, CT angiography, CT guided biopsies, virtual colonoscopy, brain and transplant studies. Radiation therapy simulation studies will also be discussed.

Content provides detailed coverage of procedures for CT imaging. Procedures include, but are not limited to, indications for the procedure, patient education, preparation, orientation and positioning, patient history and assessment, contrast media usage, scout image, selectable scan parameters, filming and archiving of the images. CT procedures will be taught for differentiation of specific structures, patient symptomology and pathology. CT images studied will be reviewed for quality, anatomy and pathology. CT procedures vary from facility to facility and normally are dependent on the preferences of the radiologists.

Prerequisites: RDTK 2200, RDTK 1920.

Range Management

REWM 2000 - Principles of Range Management (3CR)

(2L, 2LB) [E] Basic principles of range management as they relate to livestock production, conservation practices and wildlife management, region vegetative types and range sites, and grazing systems and multiple range uses. Several field trips included.

Religion

RELI 1000 - Introduction to Religion (3CR)

(3L) [E] This course will introduce the major world religions and the role they play in shaping cultures and societies. The class will make use of various academic approaches to

study religions emphasizing similarities and differences. Instructors will draw upon research in a range of fields, including: anthropology, history, sociology, and the humanities.

Renewable Energy Technology

RETK 1500 - Solar Power Systems (2CR)

(2L) This course will introduce students to the basic concepts of various active and passive solar energy conversion technologies as they relate to other renewable energy technologies.

RETK 1505 - Small Wind Turbines (2CR)

(2L) This course is designed to examine small wind generation. Students will learn how small wind generators function, their connection to loads and distribution systems and design and application considerations. Students will also explore small wind turbine siting including potential wind energy calculations and turbine performance.

RETK 1520 - Wind Power Systems (3CR)

(2L, 2LB) This course is designed to provide students with an in-depth overview of wind power systems on the commercial size scale. The class – will explore turbine components and operations, operations of wind generating facilities, maintenance practices and system interconnect requirements.

RETK 1525 - Blade Installation and Maintenance (3CR)

(2L, 2LB) This course is designed to introduce students to the design considerations, installation and maintenance of wind turbine blades. The course will address blade performance as a function of blade design (aerodynamics), installation of blades for commercial size turbines and basic repair and maintenance of turbine blades.

RETK 1530 - Crane and Rigging Operations (1CR)

(1L) This course will introduce students to crane and rigging operations and will include presentations on crane operation theory and rigging procedures.

RETK 1535 - High Angle/Confined Space Rescue (2CR)

(1L, 2LB) This course will introduce students to the minimum requirements needed to safely rescue and perform elevated work.

RETK 1980 - Cooperative Work Experience

(1-8 CR) (Max. 8) On the job training with a cooperative renewable energy business or facility. Eighty hours of work per semester earns one hour of credit.

Prerequisites: Permission of the instructor.

RETK 2500 - Basic Site Planning (3CR)

(3L) This class is designed to teach students the concepts and processes employed in evaluating and preparing sites for construction of renewable energy projects.

RETK 2530 - Instrumentation (3CR)

(2L, 2LB) This course will introduce students to instrumentation systems used in the performance and condition monitoring and controlling of renewable energy technologies including wind power production, active and passive solar applications.

RETK 2550 - Power Distribution (3CR)

(2L, 2LB) This course will introduce students to basic concepts in electric power distribution systems as they relate to renewable energy resources. The course will examine inter-connection equipment and process and electric power substation, transmission and distribution systems.

Respiratory Therapy

RESP 1500 - Introduction to Respiratory Therapy (3CR)

(3L) Historical, governmental, and association overview of respiratory therapy. This course will introduce the student to patient assessment concepts as well as common respiratory pathologies and an introduction to respiratory pathologies. This course will introduce the student to respiratory physics. (First year summer semester.)

Prerequisites: admission into the respiratory therapy program.

RESP 1505 - Cardiopulmonary Anatomy & Physiology (2CR)

(2L) This course will cover the Anatomy and Physiology of the Cardiopulmonary systems of the

adult human body. (First year fall semester.)

Prerequisites: admission into the respiratory therapy program.

RESP 1507 - Respiratory Therapy I (3CR)

(3L) This course will cover Oxygen supply and medical gases, as well as an overview of common respiratory pathologies. (First year fall semester.)

Prerequisites: RESP 1500 RESP 1505.

RESP 1515 - Respiratory Lab I (1CR)

(4LB) This course will be the laboratory where respiratory skills are practiced, simulated and learned before using them in the clinical rotation. Subjects covered will be patient assessment, oxygen systems and administration, aerosol and humidity therapy, medication delivery, lung expansion therapy and pulmonary hygiene. (First year fall semester.)

Prerequisites: RESP 1500, RESP 1505.

RESP 1518 - Respiratory Practicum I (3CR)

(12LB) Students will rotate to several clinical sites as well as our clinical simulation center, in order to practice skills training under direct supervision. These rotations will include patient assessment, oxygen administration, aerosol and humidity therapy, medication delivery and lung expansion therapy.

Prerequisites: RESP 1500, RESP 1505.

RESP 1523 - Respiratory Pharmacology (2CR)

(2L) This course will cover material on respiratory specific drugs and those drugs that are commonly used in association with respiratory disease. (First year fall semester.)

Prerequisites: RESP 1500, RESP 1505.

RESP 1527 - Respiratory Therapy II (3CR)

(3L) Course material will cover subjects of respiratory failure, and mechanical ventilation for the adult patient. All phases of mechanical ventilation will be introduced, including initiation, management and weaning. (First year spring semester.)

Prerequisites: RESP 1507, RESP 1515, RESP 1518, RESP 1523.

RESP 1535 - Respiratory Lab II (1CR)

(4LB) Course material will include mechanical ventilation and patient monitoring, airway management, suctioning, tracheostomy care and EKG's. (First year spring semester.)

