

# Minnesota State University Moorhead

## BIOL 460: Medical Laboratory Clinical Education

### A. COURSE DESCRIPTION

Credits: 12,6

Lecture Hours/Week: 0

Lab Hours/Week: 0

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

Clinical education in a school/program of medical laboratory science in an affiliated hospital. Year-long sequence requires registration for 6 summer credits, 12 fall credits and 12 spring credits for a total of 30 BIOL 460 credits. Consent of instructor and acceptance into an affiliated Medical Science Laboratory Science School/Program.

### B. COURSE EFFECTIVE DATES: 01/14/2013 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. The clinical education provides the MSL major with accurate, up-to-date education to meet the changing needs of the laboratory and health care environment.
2. MSUM affiliated, National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) accredited, programs/schools provide a competitive opportunity to complete a 50 week training program in Medical Laboratory Science that completes the degree requirements of a three plus one or four plus one academic program in Medical Laboratory Science.
3. Students completing the 30 clinical education credits will have been given didactic and clinical instruction in eight major subject areas. Upon successful completion of the 30 credits students; transcripts will show grades awarded for each of the eight major areas which include the following: Clinical Chemistry, Clinical Hematology, Clinical Immunology, Clinical Microbiology, Clinical Microscopy, Immunohematology, Professional Topics, and Clinical Coagulation.
4. The year of clinical education prepares the students to take the American Society for Clinical Pathology (ASCP) SCP Board of Certification exam to become certified Medical Laboratory Scientists. The ASCP Board of Certification examinations for Medical Laboratory Scientist (MLS)/Medical Technologist (MT) and Medical Laboratory Technician (MLT) have been approved for licensure purposes by many states.

#### **D. LEARNING OUTCOMES (General)**

1. Be proficient at performing clinical laboratory testing in all disciplines including hematology, coagulation, clinical chemistry, immunology, microbiology, transfusion medicine, clinic microscopy, molecular diagnostics and any emerging technology covered during the clinical education.
2. Correlate laboratory testing to disease states using critical decision making skills to resolve problems and ensure quality of testing.
3. Utilize the essentials of quality systems to provide excellence wherever laboratory testing is researched, developed and/or performed.
4. Participate in the development, evaluation and validation of test systems.
5. Establish and maintain continuing education as a function of growth and maintenance of professional competence.
6. Exercise principles of educational methodology to provide leadership in education to other health care personnel and the community.
7. Possess basic skills and knowledge in laboratory operation and management including quality system planning, marketing, human resources and financial management.
8. Apply principles of information system management to provide effective, accurate, timely and cost effective reporting of laboratory-generated information.
9. Demonstrate fundamental knowledge of research design and practice.

#### **E. Minnesota Transfer Curriculum Goal Area(s) and Competencies**

None

#### **F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

#### **G. SPECIAL INFORMATION**

None noted