Immunohematology Clinical Practice

MLAB 1262 87

COURSE SYLLABUS

REVISED:
2011-2012
Course Description:
MLAB 1262 is a health-related, work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical laboratory professional. The course provides clinical training in a working clinical immunohematology laboratory while emphasizing a basic understanding and knowledge of immunohematology and related instrumentation and techniques. The student will perform routine and special procedures. The student will learn to correlate disease conditions with laboratory results. Also, typical workflow patterns, preventative maintenance, Quality Control, and general laboratory policies will be addressed.

Corequisite/Prerequisite: MLAB 2431 and approval by the program director. Semester hours: 2

Required Text & Material:
Text

Supply List
1. Navy blue scrubs with MCC arm patch
2. Long white lab coat with MCC arm patch
3. White walking shoes and white socks
4. Name badge
5. Watch with a second hand
6. Sharpie permanent marker
7. Black ink pen

Instructor and Office Hours:
Diane L. Schmaus, MA, MT (ASCP), Program Director, MLT & Phlebotomy Programs
Office hours are posted by office door SB 321
Office phone number is 254-299-8417. E-mail address is dschmaus@mclennan.edu

Course Objectives and Learning Outcomes:
Emphasis will be placed on the study of blood antigens and antibodies, performance of the routine blood banking procedures, including blood group and Rh typing, antibody screens, antibody identification, cross matching, elution, and absorption techniques.

After completion of MLAB 1262 Immunohematology Clinical Practice the student will be able to meet the following general course objectives:
1. Collect, process, and analyze immunohematology specimens. (F01, F02, F03, C01, C02, C03, C04, C05)
2. Recognize factors that affect methods and test results and take appropriate actions within established guidelines. (F01, F02, F03, C01, C02, C03, C04, C05)
3. Perform and monitor routine departmental quality control. (F01, F02, F03, C01, C02, C03, C04, C05)
4. Perform preventive and corrective maintenance of equipment and instruments. (F01, F02, F03, C01, C02, C03, C04, C05)
5. Apply principles of laboratory safety, including Universal Precautions. (F01, F02, F03, C01, C02, C03, C04, C05)
6. Demonstrate professional conduct and interpersonal communication skills with patients, laboratory personnel, other health care professionals, and with the public. (F01, F02, F03, C01, C02, C03, C04, C05)
7. Apply basic scientific principles in learning new techniques and procedures. (F01, F02, F03, C01, C02, C03, C04, C05)
8. Relate laboratory test results to common disease processes. (F01, F02, F03, C01, C02, C03, C04, C05)
9. Establish and maintain continuing education as a function of growth and maintenance of personal and professional competence. (F01, F02, F03, C01, C02, C03, C04, C05)

SCANS Criteria
The Secretary’s Commission for Achieving Necessary Skills, or the SCANS criteria are incorporated into the learning outcomes and activities for the course. They are identified in each general course objective as well as in each specific course objective or learning outcome and address basic skills and workplace competencies:

- maximize resource allocations (C01)
- employ interpersonal skills (C02)
- use information skills (C03)
- use systems concepts (C04)
- use technology (C05)
- enhance basic skills (F01)
- apply thinking skills (F02)
- display appropriate personal qualities (F03)

Rationale
Medical laboratory technicians must demonstrate proficiency in the practice of immunohematology as a fundamental part of the MLT training. This course is designed to aid students academically, mentally and emotionally for the experiences they will encounter in the clinical or workplace setting.
Learning Outcomes
Learning outcomes, or specific course objectives, for the cognitive, affective, and psychomotor domains are listed for each unit and will be available to students on the first day of class via Blackboard.

Methods of Instruction:
MLAB 1262 is designed to prepare students to function at an entry-level position in a routine Immunohematology laboratory. Blackboard will be used for assignments, exams, and to complete and submit documentation for the clinical experience. The student will participate in demonstrations, practice sessions, discussions, laboratory exercises, clinical experiences, Internet exercises, and/or resource applications at their assigned clinical site. Resources are also available in the student laboratory, campus library, and hospital libraries as well as at the clinical sites.