Prerequisites: RESP 1507, RESP 1515, RESP 1518, RESP 1523.

RESP 1538 - Respiratory Practicum II (4CR)

(16LB) Continuation of skills training at our clinical sites and clinical simulation center. Additional skills in airway management and ventilator initiation will be introduced under direct supervision. Case studies will be researched and presented to the class. The student will also participate in critical thinking classes to improve their clinical decision making skills. See program

handbook for clinical clock hours vs credit hours description. (First year spring semester.)

Prerequisites: RESP 1507, RESP 1515, RESP 1518, RESP 1523.

RESP 1545 - Respiratory Pathophysiology (2CR)

(2L) This course will cover common respiratory therapy disease pathologies that require special diagnostic evaluation techniques and treatment modalities. Course subject content will include airway management, EKG's, PFT's, HBO, bronchoscopy, chest tubes and the pathophysiology of the renal system.

Prerequisites: RESP 1507, RESP 1515, RESP 1518, RESP 1505

RESP 2500 - Respiratory Specialty Practicum (3CR)

(12LB) Continuation of skills training at our clinical sites, and clinical simulation center. During this clinical rotation, students will be exposed to mechanical ventilation in the adult critical care setting.

RESP 2507 - Respiratory Therapy III (3CR)

(3L) This course will continue in the study of mechanical ventilation with emphasis on advanced modes and management as well as operational overviews of ABG drawing and analysis. Students should have an understanding of some common pathophysiologies associated with critical care. (Second year fall semester.)

Prerequisites: RESP 2500.

RESP 2510 - Respiratory Pediatrics and Neonatology (2CR)

(2L) Course material will cover prenatal, neonatal, and pediatric respiratory care. (First year spring semester.)

Prerequisites: RESP 2500

RESP 2545 - Respiratory Lab III (1CR)

(4LB) Course material will cover additional mechanical ventilation modalities along with ABG's drawing techniques. Clinical competencies will include newborn and pediatric respiratory care and ventilator management. The students will be required to complete NPR certification. (Second year fall semester.)

Prerequisites: RESP 2500.

RESP 2548 - Respiratory Practicum III (4CR)

(16LB) Continuation of skills training at our clinical sites and clinical simulation center, with an emphasis on ICU, critical care and advanced ventilator management. The student will also participate in critical thinking classes to improve their clinical decision making skills. Case studies will be researched and presented. See program handbook for clinical clock hours versus credit hours description. (Second year fall semester.)

Prerequisites: RESP 2500.

RESP 2557 - Respiratory Therapy IV (3CR)

(3L) Course material will cover the transitioning from student to the respiratory care professional. Students will prepare for the national board exams, with a

complete comprehensive review of respiratory care. (Second year spring semester.)

Prerequisites: RESP 2507, RESP 2510, RESP 2545, RESP 2548.

RESP 2570 - Respiratory Simulations (2CR)

(2L) Students will take and pass the NBRC level written and simulation exams. Course work will help towards the success of passing these exams. (Second year spring semester.)

Prerequisites: RESP 2507, RESP 2510, RESP 2545, RESP 2548.

RESP 2575 - Respiratory Lab IV (1CR)

(4LB) Laboratory skills training for passing the advanced cardiopulmonary life support (ACLS) as well as pediatric advanced life support (PALS) tests. Introduction of advanced respiratory modalities. A research paper assignment involving an aspect of respiratory care. (Second year spring semester.)

Prerequisites: RESP 2507, RESP 1545, RESP 2545, RESP 2548.

RESP 2578 - Respiratory Practicum IV (4CR)

(16LB) Continuation of skills training at our clinical sites, and clinical simulation center. Students will travel to a Level III nursery for clinical exposure to neonate and pediatric critical care. Emphasis will be on all aspects of ventilator management, the acute respiratory patient and preparation for the CSE portion of the RRT exam. Students will research, present and critique case studies. See program handbook for clinical clock

hours vs credit hours description. (Second year spring semester.)

Prerequisites: RESP 2507, RESP 2510, RESP 2545, RESP 2548.

Robotics

ROBO 1650 - Electromechanics (3CR)

(2L, 2LB) The course will examine mechanical devices used in motion control. The emphasis will be on gear, belt and chain drives as well as simple transmissions. Students will also learn about DC and AC motors and motor control circuits used with these mechanical systems.

ROBO 2580 - LabView (2CR)

(2L) Students will learn how to use the LabView environment to simulate and control an automated process or motion control system.

ROBO 2590 - Motion Control (3CR)

(2L, 2LB) Controlling robots to perform various tasks using wireless and autonomous control based on sensor input. The course will examine mechanical motion, a variety of sensors, and communications used in controlling robots.

ROBO 2595 - Robot Systems (4CR)

(2L, 4LB) Students will learn how robot control must be integrated with other aspects of the control system. The course will use robot simulation software to design control systems for a variety of applications

Prerequisites: ROBO 2590 or permission of the instructor.

Russian

RUSS 0900 - Russian for Travelers (1CR)

(1L) A course of simple Russian to help the traveler make plans, obtain tickets, order meals, and ask for and understand general information as needed for travel in a Russian-speaking country.

RUSS 1010 - First Year Russian I (4CR)

(4L) This course utilizes a multi-skill approach: listening, speaking, reading, and writing and is designed for beginners or those with a weak background in Russian. Students who want to take for credit the next course in the sequence must complete this course with a grade of "C" or better.

RUSS 1020 - First Year Russian II (4CR)

(4L) This course is a continuation of RUSS 1010 and utilizes a multi-skill approach: listening, speaking, reading, and writing and is designed for beginners or those with a weak background in Russian. Students who want to take for credit the next course in the sequence must complete this course with a grade of "C" or better.

Prerequisites: RUSS 1010 or equivalent.

RUSS 2030 - Second Year Russian I (4CR)

(4L) [E] Grammar completion and conversation with a study of authentic cultural materials in Russian.

