

**LANCASTER GENERAL COLLEGE OF NURSING & HEALTH SCIENCES
CLINICAL LABORATORY SCIENCE PROGRAM**

**SYLLABUS
Spring Semester 2006**

- I. Title: **CLS 142 Immunoematology**
- II. Course Description: This course encompasses all aspects of blood banking and transfusion services. Instruction is included for sample processing, antibody identification, crossmatching, QC, component preparation, donor services, and blood inventory control.
- III. Prerequisite Admission to Clinical Laboratory Science program
- IV. Placement: Spring Semester
- V. Time Allotment: 30 hours
- VI. Faculty: Judy E. Gue, MT(ASCP) Teaching Supervisor
Carol Bond, MT(ASCP)
- VII. Credits 2
- VIII. Evaluation: **GRADE**
- | <u><i>Instrument</i></u> | <u><i>Weight</i></u> |
|--------------------------|----------------------|
| Quizzes | 20% |
| Exams | 80% |
- IX. Textbook: Harmening, Denise. *Blood Banking and Transfusion Practices*, 5th ed., FA Davis, 2005
- X. References: *Standards for Blood Banks & Transfusion Services*, AABB
Henry, J.B. *Clinical Diagnosis & Management*, 20th ed, 2001
AV tapes, slides, and videos from AABB meetings/seminars
Selected Case Studies
Study Questions
- XI. Course Objectives: By the conclusion of the course, the student must:
1. Describe preservation, storage techniques/temperature for whole blood and other blood components; list indications for use of each component and demonstrate preparation of selected components.
 2. Describe the ABO, Rh and other common blood group systems as to inheritance, biochemistry, subgroups, and methods of testing for each; perform testing, interpret results and resolve discrepancies in testing for each system.

3. Discuss common problems encountered in compatibility testing with a solution(s) for each; perform appropriate antibody identification panels and other techniques to assure compatibility of units
4. Discuss symptoms and causes of transfusion reactions; list required testing for investigating transfusion reactions including “look-backs” if necessary.
5. List/demonstrate appropriate steps in processing a unit of donor blood. This includes taking a complete history, determining suitability, performing screening tests and phlebotomy, processing donor unit and labeling unit for use.
6. Discuss techniques used to diagnose, prevent and treat hemolytic disease of the newborn; list problems encountered in patients with autoimmune hemolytic anemia and paraproteinemias including techniques for solving them.
7. Describe techniques used in and role of the immunohematologist in:
HLA typing Reagent & Equipment QC Apheresis procedure
Blood salvage Autologous donations

XII. School Policies: Students are held accountable for all policies in the Student Handbook and any revisions made to those policies during the academic year.

- XIII. Class:
- A. Importance of Attending Class

Healthcare education comprises more than just reading and passing of exams. Students shall recognize that active and informed participation in class is essential to the development of intellectual abilities and scholarly growth. Students must also recognize the importance for both the present and future of achieving an academic record that reflects their intellectual ability. Such records are seldom achieved without regular attendance and participation in class activities. Attendance will be taken.
 - B. Student Responsibility for Missed Material

Students are responsible for all material presented and announcements made in class, regardless of attendance. It is the student’s responsibility to obtain materials and assignments if absent
 - C. Unit Examinations

Examinations should only be missed in extenuating circumstances with approval of the instructor. A student who misses an exam will be required to make up the exam on the next day of lecture. Contact the appropriate instructor prior to the next lecture day to make arrangements to take the exam. A student who misses an exam, without instructor approval, will have ten percent (10%) deducted from the grade achieved on the exam. Example: The exam is worth sixty (60) points, the student takes the exam and achieves a grade of 52/60. The score of 52 is then decreased by 10% or five points; thus, the grade on the exam will be 47/60. An alternate exam may be given for the makeup exam.

D. Class Behavior

Once class has started, the instructor has the prerogative not to admit students into lecture. Students will be dismissed from class for any inappropriate behavior.

XIV. Other:

Academic Dishonesty and Plagiarism

Academic dishonesty violates the spirit and purpose of an academic community and is therefore subject to disciplinary action. Academic dishonesty includes cheating on exams and unauthorized duplicate submission of work.

Plagiarism is an act of academic dishonesty. Any work submitted that is not your own is plagiarism. In preparing assignments, you must acknowledge in writing any use of outside sources or any assistance you received in preparing an assignment.

If an instructor believes a student has committed an act of academic dishonesty or has plagiarized material, the instructor will award a failing grade for that assignment. If the occurrence is during an exam, the student will receive a zero for that portion of their grade and must leave the room.

If the student disagrees with this decision, the student may follow the grievance procedure.

PLEASE NOTE: Changes to the syllabus may be needed as the course progresses. Students and any other individuals who may be affected by any changes will be notified promptly after any change is made.