

CASPER COLLEGE COURSE SYLLABUS  
MLTK 1800 01: PRINCIPLES OF PHLEBOTOMY

**Semester/Year:** Fall 2015

**Lecture Hours:** 2

**Lab Hours:** 4

**Credit Hours:** 3

**Class Time**

Delivery: On-Site T/TH 6-8:30

**Days:**

Mandatory Skills Labs: T/TH 6-8:30

**Room:**

AH 201

Instructor's Name: Matthew Tunstall MLT (ASCP)

**Instructor's**

**Office Phone:**

**Email:**

**Contact**

268-2522

mtunstall@caspercollege.edu

**Information:**

**Office Hours:** By email and appointment only

**Course Description:**

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.

**Health Requirements:**

You will need to obtain proof of the following health requirements to train in phlebotomy student laboratory or clinical affiliates.

- ✓ Health Insurance (Private or available through Casper College)
- ✓ Tuberculosis testing (within the last year)
- ✓ Hepatitis B vaccination (at least the first in the series of three)
- ✓ Measles, Mumps Rubella and Tetanus (vaccination history)

**Goal:**

At the end of this course the student should be able to:

1. Demonstrate a working comprehension of the technical and procedural aspects of laboratory testing, safety and ethical standards of practice.
2. Explain and apply basic principles of medical terminology, safety measures, universal precautions, infection control and potential sources of error as they relate to standard laboratory operating procedures and quality patient care.
3. Demonstrate technical skills by following established procedures for collecting and processing biological specimens for analysis.

4. Recognize unexpected results and instrument malfunction and take appropriate action for resolution.
5. Calculate, interpret, documentation of quality control data, and resolve out of control situations.
6. Professionally communicate laboratory information to patients, physicians and other authorized sources utilizing a variety of formats which may include, laboratory information systems computer technologies, telecommunications and direct patient conversation.
7. Demonstrate proficiency in laboratory technical skills through performance and instruction of other laboratory personnel.

**Outcomes:**

1. Students will demonstrate mastery of the content through examination and practical skills assessment.
2. Demonstrate Effective Written and Oral Communication. (CC general education outcome #1)

**Methodology:**

PowerPoint lectures, assignments and labs meeting Tuesday's and Thursday's from 6-8:30p.m. in life science building room 209 as well as the phlebotomy lab in the Aley Hall building, additional assignments and exams delivered via Moodle.

**Evaluation Criteria:****REQUIRED STUDENT TASK/ASSIGNMENTS**

The required tasks and assignments are used to evaluate the student's acquisition and comprehension of the learning objectives. Assignments are designed allow students utilize information from class lecture and discussion, and place into practice, technical skills and decision making. Details about each assignment (including grading criteria) will be discussed in class.

**LECTURE EXAMS/POP QUIZZES/FINAL: (50%)**

Unit exams will cover materials listed in the learning objectives for defined segments or units outlined on the lecture schedule. Most material will be covered specifically in class but, exam questions may cover materials presented in the assigned reading. You may want to purchase phlebotomy review books (ASCP, NCA and others), which provide practice questions for subjects we cover in class. There will be three lecture exams and a comprehensive final. You must be present to take "pop" quizzes. Exams can only be made up if prior notification of absence is provided by the student.

**LAB SKILLS AND PRACTICALS: (30%)**

Students will be expected to practice phlebotomy skills through mannequin simulation as well as real live draws on volunteers. There will be three laboratory practical exams given during lab sessions. The purpose is to assess your knowledge of fundamentals and methodology, and skills in phlebotomy techniques, sample collection, processing and transport for clinical testing. Lab exams will challenge you to perform certain laboratory skills as well and analyze clinical situations, specimens and data. Exams can only be made up if prior notification of absence is provided by the student.

**"DIAGNOSTIC TESTING" STUDENT RESEARCH PAPER: (10%)**

The purpose of this exercise is to reinforce standard clinical practices used in diagnosis of disease conditions. Each student will be given the opportunity to select a disease or pathological condition for a research paper. Each research paper should be 3-4 pages, typed, single or space and a half with font size no greater than 12. Your paper should include:

1. Definition and description of the disease or pathological condition.
2. A list and explanation of the tests available for screening and then differential diagnosis. (You may want to confer with a laboratory section head at a local hospital, clinic, or lab.)
4. A summary of each diagnostic procedure with emphasis on sample collection, patient preparation, processing, result interpretation and information gained through testing that leads to diagnosis.
5. Include any models or diagrams that might be helpful for explanations.
6. References must be cited throughout the paper and available by list at the end of the paper.