Prerequisites: Successful

completion of RUSS 1020 or permission of instructor.

RUSS 2475 - Independent Study in Russian (1-4CR) (Max. 4 credits)

(1-4CR) (Max. 4 credits)

Students will meet with the instructor to discuss independently assigned reading and reports from sources of special interest to the student(s) and pertaining to Russian culture and/or current events which are selected in consultation with the Russian instructor of record. Coursework will be done in Russian. Some oral/aural work will be required and grammatical topics may be revisited and expanded upon.

Prerequisites: Successful completion of RUSS 1020 or permission of the instructor.

Social Work

SOWK 2000 - Foundations of Social Work (3CR)

(3L) Introduces social work and social welfare through an overview of the history, philosophy, ethics, values, methods, and fields of practice to generalist social work.

Concurrently: Concurrent enrollment in SOWK 2005 is optional.

SOWK 2005 - Social Work Lab (1CR)

(2LB) This volunteer assignment is designed to acquaint the student with services and agencies providing a wide range of human services in the field of social work. This course is an optional Lab component taken in concern with SOWK 2000 – Foundations of Social Work.

SOWK 2025 - Social Work Capstone (3CR)

(3L) In this class, students will reflect upon prior coursework in a range of social science disciplines. In addition, students will complete assignments that assist in preparation for further study in the field of social work.

Prerequisites: SOC 1000, SOWK 2000, ENGL 1020, ECON 1010, and PSYC 1000

Sociology

SOC 1000 - Introduction to Sociology (3CR)

(3L) [E] A survey of the organization of human society and the impact of group membership and interpersonal relationships upon human behavior.

SOC 1100 - Social Problems (3CR)

(3L) [E] An analysis of the causes, effects and possible avenues for eradicating the social problems of our society. Crime, delinquency, family disorganization, racial conflict, and poverty are some areas of investigation.

Prerequisites: SOC 1000, or permission of the instructor.

SOC 1101 - Education and the Good life: A First-Year Seminar (3CR)

(3L) [E] SOC 1101 is a first-year seminar focused on the nature and purpose of higher education. As individuals, and in groups, students examine the personal, social, civic, and economic goals of a public college with emphasis on the role of the arts and sciences. During the class, students do research, they think

through complex issues, consult with others, and in the end, present samples of their work to the instructor and classmates.

SOC 2112 - Environmental Sociology (3CR)

(3L) Environmental sociology is focused on the intersection of the social and physical worlds. The course explores the constant interaction between human societies and the environments they depend upon. The analysis includes an examination of economic patterns like consumption, production, and the use of environmental resources. The course also includes a discussion of the social mechanisms that shape our relationship to the environment – norms, roles, values, beliefs, and ideology.

SOC 2200 - Sociology of Human Sexuality (3CR)

(3L) [E] An interdisciplinary course designed to acquaint the student with the major factors affecting human sexuality. Relevant research is reviewed in biology, psychology, sociology, and anthropology, as well as religious and historical perspectives.

Prerequisites: A 1000 level introductory social science or biology course.

Cross-listed: (Cross listed as PSYC 2200.)

SOC 2325 - Marriage and Family (3CR)

(3L) The family as a major institution. The significant aspects of courtship and marriage; contemporary marital and domestic problems; changing functions of the family and the impact of major social changes on family life are

studied.

Prerequisites: SOC 1000, PSYC 1000, or permission of the instructor.

SOC 2400 - Criminology (3CR)

(3L) [E] A general introduction to the nature of crime, statistics on crime, types of criminal behavior, and explorations of crime.

Prerequisites: SOC 1000, or permission of the instructor.

Soil Science

SOIL 2010 - Introduction to Soil Science (4CR)

(3L, 2LB) [E] Introduces soil ecological processes and management in terrestrial environments. Discusses interaction of soil, biological, chemical. Morphological, and physical properties with land management in wild land and agricultural ecosystems.

Emphasis is on plant response to soil conditions. (Spring semester.)

Prerequisites: None

Spanish

SPAN 0900 - Spanish for Travelers (1CR)

(1L) A course of simple Spanish to help the traveler order meals, make travel plans, obtain tickets, and ask for and understand general information as needed for travel in a Spanish-speaking country.

SPAN 1005 - Novice Spanish I (2CR)

(2L) This course is for the student who is weak in English grammar. While grammar is presented, the course emphasizes conversational Spanish using the natural approach. Listening, reading, writing, and speaking skills are developed. The student is introduced to Hispanic culture, the purposes and values of studying Spanish, and the Spanish language's influence on modern civilization. A student who needs four credits of Spanish for his/her degree must take one semester of SPAN 1005 followed by one semester of SPAN 1015 to receive credit equivalent to SPAN 1010. Should a student take SPAN 1005 followed by SPAN 1010, the student will receive credit for only SPAN 1010. Four credits maximum are allowed for SPAN 1005, SPAN 1010, and SPAN 1015. Students who want to take for credit the next course in the sequence must complete this course with a grade of "C" or better.

Prerequisites: For those students who have never studied Spanish and have an English ACT score of less than 18, or a COMPASS writing score of less than 75.

SPAN 1010 - First Year Spanish I (4CR)

(4L) [E] This course is intended for students who have never studied Spanish at the college level. Students will learn the fundamentals of the Spanish language through listening, speaking, reading and writing activities of the ACTFL (American Council on the Teaching of Foreign Languages) Novice High Level. This course will also introduce students to

the culture of various Spanish-speaking countries. Language laboratory times are required as needed. Students who want to take for credit the next course in the sequence must complete this course with grade of a 'C' or better.

SPAN 1015 - Novice Spanish II (2CR)

(2L) This course is a continuation of the objectives outlined in SPAN 1005. A student who needs four credits of Spanish for his/her degree must take one semester of SPAN 1005 followed by one semester of SPAN 1015 to receive credit equivalent to SPAN 1010. Should a student take SPAN 1005 followed by SPAN 1010, the student will receive credit for only SPAN 1010. Four credits maximum are allowed for SPAN 1005, SPAN 1010, and SPAN 1015. Students who want to take for credit the next course in the sequence must complete this course with a grade of "C" or better.

