

**COURSE DESCRIPTION WITH STUDENT OUTCOMES**

**LORAIN COUNTY COMMUNITY COLLEGE**

**DIVISION:** Allied Health and Nursing

**COURSE TITLE:** Introduction to Clinical Laboratory Science Technology

**COURSE NUMBER:** CLSC 111

|                             |   | Contact Hours/Week |   |                           | Weight |   | ILU's |                      |   |   |
|-----------------------------|---|--------------------|---|---------------------------|--------|---|-------|----------------------|---|---|
| <b>LECTURE/RECITATION</b>   | = | 2                  | X | <b>LECTURE/RECITATION</b> | (1.0)  | = | 2     |                      |   |   |
| <b>LAB</b>                  | = | 0                  | X | <b>LAB</b>                | (0.85) | = | 0     |                      |   |   |
| <b>CLINICAL</b>             | = | 0                  | X | <b>CLINICAL</b>           | (1.0)  | = | 0     |                      |   |   |
| *                           | = |                    |   | *                         |        | = |       |                      |   |   |
| *                           | = |                    |   | *                         |        | = |       |                      |   |   |
| <b>TOTAL CONTACT HOURS:</b> | = | 2                  |   | <b>TOTAL COURSE ILU's</b> |        | = | 2     | <b>CREDIT HOURS:</b> | = | 2 |

\* Please refer to the "Quality Point Checklist for New and Revised Courses" and/or Pages 500.01 through 500.05 of the Ohio Board of Regents Operating Manual for Two-Year Campus Programs for Instructional Arrangements that are not identified as Lecture/Recitation, Lab or Clinical. ([http://regents.ohio.gov/academic\\_programs/2yr/2yrmanual.pdf](http://regents.ohio.gov/academic_programs/2yr/2yrmanual.pdf))

**IS THERE A SEPARATELY SCHEDULED LAB:** No  
**IS THERE A SEPARATELY SCHEDULED CLINICAL:** No

**SPECIAL FACILITIES:** No

**START YEAR/SEMESTER:** Fall 2009

**PREREQUISITE:** High school graduation nor GED and acceptance in Clinical Laboratory Science Technology program or Phlebotomy program.  
 (Please indicate course/s that must be taken before this course.)

**COREQUISITE:** None  
 (Please indicate course/s that must be taken with this course.)

**CONCURRENT:** None  
 (Please indicate course/s that must be taken before or with this course.)

**CATALOG DESCRIPTION:**  
 Introduction of the student to the profession of laboratory medicine. This includes: organizational structure of hospitals and laboratories,; medical ethics; related medical terminology; quality assurance; laboratory safety; calculations and knowledge of the basic routine laboratory tests. *Prerequisite; High school graduation or GED and acceptance in Clinical Laboratory Science Technology program or Phlebotomy program.*

*Italicized areas can be Fast-tracked though the Divisions/Provost/VP ALS*

**REQUIRED TEXTBOOK(S)/MATERIAL(S):**

- *Clinical Laboratory Science Student Handbook OR Phlebotomy Student Handbook*
- *Course Syllabus*

**TOPICAL OUTLINE: (COMMON CORE TOPICS)**

*I. Introduction to the Profession*

- A. Medical Technology [Clinical Laboratory Science]*
- B. Registration, Certification, Licensure, Accreditation*
- C. Certification Examinations*
- D. Education and Training*
- E. Laboratory Departments*
- F. Interpersonal Relationships*
- G. Professional Ethics*

*II. Laboratory Safety*

- A. Safety Manual*
- B. Emergency Precautions*
- C. Agencies that Regulate Laboratory Workplace Safety*
- D. Laboratory Hazards*
- E. Decontamination of Work Surfaces*
- F. Autoclave*
- G. Handling of Infectious Waste*
- H. Basic First-Aid*

*III. Quality Assurance Programs and Quality Control*

- A. Quality Assurance Programs*
- B. Analytical Methods for Laboratory Tests*
- C. Quality Control Material*
- D. Types of Errors Detected by Using QC Material*
- E. Statistics for Evaluating QC Data*
- F. Sources of Analytical Variation (Error)*

*IV. Laboratory Departments*

- A. Urinalysis*
- B. Serology*
- C. Microbiology*
- D. Hematology*
- E. Coagulation*
- F. Immunohematology*
- G. Chemistry*