Course Outline:
2. Basic Genetics for Blood Bankers
3. Fundamentals of Immunology for Blood Bankers
4. The Antiglobulin Test
5. The ABO Blood Group System
6. The Rh Blood Group System
7. The Lewis System
8. Other Major Blood Group Systems
9. Donor Screening and Component Preparation
10. Antibody Detection and Identification
11. Compatibility Testing
12. Orientation to the Routine Blood Bank Laboratory
14. Transfusion Therapy and Transfusion in Transplantation
15. Adverse Effects of Blood Transfusion
16. Transfusion-Transmitted Diseases
17. Hemolytic Disease of the Newborn and Fetus
18. Autoimmune Hemolytic Anemias
19. Quality Management in the Blood Bank
20. Medicolegal and Ethical Aspects of Providing Transfusion Services

Course Requirements:
1. Grading Policy
   A = 90 – 100
   B = 80 – 89
   C = 75 – 79
   D = 70 – 74
   F = 69 and below
   
   Any student earning a 74 or below on any paper is required to schedule conference time with the Program Director.
2. **Course Breakdown**
   - 50% Assignments and Discussion Boards
   - 30% Checklist and Competency Evaluation Form
   - 20% Final Examination

   Grades will be posted on Blackboard

3. **Examinations**
   There will be one major final comprehensive examination which may be taken face-to-face or online using Blackboard. The final exam may **not** be made up if it is missed.

4. **Assignments**
   Your assignment grade will include quizzes, assignments, and discussion boards

**Clinical Rotation Schedule:**
Clinical rotation schedules are assigned on an individual basis. Distance/online students may be required to find a clinical affiliate and arrange a rotation schedule. If the hospital/clinic does not have an affiliation agreement with MCC, please inform the Program Director as soon as possible in order to develop an agreement. Placement of students into clinical rotations may be on a rotating basis due to the limited number of clinical sites available and the hours the students are available to attend clinical rotations (see student handbook).

Students will be placed into clinical rotations only after submitting a copy of his/her immunization records (including completion of the Hepatitis B series) and a negative drug screen and criminal background check. These records will be submitted to and kept by the Program Director as stated in the student handbook.

**During the rotation:**
- Daily Task Sheets are to be completed by the student and signed (electronic signature preferred) by the clinical instructor each day you are in your rotation. It is the student’s responsibility to make sure that the tally sheets are accurate regarding the hours and testing performed each day.

- The number of hours spent in each rotation will be designated by the MCC faculty. To complete the rotation, the student will continue rotations until s/he reaches entry level competency.

- A Mid-term Evaluation checklist and a Final Competency Evaluation checklist will be available for the student/instructor to view and complete. The checklist should serve as a guideline regarding what each student should be able to accomplish during the clinical rotation.

- Assignments, including Discussion Board topics, will be posted on Blackboard for the student to complete in a timely fashion. You must complete a minimum on one assignment each week and post on the Discussion Board at least THREE times each week.
• If a clinical rotation does not offer all of the required testing from the competency/evaluation checklist, the student may be required to attend/find another clinical site that performs the testing. This may include the student laboratory on campus.

• The student also may be required to report to campus for additional training in the student lab, library, or computer lab. If the student is unable to report to campus, alternative methods will be used to help the student reach entry level competency.

**At the end of the rotation:**

• The student will take a comprehensive Final Exam.

• All assignments, daily task sheets, clinical site evaluation by the student, and checklists must be completed and submitted either electronically or manually to the MCC faculty.

Clinical rotation grades will not be given until ALL work and documentation is completed and turned in.

**Attendance Policy:**

Regular and punctual attendance is expected of all students, and each instructor will maintain a complete record of attendance for the entire length of each course, including online and hybrid courses. Students will be counted absent from class meetings missed, beginning with the first official day of classes. Students, whether present or absent, are responsible for all material presented or assigned for a course and will be held accountable for such materials in the determination of course grades. In the case of online and hybrid courses, attendance will be determined in terms of participation.

Absence from 20 percent of scheduled lecture and/or laboratory meetings or inactivity on Blackboard (in the case of an online student), will be taken as evidence that a student does not intend to complete the course, and the student will be withdrawn from the course with a grade of W. The instructor may reinstate the student if satisfied that the student will resume regular attendance and will complete the course. If the student’s 20 percent absences are reached after the official drop date, the instructor may assign a W, if the student is passing and requests to be withdrawn. However, if a student who is not passing reaches the 20 percent point after the official drop date, the student will receive an F. In extenuating circumstances, the instructor may assign a W to a student who is not passing. Each absence will count toward attendance requirements in each course.