Prerequisites: SPAN 1005 with a grade of "C" or better.

SPAN 1020 - First Year Spanish II (4CR)

(4L) [E] This course is a continuation of the objectives in SPAN 1010. Students will become more proficient in listening, speaking, reading, and writing Spanish and will further their grammatical study of the Spanish language at the ACTFL (American Council on the Teaching of Foreign Languages) Novice Mid-Level. The course will continue to introduce students to the culture of various Spanish-speaking countries. Language laboratory times are required as needed.

Prerequisites: A grade of "C" or better in SPAN 1010, CLEP test result, or instructor's permission.

SPAN 2030 - Second Year Spanish I (4CR)

(4L) [E] This course focuses on increased development of listening, speaking reading, and writing skills in Spanish. Students review and expand upon grammar points which facilitate successful communication at the ACTFL (American Council on the Teaching of Foreign Languages) Novice High Level. Language laboratory times are required as needed.

Prerequisites: A grade of "C" or better in SPAN 1020, CLEP test result, or instructor's permission.

SPAN 2040 - Second Year Spanish II (4CR)

(4L) [E] This course further emphasizes the development of all four communicative aspects of the Spanish language through composition, conversation, oral presentations, and grammar study. Language laboratory times are required as needed.

Prerequisites: A grade of "C" or better in SPAN 2030, CLEP test result, or instructor's permission.

SPAN 2140 - Introduction to Reading/Composition and Conversation (3CR)

(3L) [E] Reading of literature with emphasis on creative written expression; included is an introduction to Hispanic culture. Students who want to take for credit the next course in the sequence must complete this course with a grade of "C" or better.

Prerequisites: SPAN 2040, or

permission of the instructor. Students speak in Spanish. Emphasis on Latin American literature.

SPAN 2220 - Intermediate Composition and Conversation (3CR)

(3L) Reading of literature with emphasis on creative written expression; included is an introduction to Hispanic culture. Students who want to take for credit the next course in the sequence must complete this course with a grade of "C" or better.

Prerequisites: SPAN 2140, or permission of the instructor. Students speak in Spanish. Emphasis on Spanish literature.

SPAN 2410 - Introduction to Oaxacan Culture (1CR)

(1L) This course will focus on unique culture found in Oaxaca, Mexico. It will prepare students to more fully appreciate that culture while living in the midst of it as they attend a Spanish Language course at the Universidad Regional del Sureste (URSE) and take part in a service learning project in Oaxaca. This course is required of all students who wish to participate in the Student Exchange between Casper College and URSE. It must be passed with a grade of "C" or better and must be taken concurrently with SPAN 2420.

Prerequisites: Successful completion of SPAN 1010 with a grade of "C" or better, must be 18 years old by 1 January of the year in which the exchange is offered.

SPAN 2420 - Travel to Mexico: Oaxaca (3CR)

(3L) This course will focus on unique or specific situations associated with traveling to Mexico (specifically Oaxaca). It will prepare students to successfully complete a Spanish language course at the Universidad Regional del Sureste (URSE) and a service learning project in Oaxaca. This course is required of all students who wish to participate in the Student Exchange between Casper College and URSE. It must be passed with a grade of "C" or better and must be taken concurrently with SPAN 2410.

Prerequisites: Successful completion of SPAN 1010 with a grade of "C" or better; must be 18 years old by 1 January of the year in which the exchange is offered.

SPAN 2475 - Independent Study, Spanish

(1-4CR) (Max. 4) Individual appointments with instructor. Books studied independently by student in consultation with instructor. Students who want to take for credit the next course in the sequence must complete this course with a grade of "C" or better.

Prerequisites: SPAN 2040, or permission of the instructor.

SPAN 2495 - Workshop: Topic

(.5-3CR) (Max. 12) Offered in response to needs and interests of students and members of business and the community. Various topics will focus on development of practical Spanish-speaking skills and cultural awareness. A student may repeat this course, under

different topics, for credit up to a maximum of 12 credit hours. Students who want to take for credit the next course in the sequence must complete this course with a grade of "C" or better.

Statistics

STAT 2000 - Statistics and the World (3CR)

(3L) Discusses statistical reasoning and methods as related to today's society. Emphasizes ideas rather than specific techniques. Focuses on real examples of the use (and misuse) of statistics. Includes sampling, experimentation, descriptive statistics, elementary probability and statistical inference.

Prerequisites: Grade of C or better in MATH 0930 or MATH 1000 or higher.

STAT 2050 - Fundamentals of Statistics (4CR)

(5L) [E] Primarily for the students of the life sciences, behavioral sciences, and physical sciences. Includes frequency distributions and graphics, central tendency, dispersion, useful probability models, and basic statistical inference including linear regression and correlation.

Prerequisites: A "C" or better in MATH 1000 or MATH 1400, or an ACT Math score of 23 or better, or an appropriate COMPASS Exam score within the past year.

STAT 2070 - Introductory Statistics for Social Science (4CR)

(5L) [E] Primarily for the

students of the social sciences. Includes frequency distributions and graphics, central tendency, dispersion, useful probability models, and basic statistical inference including linear regression and correlation, with emphasis on applications in the social sciences.

Prerequisites: A "C" or better in MATH 1000 or MATH 1400, or an ACT Math score of 23 or better, or an appropriate COMPASS Exam score within the past year.

STAT 2120 - Fundamentals of Sampling (5CR)

(5L) This course develops methodology of simple random sampling, stratified sampling, and multistage sampling; provides applications related to physical, social, and biological sciences; discusses single and two-variable estimation techniques, and presents estimation based on subsamples from subpopulations.