**COURSE OUTCOMES & ASSESSMENT:**

**(Tools, Methods, and Expected Results)**

| <b>Outcomes</b>  | <b>Assessment Method(s)</b>  |
|--|--|
| <b><i>Cognitive / Knowledge: What should the students know from studying this discipline?</i></b>  |  |
| 1. <i>Describe the profession of clinical laboratory science (medical technology) as it relates to issues of accreditation, certification, licensure, and other legislature and regulatory topics.</i> | <ul style="list-style-type: none"> <li>• <i>Objective Assessment (e.g., quizzes and exams)</i></li> </ul>  |
| 2. <i>Identify various levels of personnel in a clinical laboratory, including the education, qualifications, and professional duties of each.</i>   | <ul style="list-style-type: none"> <li>• <i>Objective Assessment (e.g., quizzes and exams)</i></li> </ul>  |
| 3. <i>Identify safety protocols and precautions necessary for safe practice in a clinical laboratory.</i>  | <ul style="list-style-type: none"> <li>• <i>Objective Assessment (e.g., quizzes and exams)</i></li> </ul>  |
| 4. <i>Describe quality assurance and quality control protocols used to ensure the accuracy and precision of clinical laboratory data.</i>  | <ul style="list-style-type: none"> <li>• <i>Objective Assessment (e.g., quizzes and exams)</i></li> </ul>  |
| 5. <i>Demonstrate knowledge of the various departments in a clinical laboratory, including the most commonly performed laboratory tests in each department.</i>  | <ul style="list-style-type: none"> <li>• <i>Objective Assessment (e.g., quizzes and exams)</i></li> </ul>  |
| <b><i>Values / Attitudes: What additions or changes should the student experience in interest, appreciations, beliefs, judgments, etc. as a result of studying this discipline?</i></b>                |  |
| 6. <i>Demonstrate an ethical and professional attitude in all aspects of their course performance, adhering to all program policies and procedures as delineated in the Program Student Handbook.</i>  | <ul style="list-style-type: none"> <li>• <i>Student signature pages acknowledging understanding of all program policies and procedures</i></li> <li>• <i>100% of students will comply with program policies and procedures.</i></li> </ul> |

**GENERAL EDUCATION REQUIREMENT: OUTCOMES AND ASSESSMENT**

Core course outcomes:

- C1: English: Demonstrate logical organization, coherent thinking, and precision in writing.
- C2: Mathematics: Utilize college mathematics to solve problems.
- C3: Natural Science: Apply scientific concepts and methods of inquiry.
- C4: Social Science: Apply concepts, principles and methods of inquiry in the social sciences.
- C5: Humanities: Examine the nature of human expression and/or artistic creativity.

Infused outcomes:

- In1: Critical Thinking: Employ critical thinking skills in addressing issues and problems.
- In2: Communication: Demonstrate competence in verbal and nonverbal communication.
- In3: Diversity: Analyze the role of diversity in the development of the individual, the community, and the global society.
- In4: Ethics: Apply personal, professional, social and civic values.
- In5: Health: Identify behaviors that promote health of the individual.

| General Education Outcomes                                  | Corresponding Course Outcomes |
|---|-------------------------------|
| In4: Apply personal, professional, social and civic values. | #6                            |

**SUGGESTED INSTRUCTIONAL METHOD(S) AND TECHNIQUE(S):**

- *Lecture*
- *Demonstrations*
- *Large group discussions*
- *Case Study discussions*

**GRADING PROCEDURES:**

- *Lecture Quizzes (6)*      33%
- *Midterm Exam*            33%
- *Final Exam*                33%

**TRANSFER MODULE REQUIREMENT CHANGES:**

- None
- Add to English Composition area of Transfer Module
- Add to Arts/Humanities area of Transfer Module
- Add to Social and Behavioral Sciences area of Transfer Module
- Add to Mathematics area of Transfer Module
- Add to Natural and Physical Sciences area of Transfer Module

**MISCELLANEOUS**

- Add to Transfer Assurance Guide (TAG)/Ohio Articulation Number (OAN)
- Add "G" for International Course (at least 30% of content is outside U.S.)
- Course/Cluster Program Review Underway

**OTHER RESOURCES INCLUDING EQUIPMENT AND SOFTWARE:**

- Library/Learning Resource Review*
- IS&S/ITMS Resource Review (Complete form if special technology is needed.)*
- Facilities Planning Resource Review (Complete form if special facilities are needed.)*

Rev:

Date: 4/19/08

JD/JM

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