Students will be permitted to make up class work and assignments missed due to absences caused by (1) authorized participation in official College functions, (2) personal illness, (3) an illness or a death in the immediate family, or (4) the observance of a religious holy day. Also, the instructor has the prerogative of determining whether a student may make up work missed due to
absences for other reasons. It is the student’s responsibility to inform the instructor of the reason for an absence and to do so in a timely fashion.

If a student is 15 minutes or more late to a scheduled class or lab or if the student leaves before the class is dismissed by the instructor, s/he will be counted as tardy. Three such tardies will be counted as an unexcused absence. It is the responsibility of the student to inform the instructor, in a timely manner, the reason for any absence.

**Student Absences on Religious Holy Days**
McLennan Community College shall excuse a student from attending classes or other required activities including examinations for the observance of a religious holy day, including travel for that purpose. Students are required to file a written request with each instructor for an excused absence. A student whose absence is excused for this observance may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence. Religious holy day means a holy day observed by a religion whose places of worship are exempt from property taxation under the Texas Tax Code. McLennan Community College may not excuse absences for religious holy days which may interfere with patient care.

**Student Behavior:**
Students are expected to maintain classroom decorum that includes respect for other students and the instructor, prompt and regular attendance, and an attitude that seeks to take full advantage of the education opportunity.

**Academic Integrity**
The Center for Academic Integrity, of which McLennan Community College is a member, defines academic integrity as “a commitment, even in the face of adversity, to five fundamental values: honesty, trust, fairness, respect, and responsibility. From these values flow principles of behavior that enable academic communities to translate ideals into action.” Individual faculty members determine their class policies and behavioral expectations for students. Students who commit violations of academic integrity should expect serious consequences. For further information about student responsibilities and rights, please consult the McLennan website and your Highlander Student Guide.

**Plagiarism and Cheating**
“Plagiarism” is the use of someone else's words or ideas without giving proper credit for those words or ideas. It includes, but is not limited to, the use, by paraphrase or direct quotation of the published or unpublished work of another person without full and clear acknowledgment (this includes material from the internet). It is a serious offense and grounds for disciplinary action.
“Cheating” includes but is not limited to: (1) use of any unauthorized assistance in taking quizzes, tests, or examinations; (2) dependence upon the aid of sources beyond those authorized by the instructor; or (3) the acquisition, without permission, of tests or other academic material belonging to the MCC faculty or staff.

Any reported incidents of plagiarism or cheating will be investigated and documented with proper disciplinary action taken as necessary.

**Cellular Telephones and Personal Telephone Calls**

Students are NOT to receive or place telephone calls or text messages during class, labs, or clinical hours. Cellular telephones are to be turned off before entering the classroom, student laboratory, or the clinical site. Messages for students may be left with the Health Sciences Division secretary for the Medical Laboratory Technician program. Messages during an emergency will be delivered immediately to the student.

**ADA Statement:**

In accordance with the requirements of the Americans with Disabilities Act (ADA) and the regulations published by the United States Department of Justice 28 C.F.R. 35.107(a), MCC’s designated ADA coordinators, Mr. Gene Gooch, Vice President, Finance and Administration and Dr. Santos Martinez, Vice President, Student Services, shall be responsible for coordinating the College’s efforts to comply with and carry out its responsibilities under ADA. Students with disabilities requiring physical, classroom, or testing accommodations should contact Ms. Rene Jacinto, Disabilities Specialist, at 299-8122 or rrjacinto@mclennan.edu.

**Equal Opportunity Statement:**

McLennan Community College provides equal educational opportunity for all qualified students and does not discriminate on the basis of sex, disability, race, creed or religion, color, age, national origin or any other unlawful factors in its educational programs, activities, or employment as required by Title VI and Title VII of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, title IX of the Educational Amendments Act of 1972 and the Age discrimination Act of 1978.

**Subject to Change Disclaimer:**

The policies, regulations, procedures, and fees associated with this program are subject to change without prior notice, if necessary, to keep College and program policies in compliance with State and Federal laws and/or with rules related to the program's accrediting agency. The College and the program reserve the right to change curricula, rules, fees, and other requirements, of whatever kind, affecting students in any way. The provisions of this document do not constitute a contract, express or implied, between any applicant, student, faculty or staff member and McLennan Community College or this program.