Prerequisites: A "C" or better in STAT 2050 or STAT 2070.

STAT 2121 - Sampling Supplement (2CR)

(2L) This course is a required co-enrollment class to be taken with STAT 4155 (Sampling) offered at Casper College by the University of Wyoming. When combined with STAT 4155, content is identical to STAT 2120.

STAT 2150 - Statistical Methods of Data Analysis (4CR)

(4L) [E] A continuation of statistical inference methods begun in STAT 2050 and STAT 2070. Topics include the design

of experiments, multi-sample and multivariate methods, multiple regression, ANOVA, ANCOVA, MANOVA, and non-parametric methods. Emphasis is on interpretation of analyses provided by statistical software.

Prerequisites: A 'C' or better in STAT 2050 or STAT 2070.

STAT 2220 - Experimental Design (5CR)

(5L) This course reviews design and analysis of one-factor experiments and introduces multi-factor experiments, Latin squares, nested designs and random effects. It also introduces topics such as polynomial response curves, trend analysis, split plots, and incomplete blocks as time permits.

Prerequisites: A grade of "C" or better in STAT 2150.

STAT 2221 - Design and Analysis of Experiments Supplement (2CR)

(2L) This course is a required co-enrollment class to be taken with STAT 4025 (Design and Analysis of Experiments) offered at Casper College by the University of Wyoming. When combined with STAT 4025, content is identical to STAT 2220.

STAT 2240 - Categorical Data Analysis (5CR)

(5L) This course covers applied methods for analyzing associations when some or all variables are measured in discrete categories, not continuous scales. Topics include the binomial, multinomial, and Poisson probability models, parameter estimation and hypothesis-

testing and proportions, measures of association and tests for contingency tables, logistic regression, and log-linear models.

Prerequisites: A grade of "C" or better in STAT 2150.

STAT 2241 - Categorical Data Analysis Supplement (2CR)

(2L) This course is a required co-enrollment class to be taken with STAT 4045 (Categorical Data Analysis) offered at Casper College by the University of Wyoming. When combined with STAT 4045, content is identical to STAT 2240.

STAT 2485 - Statistics Laboratory (2CR)

(1L, 2LB) This course provides a real-life introduction to the elements of client consultation. The student will learn to translate the client's needs into statistical methodology under the supervision of the faculty. Client questions will include elements of design, sampling methods, analysis procedures, and interpretation of analysis, which the student will now learn to apply. Complicated issues will be discussed and resolved in a seminar format.

Prerequisites: A grade of "C" or better in STAT 2220.

Theatre

THEA 1000 - Introduction to the Theatre (3CR)

(3L) [E] Designed to stimulate an interest and appreciation of the role of the theatre in the modern world including a survey of major theatrical periods from the Golden Age of Greece into

the 20th century, a study of the effective evaluation of theatrical performance, and the modern business of theatre.

THEA 1005 - The Art of Sound (1CR)

(1L) A study of the basic concepts of sound in the field of theatre, radio, television, internet and live performances. Learning the art form of sound and basic techniques of the equipment for recorded and live art. Topics include: under scoring, dialog, Foley, dramatic Audio, basics of microphones, mixers and sound systems. Editing equipment for audio production.

Prerequisites: None

THEA 1010 - Fundamentals of Theatre Arts (3CR)

(3L) [E] Designed to stimulate an interest in and appreciation of the role of the theatre in the modern world including a survey of major theatrical periods from the Golden Age of Greece into the 20th century, a study of the effective evaluation of theatrical performance, and the modern business of theatre.

THEA 1020 - Children's Theatre (3CR)

(2L, 2LB) This course will include a brief history of Children's Theatre, that is performance for children and youth; a study of selected plays that have been important in the development; the study and experience in the techniques employed in performing for children and youth, and will result in the development of a performance piece (play) that will be toured to local elementary schools.

THEA 1100 - Acting I (3CR)

(3L) [E] A foundation performance course with emphasis on exploring and developing sensory and emotional resources through creative exercises and improvisations leading to performance readiness. The course uses a step-by-step 'learn by doing' methodology.

THEA 1115 - Twentieth Century Avant Garde Theatre (3CR)

(3L) This course will introduce students to styles and methods of performance that emerged as alternatives to mainstream theatre in the 20th century.

THEA 1120 - Asian Theatre (3CR)

(3L) In this course, students will explore the theatrical forms of Asia, specifically the countries of China, Japan, India, Indonesia, and Burma. We will study the form and content of theatrical practices such as kabuki, noh, Chinese opera, banraku, buto, kathakali, and kyogen. Students also will study the theatrical theory underlying these practices; examples include the ancient Sanskrit treatise Natyasastra and the treatise by Zeami on the subject of Noh drama. Finally, students will read plays exemplary of these various theatrical practices.

Prerequisites: None.

THEA 1125 - Musical Theatre Performance Techniques I (3CR)

(2L, 2LB) This course is designed to integrate the learned skills of singing, acting, movement, voice and dancing

into a synthesized, cohesive musical theatre performance craft.

THEA 1220 - CAD for Theatre (3CR)

(2L, 2LB) An introductory course in computer graphics using AutoCAD software to create drafting for scenic and lighting designs. Students will be given the opportunity to learn 2-D and 3-D drawing, how to properly maintain files and how to produce hard copies.

THEA 1471 - Technical Theatre Practicum Costuming (2CR)

(4LB) Required technical theatre lab work for all technical theatre majors not registered in THEA 2220 Stagecraft. Hands-on work constructing costumes used in Casper College Theatre and Dance Department productions. The student will develop an overview of how all the areas of technical construction overlap and support each other.

THEA 1472 - Technical Theatre Practicum Lighting (2CR)

(4LB) Required technical theatre lab work for all technical theatre majors not registered in THEA 2220 Stagecraft. Hands-on work in lighting preparation used in Casper College Theatre and Dance Department productions. The student will develop an overview of how all the areas of technical construction overlap and support each other.

