# COURSE DESCRIPTION WITH STUDENT OUTCOMES

**LOCATION COUNTY COMMUNITY COLLEGE**

**DIVISION:** Allied Health and Nursing

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

**COURSE NUMBER:** CLSC 111

<table>
<thead>
<tr>
<th>Contact Hours/Week</th>
<th>Weight</th>
<th>ILU's</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LECTURE/RECITATION</strong></td>
<td>2</td>
<td>(1.0)</td>
</tr>
<tr>
<td><strong>LAB</strong></td>
<td>0</td>
<td>(0.85)</td>
</tr>
<tr>
<td><strong>CLINICAL</strong></td>
<td>0</td>
<td>(1.0)</td>
</tr>
</tbody>
</table>

**TOTAL CONTACT HOURS:** 2

**TOTAL COURSE ILU’s:** 2

**CREDIT HOURS:** 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 no 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

Italicized areas can be Fast-tracked through the Divisions/Provost/VP ALS
<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Assessment Method(s)</th>
</tr>
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<tbody>
<tr>
<td><strong>Cognitive / Knowledge: What should the students know from studying this discipline?</strong></td>
<td></td>
</tr>
<tr>
<td>1. Describe the profession of clinical laboratory science (medical technology) as it relates to issues of accreditation, certification, licensure, and other legislature and regulatory topics.</td>
<td>● Objective Assessment (e.g., quizzes and exams)</td>
</tr>
<tr>
<td>2. Identify various levels of personnel in a clinical laboratory, including the education, qualifications, and professional duties of each.</td>
<td>● Objective Assessment (e.g., quizzes and exams)</td>
</tr>
<tr>
<td>3. Identify safety protocols and precautions necessary for safe practice in a clinical laboratory.</td>
<td>● Objective Assessment (e.g., quizzes and exams)</td>
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<tr>
<td>4. Describe quality assurance and quality control protocols used to ensure the accuracy and precision of clinical laboratory data.</td>
<td>● Objective Assessment (e.g., quizzes and exams)</td>
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<tr>
<td>5. Demonstrate knowledge of the various departments in a clinical laboratory, including the most commonly performed laboratory tests in each department.</td>
<td>● Objective Assessment (e.g., quizzes and exams)</td>
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<tr>
<td><strong>Values / Attitudes: What additions or changes should the student experience in interest, appreciations, beliefs, judgments, etc. as a result of studying this discipline?</strong></td>
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</table>
| 6. 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. | ● Student signature pages acknowledging understanding of all program policies and procedures  
 ● 100% of students will comply with program policies and procedures. |
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.

<table>
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<tr>
<th>General Education Outcomes</th>
<th>Corresponding Course Outcomes</th>
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<tr>
<td>In4: Apply personal, professional, social and civic values.</td>
<td>#6</td>
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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:
- X 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

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