

CASPER COLLEGE COURSE SYLLABUS  
MLTK 2800 Clinical Pathology

Semester/Year: Spring/Fall 2015

Lecture Hours: 4

Lab Hours: 0

Credit Hours: 4

Class Time: On-line

Days: N/A

Room: Moodle

Instructor's Name: Audrey Hentzen, PhD, MLS (ASCP)<sup>cm</sup>

Instructor's Information:  
Contact 268-2632

Email: [ahentzen@caspercollege.edu](mailto:ahentzen@caspercollege.edu)

Office Hours: By appointment and T- TH 11:00- 12:00, and T and TH 1:00-2:00. Out of town travel may affect office hours please call (307) 258-9109. Office hours also available by appointment and through teleconferencing.

**Course Description:**

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.

**Statement of Prerequisites:**

MLTK 1500, 1600, 1700, 2500, 2600, 2650, and 2700  
Access to computer technology and internet services.

**Goal:**

Students will have an increased understanding and working knowledge of advanced topics in clinical chemistry, microbiology, immunohematology, serology, hematology, laboratory management, professional development and laboratory regulatory issues. Students will view laboratory medicine in a multidisciplinary approach for the analysis of clinical cases, correlation of data to disease states, and healthcare. Students will be able to analyze clinical scenarios to identify critical information needed for evaluation, interpretation, development of decision-making strategies and resolution. Students will effectively incorporate OSHA, CDC and CLIA regulations as needed, as part of the resolution plans.

**Outcomes:**

1. Evaluate case histories to identify significant data that focuses on the dilemma or patient illness.
2. Gather resource information for the development of a follow-up or confirmatory testing algorithms, differential diagnosis, clinical correlation and prognosis.
3. Based upon clinical scenarios or dilemma, develop decision-making strategies that lead to conflict resolution or implementation of a management plan to improve laboratory effectiveness.

4. Evaluate and incorporate considerations of laboratory resources, instrumentation, personnel and Federal regulations in predicting laboratory trends and changes.

#### Casper College General Education Outcomes

1. Demonstrate effective oral and written communication (#1).
2. Solve problems using critical thinking and creativity (#3 )
3. Describe the value of personal, civic, and social responsibilities (#7).

#### Methodology:

This course will be delivered on line, primarily to those students who are completing their clinical practicum at clinical affiliates. This course will utilize the Moodle format with Assignments, discussion boards and PowerPoint lectures assignments. Students will interact through online discussions, quizzes, exams, emails and written assignments that are submitted electronically.

#### Evaluation Criteria:

#### REQUIRED STUDENT TASK/ASSIGNMENTS

##### Exams

Exams will cover materials listed in defined learning segments or units outlined on the course schedule of clinical cases. Exams are designed to be drill and practice for the multiples discipline in the clinical laboratory. Exams must be completed by specified dates through out the semester.

##### Case evaluations

Students will be presented case histories focused on advanced topics in clinical laboratory science, laboratory management, professional development, education and laboratory management or regulatory issues. Students will use a multidisciplinary approach to analyze the clinical cases for critical information needed for differential diagnosis, evaluation and interpretation of data, correlation to clinical disorder or disease state, development of decision-making strategies in laboratory management and resolution of conflict or issue. Students will utilize infection control and safety guidelines as directed by OSHA, CDC and CLIA regulations.

##### On-line Discussion

Periodically, students will be required to log in for discussions. Discussion may involve answering specific questions, case studies or special topics. Students may discuss on line and then turn in (electronic, fax or hard copy) your statements by the due date.

##### Written Assignments

#### GRADING:

A = 92-100%  
B = 82-91%  
C = 70-81%  
D = 60-69%  
F = <60%

Final grades:

Exams  
Case Evaluations  
On-line Discussion  
Written Assignments

#### Required Text

Enrollment in labce.com for BOC review. All text books from previous MLTK courses.

Student must have access to computer technology and internet services.

Class Policies: Last Date to Change to Audit Status or to Withdraw with a W Grade is the Casper College deadlines.

Exams must be completed without the use of textbooks, notes or assistance from classmates.

Once a deadline has passed, students will not be able to access discussions, exams or case histories and student work will be not be accepted or graded. If you have a problem, talk with the instructor.

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 in order to solve the problem. If you are not satisfied with the solution offered by the instructor, you should then take your problem through the appropriate chain of command starting with the Department Head/Program Director, the Dean, and lastly the Interim Vice President for Academic Affairs.

Student complaints should be addressed through the following chain of command:

- 1) The instructor of your course.
- 2) MLT Program Director (Dr. Hentzen)
- 3) Dean of Health Sciences (Dr. Tammy Frankland)
- 4) The Interim Vice President for Academic Affairs (Dr. Shawn Powell)

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.

Calendar or schedule indicating course content: See moodle course for calendar of events, exams and assignments.

Course content may include:

Myelo- and lympho- proliferative disorders

Cancer and cancer therapy

Blood component utilization/effectiveness

Transfusion reactions as signal events

Prenatal and fetal monitoring

Exchange transfusions

Therapeutic drug monitoring/pharmokinetics of CHF

Drugs of abuse

Nutritional assessment

Coronary risk assessment

Metabolic syndrome

Managing the diabetic patient

Autoimmune disorders

T-cell disorders

B-cell disorders

Infectious disease

Bioterrorism

Public health

Laboratory management of personnel

Laboratory management of MSDS, safety training and documentation

Laboratory management of budgets and reimbursements

Laboratory management of instrument acquisition

Instrument correlation study

Interdisciplinary approach to team-medicine

Emerging technologies