THEA 1473 - Technical Theatre Practicum Properties (2CR)

(4LB) Required technical theatre lab work for all technical theatre majors not registered in THEA

2220 Stagecraft. Hands-on work constructing properties used in Casper College Theatre and Dance Department productions. The student will develop an overview of how all the areas of technical construction overlap and support each other.

THEA 2010 - Theatrical Backgrounds Drama I (3CR)

(3L) [E] First semester of a one-year course. A study of plays from the major periods of dramatic literature. This course will cover from the Greeks through the Restoration.

Prerequisites: THEA 1000 or THEA 1010.

THEA 2020 - Theatrical Backgrounds Drama II (3CR)

(3L) [E] Second semester of a one-year course. Covers major plays from the 18th century to the present. A continuation of THEA 2010.

Prerequisites: THEA 2010, or permission of the instructor.

THEA 2030 - Beginning Playwriting (2CR)

(2L) This course helps develop the student's playwriting skills. It covers play formatting and scene writing exercises. Each exercise will be written outside of class. The student's work will then be read and discussed in the following class.

THEA 2050 - Theatre Practice

(1-2CR) (Max. 10) [E] Individually supervised practical training during the rehearsal and performance of faculty-directed theatre productions. Open entry.

Prerequisites: permission of the instructor.

THEA 2060 - Production: Run Crew

(1-2CR) Repeatable Individually supervised practical training during the rehearsal and performance of faculty-directed theatre productions. Open entry.

Prerequisites: Permission of instructor.

THEA 2070 - Production: Costume Crew

(1-2CR) (Max. 10) Individually supervised practical training during the rehearsal and performance of faculty-directed theatre productions. Open entry.

Prerequisites: Permission of instructor.

THEA 2080 - Production: Stage Management

(1-2CR) (Max. 10) Individually supervised experience in stage management during the rehearsal and performance of faculty-directed theatre productions. Open entry.

Prerequisites: Permission of instructor.

THEA 2090 - Production: Orchestra

(1-2CR) Individually supervised practical training during the rehearsal and performance of faculty-directed theatre production. Open entry.

Prerequisites: Permission of the instructor.

THEA 2100 - Acting II (3CR)

(3L) A course to develop the actor's voice and body for characterization and character interaction through performance of scenes. Study of character and scene analysis.

Prerequisites: THEA 1100, or permission of the instructor.

THEA 2135 - Script Development (2CR)

(2L) In this course, the class will explore the process of bringing a play "from the page to the stage." Student playwrights with early drafts of original material will have the opportunity to workshop their plays with a group of actors and designers. As the plays are being revised, the group will examine ways in which the plays might be produced, gaining valuable insight into how the business of the theatre operates. Using only the resources available through the Department of Theatre and Dance and a production budget allocated by the Bakkhai, student directors and designers will have the opportunity to explore their visions of extant material and develop their ideas for production during the summer Theatre Brute season.

THEA 2140 - Voice for Acting (3CR)

(3L) Study of voice and articulation as a means of improving vocal expression in performance.

THEA 2145 - Costume Construction (3CR)

(1L, 4LB) [E] Will introduce all aspects of stage costuming: costume construction and the integrating of the costume with scenery, make-up, and lighting.

This class will focus on the practical construction and crafting of costumes and may include practical laboratory work on college productions.

THEA 2155 - Movement for Acting (3CR)

(3L) This course focuses on the physical training of the actor. Aspects of physical training that will be covered are: warm ups, dynamic movement, relaxation and alignment, coordination and control, and techniques such as stage combat and mime.

THEA 2160 - Stage Make-up (3CR)

(1L, 4LB) [E] The practice of techniques involved in stage make-up. Straight and character make-ups, the application and shaping of beards and mustaches, and other techniques of realistic and nonrealistic make-up.

THEA 2220 - Stagecraft (4CR)

(3L, 1LB) [E] Study of basic skills and procedures used to realize a design idea into a finished stage production. Work in design principles and techniques, set construction, color, and stage lighting. Laboratory required.

THEA 2225 - Playing with Shakespeare: Literature in Performance (4CR)

(4L) A fresh look at Shakespeare, aimed at engaging students' interests and increasing their appreciation and enjoyment of his works. Will include study of a variety of different performances. Will examine and respond to the interpretations of actors, directors, and literary critics in order to arrive at a

more complete understanding of Shakespeare's plays, both as literature and performance. Prerequisites: ENGL 1010, or permission of the instructor. Cross-listed: (Cross-listed as ENGL 2225.)

THEA 2230 - Stage Lighting (3CR)

(2L, 2LB) This is an introduction to the discipline of stage lighting which will examine the elemental aspects of stage lighting including: history, luminaries, color theory, lighting control, principles of lighting design and fundamental electricity. Laboratory required.

THEA 2235 - Introduction to Scenic Design (3CR)

(3L) An introduction to the discipline of scenic design. Course will focus on the fundamentals of scenic design, including the history of design, fundamentals and principles of design, design process, and production of designer drawings, elevations, renderings and models.

Prerequisites: THEA 2220

THEA 2240 - Costume Design (3CR)

(3L) An introduction to the discipline of costume design. This course will focus on the fundamentals of costume design, including history of design, history of fashion, fundamentals and principles of design, design process, and position of designer drawings, renderings, and other collaborative communications.

Prerequisites: THEA 2145

THEA 2310 - Auditioning (3CR)

(2L, 2LB) Practical experience in preparing and presenting audition material, and a preparation for a career in theatre, film or television.

Prerequisites: THEA 1100, THEA 2100, or permission of instructor.

THEA 2311 - Portfolio Preparation (1CR)

(1L) This course is for beginning costume, makeup, set or lighting designers, stage managers and/or technical directors. It is the study and practice of the techniques and skills required to assemble a professional portfolio and to prepare the student to present their work and themselves in a professional manner when interviewing for transfer schools or jobs.

