

**CASPER COLLEGE COURSE SYLLABUS**  
**ELAP 1535, Section 01 – Independent Electrical Apprentice III**

**Semester/Year:** Fall 2015

**Lecture Hours:** 5

**Lab Hours:** 0

**Credit Hours:** 5

**Class Time:** 6:30-9:00 pm

**Days:** TTH

**Room:** PS216

**Instructor's Name:** Mr. Mitchell

**Instructor's contact Information:**

**Phone:** 259-0448  
**Email:** smelectric@bresnan.net  
**Office hours:** N/A

**Course Description:**

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.

**Statement of Prerequisites:**

Recommended status as a second-year/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.

**Course Goals:**

Upon completion of this course, the student will meet the requirements for continuation of the second/third year as an Electrical Apprentice. This vocational course is intended to provide industrial training for employment in areas closely related to electrical wiring. As such, it is not intended to be transferred to other institutions, although it may be accepted by similar two-year vocational programs. Within the State of Wyoming, this course is transferable to any other Community College participating in the State approved Electrical Apprenticeship training program.

**Outcomes:**

1. Apply the National Electrical Code to industrial electrical applications.

**Course Objectives:**

1. Wiring of industrial buildings to meet the requirements of the National Electrical Code.
2. Practice the safeguarding of persons and property from the hazards arising from the use of electricity.
3. Interpretation of the National Electrical Code.

**Methodology:**

Supervised self study in small groups will be the major learning technique, supplemented with lecture, demonstration, audio-visual materials and practical applications.

**Evaluation Criteria:**

Students will be evaluated on participation and exams. Participation will be 50% and the other 50% will be based on quizzes/exams covering the NEC and industrial electrical wiring.

**Participation:**

Based upon your attendance and behavior in class. I will be keeping track of each student's attendance. Other issues that can cause loss of points for participation are being late, disruptive behavior, sleeping, not paying attention, and so on.

Grading Policy:	A	=	94% or better
	B	=	88 – 93%
	C	=	82 – 87%
	D	=	75 – 81%
	F	=	Less than 75%

**Casper College may collect samples of student work demonstrating achievement of the above outcomes. Any personally identifying information will be removed from student work.**

**Required Text, Readings, and Materials:**

Herman, Stephen, Electrical Wiring, Industrial, Delmar/Cengage Learning, 2014.  
2014 National Electrical Code.

**Class Policies: Last Date to Change to Audit Status or Withdraw with a W Grade:**

November 12, 2015

Attendance is required by the Department of Fire Prevention and Electrical Safety and Casper College. All students must have at least 72 hours of attendance per semester. Less than 72 will result in failure.

No student will be allowed to take midterm or continue attending class if not registered by October 12.

**Safety:**

Personal and equipment safety standards will be strictly enforced. *It is the individual's responsibility to develop and use a safe work attitude.* Disregard for the safety of yourself and/or others will result in dismissal from the class.

**Student Rights and Responsibilities:**

Please refer to the Casper College Student Conduct and Judicial Code for information concerning your rights and responsibilities as a Casper College Student.

**Chain of Command:**

If you have any problems with this class, you should first contact the instructor to attempt to solve the problem. If you are not satisfied with the solution offered by the instructor, you should then take the matter through the appropriate chain of command starting with the Department Head/Program Director, the Dean, and lastly the Vice President for Academic Affairs.

**Academic Dishonesty:**

(Cheating & Plagiarism) Casper College demands intellectual honesty. Proven plagiarism or any form of dishonesty associated with the academic process can result in the offender failing the course in which the offense was committed or expulsion from school. See the Casper College Student Code of Conduct for more information on this topic.

**Official Means of Communication:**

Casper College faculty and staff will employ the student's assigned Casper College email account as a primary method of communication. Students are responsible to check their account regularly. This is also, where you will find course evaluation links during course evaluation periods.

**ADA Accommodations Policy:**

If you need academic accommodations because of a disability, please inform me as soon as possible. See me privately after class, or during my office hours. To request academic accommodations, students must first consult with the college's Disability Services Counselor located in the Gateway Building, Room 344, (307) 268-2557, [bheuer@caspercollege.edu](mailto:bheuer@caspercollege.edu). The Disability Services Counselor is responsible for reviewing documentation provided by students requesting accommodations, determining eligibility for accommodations, and helping students request and use appropriate accommodations.

**ELAP 1535****FALL 2015****Mitchell****Week****Topic**

1	introduction/orientation
2	Theory fundamentals
3	Safety
4	Symbols
5	Electrical controls
6	Blue print reading
7	Magnetics and solenoids
8	Relays and <b>Midterm</b>
9	fall break/Motors
10	Motors
11	Motors starting
12	Sensors
13	Protective relays
14	Arc Flash/thanksgiving
15	Arc Flash
16	MOVs
17	<b>Final</b>