**ETHICS CASE STUDY: (10%)**

Students are asked to review current ethical issues and prepare a position statement for debate and 1-2 page paper. Each student will present their position to the class for open, respectful discussion of the issue, justification of stance with data and rebuttal discussion and or information. This is an exercise that incorporates research of current scientific data with practice in professional presentation techniques, interpersonal skills and effective communication. References must be cited throughout the paper and available by list at the end of the paper.

**GRADING:**

A = 92-100	Final grades: Lecture exams/Pop Quizzes/Final	50%
B = 82-91%	Lab skills/Exams	30%
C = 70-81%	Research paper	10%
D = 60-69%	Ethics Case Study	10%
F = <60%		

**Required Text:**

The Phlebotomy Text Book: 3<sup>rd</sup> edition: Strasinger, Susan  
ISBN:978-0-8036-2057-5

**Suggested Study Books:**

McCall, RE and Tankersley, CM (1997) Phlebotomy Exam Review, Lippincott, Philadelphia, Pennsylvania, ISBN 0-397-55232-7  
Becan-McBride, K, Garza, D (2001) Q&A review Phlebotomy, Prentice Hall Health, 5th Edition, Upper Saddle River, New Jersey ISBN 0-13-088715-3

**Readings, and Materials:** copies of the lecture PowerPoint presentations, special reading assignments and overheads will be available for students.

**Required Personal Protective Equipment (PPE)** (you will need to purchase)

Gloves  
Scrubs (any color)  
Safety goggles

**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. Attendance is required for lecture and student labs. No make-up labs will be available. ASCP Board of Registry Certification requires 40 didactic hours and 120 clinical hours to be eligible to take the certification examination. Therefore, we will have “time sheets” for lecture and student laboratory similar to those used to monitor clinical practicum experiences and hours.

**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, then the division chair, and lastly the vice president for academic affairs.

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

- 1) The instructor of your course. (Matthew Tunstall/ Bernardino Madsen/Jed Doxtater/)
- 2) MLTK Program Director. (Dr. Audrey Hentzen)
- 3) Dean of Health Science: (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.

**ADA Accommodations Policy:**

It is the policy of Casper College to provide appropriate accommodations to any student with a documented disability. If you have a need for accommodation in this course, please make an appointment to see me at your earliest convenience.

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.

Month	Day	Topic	Chapter
August	25	Introductions/ Safety	
August	27	Phlebotomy and the Health-Care Delivery System	1
September	1	Venipuncture Equipment	8
September	3	Venipuncture Equipment	8
September	8	Introduction to Phlebotomy	3
September	10	Introduction to Phlebotomy	3
September	15	Routine Venipuncture	9
September	17	Venipuncture Complications Unit 1 Exam Ethics Paper Due	10
September	22	Safety and Infection Control	4
September	24	Safety and Infection Control	4
September	29	Regulatory, Ethical, and Legal Issues	3
October	1	Regulatory, Ethical, and Legal Issues	3
October	6	The Clinical Laboratory	2
October	8	The Clinical Laboratory	2
October	13	Basic Medical Terminology	5
October	15	Basic Anatomy and Physiology Exam 2	6
October	20	Fall Break	
October	22	Butterfly venipuncture	11
October	27	Basic Anatomy and Physiology	6

October	29	Basic Anatomy and Physiology	6
November	3	Circulatory System	7
November	5	Circulatory System	7
November	10	Diagnostic testing paper due Unit 3 Exam	
November	12	Skills Practical	
November	17	Dermal Puncture	12
November	19	Dermal Puncture	12
November	24	Waived Testing	15
November	26	Thanksgiving Break	
December	1	Quality Assessment and Management in Phlebotomy	13
December	3	Arterial Blood Collection	14
December	8	Special Blood Collection/ Unit 3 Exam/ Diagnostic Paper Due	11
December	10	Skills Practical	
December	15	Finals Week	