THEA 2350 - Musical Theatre History and Analysis (4CR)

(4L) Understanding the history of musical theatre through the reading, listening, watching, and analyzing of specific groundbreaking musicals representative of the genre throughout the decades, and then how that information applies to each student's professional craft.

THEA 2360 - Musical Theatre History and Analysis II (3CR)

(3L) An advanced study of the analysis of musical theatre through the reading, listening, watching, and analyzing of specific groundbreaking musicals representative of the genre, and then how that information applies to each student's professional craft. This course will fulfill the general education requirement for

Cultural Environment.

Prerequisites: THEA 2350

THEA 2370 - Summer Theatre

(2-6LB) (1-3CR) [E] (Max. 4) Credit for participation in the Casper College Summer Theatre Program in all phases of production. Open entry. (Summer term.)

Prerequisites: permission of the instructor.

THEA 2475 - Directed Special Projects in Theatre (3CR)

(1-3L, 2-6LB) (Max. 6) For students who wish to work in greater depth in acting, scenic design, stage lighting, costuming, research in theatre, etc. Course content will be contracted individually with each student in order to provide greater emphasis and experience in that student's area of interest.

THEA 2790 - Stage Management (2CR)

(2L) Learn the basic techniques used by stage managers to run and organize auditions, rehearsals, technical rehearsals and performances.

Welding Technology

WELD 1555 - Welding Technology Safety (1.5CR)

(1L, 1LB) Designed to increase awareness of accident prevention and to recognize potential hazards in the working environment. Emphasis in the theory and practice of hand tools and shop equipment including good working habits toward drilling, tapping, grinding, filing,

letter stamping, metal cutting, drill sharpening, machine guarding, and layout.

WELD 1650 - Print Reading (2CR)

(2L) Designed to develop technical understanding of standard American Welding Society (AWS) symbols contained on engineering drawings and to effectively use this information to communicate welding instructions from the designer to the welder and fitter.

WELD 1700 - General Welding

(.5L, 1LB) (1CR) or (1L, 3LB) (2.5CR) Includes the study of oxyacetylene welding, cutting and brazing (OAW, OAC), and Shielded Metal Arc Welding (SMAW) processes. Students should develop skills necessary to produce quality welds on mild steel joints utilizing both processes.

WELD 1710 - Oxyacetylene Welding and Cutting (1.5CR)

(1L, 1LB) Instruction in welding safety, oxyacetylene cutting (OAC), oxyacetylene welding (OAW) and torch brazing (TB) processes. Identification of the most common joint designs, including joining processes using bead, fillet, and groove welds. Applications used with art forms, pipe welding, and nonferrous metals are covered.

WELD 1755 - Shielded Metal Arc Welding (8CR)

(4L, 8LB) Provides the student with the technical knowledge of Shielded Metal Arc Welding (SMAW) safety, power sources, and electrode classification and selection. Training is provided to

develop skills necessary to produce quality welds on mild steel in all positions using mild steel electrodes, low hydrogen electrodes, and iron powder electrodes using both AC and DC current.

WELD 1770 - Gas Metal Arc Welding (GMAW) (5CR)

(2L, 6LB) Provides the student with a technical understanding of Gas Metal Arc Welding (GMAW) equipment, troubleshooting and adjustments, metal transfer, shielding gases, and welding safety. Will include training in the gas metal arc spray and short circuit transfer, Flux Cored Arc Welding (FCAW), and Innershield.

WELD 1780 - Gas Tungsten Arc Welding (GTAW) (5CR)

(2L, 6LB) Provides the student with the knowledge and understanding of the Gas Tungsten Arc Welding (GTAW) process, welding safety, and arc characteristics. Students should develop skills necessary to produce quality fillet and open groove welds on mild steel, stainless steel, and aluminum.

WELD 1820 - GMAW and GTAW Welding (2.5CR)

(1L, 3LB) Provides basic instruction in the Gas Tungsten Arc Welding (GTAW) and Gas Metal Arc Welding (GMAW) processes. Emphasis on safety, machine set-up and troubleshooting, and power sources. Students should develop skills necessary to produce quality welds on mild steel, aluminum, and stainless steel joints utilizing both processes.

WELD 1860 - Welding Fabrication (5CR)

(2L, 6LB) Building a project of their choice, students display design, layout, and welding skills. Abilities are further developed using a variety of processes on construction of metal structures. Students are given the opportunity to compete in local and national competition with their projects.

Prerequisites: WELD 1650, WELD 1710, WELD 1755, WELD 1770, AUBR 1820.

WELD 1910 - Specialized Welding and Joining (3CR)

(2L, 2LB) Emphasizes unique applications of hard-to-join metals and plastics. Utilizing modern technology, students are exposed to new dimensions in welding. Various laboratory exercises will cover plasma, submerged arc welding, resistance spot welding, metal surfacing, thermal torch spraying, and thermoplastic welding.

Prerequisites: WELD 1710, WELD 1755, WELD 1770, WELD 1820, AUBR 1540.

WELD 1975 - Independent Study Welding

(1-3CR) Provides an option for students with sufficient background to pursue special interests in the welding laboratory under contract with the instructor.

Prerequisites: Welding majors only.

WELD 1980 - Cooperative Work Experience

(1-8CR) (Max. 8) Advanced students are afforded the opportunity to gain practical on-

the job experience in their specialties. Students will be supervised by the instructor and the employer. A minimum of 80 hours of on-the-job training represents one semester credit.

Prerequisites: permission of the instructor.

WELD 2500 - Structural Welding (3CR)

(2L, 2LB) A continuation of ARC welding techniques utilizing Shielded Metal Arc Welding (SMAW) Gas Metal Arc Welding (GMAW) on a variety of structural applications. Emphasis will be placed on multiple positions and joint geometry common to industry. Testing and course material will be based on the American Welding Society Structural Welding Code D1.1.

Prerequisites: WELD 1710 and WELD 1770.

WELD 2510 - Pipe Welding I (4CR)

(2L, 4LB) An introduction to pipe fabrication. Emphasis will be on joint preparation, formulas used in pipe layout, and uphill and downhill techniques. Welding will be done on carbon steel using the Shielded Metal Arc Welding (SMAW) process with qualification testing in accordance with API and ASME codes.

Prerequisites: WELD 1710 or permission of instructor. Concurrently: Concurrent enrollment in WELD 1755 is required.

WELD 2520 - Pipe Welding II (5CR)

(2L, 6LB) Designed to combine skills developed in previous courses to prepare pipe joints on carbon steel, stainless steel, and aluminum pipe. Welding will be done using the Shielded Metal Arc Welding (SMAW), Gas Tungsten Arc Welding (GTAW), and Gas Metal Welding (GMAW) processes in the 2G, 5G and 6G positions. This course includes a welder qualification performance test in accordance with Section IX of the ASME Boiler and Pressure Vessel Code.

Prerequisites: WELD 2510.

WELD 2970 - Welding Internship

(1-8CR) Students will be placed in selected welding related industries for guided learning experiences providing the students with practical application of knowledge and skills learned in the classroom.

Prerequisites: permission of the instructor.

WELD 2995 - Welding Workshop (1CR)

(2LB) A variable interest course in the welding field designed for vocational education instructors only.

Women's and Gender Studies

WMST 1080 - Introduction to Women's Studies (3CR)

(3L) [E] A discussion of issues central to women's studies: the psychology, sociology and acculturation of women, and women's contributions to and

influence on society, culture, work, and the arts.

WMST 2020 - Women and Food (3CR)

(3L) "Who is cooking what, for whom, under what conditions, and does it matter? Are we what we eat? A daily activity all of us must do and have done since the day we were born, eating plays a role in constructing our identities and the worlds we live in...this course will examine the complex interplay of food and the construction of identities and social structures. Focusing on women and gender within the contexts of race, class, and sexuality, we will explore food practices historically both domestically and in larger social structures including the global context. We will use historical and social analyses as well as memoir and fiction to explore these issues." (description used with permission from Dr. Avakian at 2010 WMST Conference).

Prerequisites: None.

WMST 2021 - Women in Music (3CR)

(3L) This course explores women's contribution to the field of Western music from Ancient Greece to modern times.

Prerequisites: None.
Cross-listed: MUSC 2021

WMST 2025 - Women in Global Culture (3CR)

(3L) In this course, we will explore global and cross-cultural perspectives on women and feminism. We will examine feminist perspectives across a range of national and international issues affecting all people, with an emphasis on the

realities women face. We will also analyze the feminist debates surrounding Western concepts of feminisms and compare Western concepts to other concepts in different geographic and cultural contexts.

Prerequisites: None.

WMST 2040 - History of Women in America (3CR)

(3L) Examine women's history, the activities and circumstances specific to women in America, and their contributions, influences, and significance.

Prerequisites: ENGL 1010, (or concurrent enrollment) or permission of the instructor.

WMST 2480 - Directed Special Projects

(1-3L) (1-3CR) (Max. 3)
Research project designed by student in consultation with instructor from the women's studies department, and with approval of the director of women's studies.

Prerequisites: WMST 1080 and permission of the instructor.

Zoology

ZOO 2040 - Human Anatomy (3CR)

(3L) [E] This course is designed to give students a hands-on experience with the microscopic and macroscopic elements of human anatomy. Topics covered include human anatomical principles ranging from the cellular to the organ system level. This course is intended to provide students with a solid anatomical background, which may be used to assist in learning human physiology.

Concurrently: (This course must be combined with ZOO 2041 and ZOO 2110 in order to fulfill an anatomy and physiology requirement.
*NOTE: a maximum of 8 credit hours in an Anatomy and Physiology course sequence may be applied toward graduation.)
Cross-listed: (Cross-listed at UW as KIN 2040.)

ZOO 2041 - Human Anatomy Lab (1CR)

(3LB) [E] This course is designed to give students a hands-on experience with the microscopic and macroscopic elements of human anatomy. Topics covered include human anatomical principles ranging from the cellular to the organ system level. This course is intended to provide students with a solid anatomical background, which may be used to assist in learning human physiology.

Concurrently: To be taken concurrent with ZOO 2040 Human Anatomy.
Cross-listed: (Cross-listed at UW as KIN 2041.)

ZOO 2110 - Human Physiology (4CR)

(3L, 3LB) This course is a scientific inquiry into the physiology of select organ systems in the human body during homeostasis. Physical exertion, environmental effects and pathological change will also be discussed as they pertain to physiological change in organ system function. Physiologic concepts will be related to anatomical organization.

Concurrently: (This course must be combined with ZOO 2040 and ZOO 2041 in order to fulfill an anatomy and physiology requirement.
*NOTE: a maximum of 8 credit hours in an Anatomy and Physiology course sequence may be applied toward graduation.)
Cross-listed: (Cross-listed with PEPR 2110 .)

ZOO 2140 - Cadaver Anatomy (4CR)

(3L, 2LB) This course involves dissection of human anatomical donors for the purpose of studying human anatomy at the

macroscopic level. The lecture portion of the course builds upon the principles of anatomy acquired in previous coursework. In the laboratory portion of the course, students will learn basic dissection techniques and will apply them to the dissection of a human anatomical donor. The course is regionally organized so that the primary focus is on the thorax, abdominal and cranial regions. Extremity, back and pelvic prosections will be studied. (Spring only.)

Prerequisites: Successful completion of ZOO 2040, ZOO 2041, and ZOO 2110, or permission of the instructor.

ZOO 2450 – Principles of Wildlife Management (3CR)

(3L) Emphasizes principles of habitat and population biology and management, human dimensions of wildlife management, as well as law and policy

Cross listed: ENR 2450

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