COURSE DESCRIPTION WITH STUDENT OUTCOMES

LORAIN COUNTY COMMUNITY COLLEGE

DIVISION: Allied Health and Nursing  COURSE TITLE: Advanced Hematology and Hemostasis

COURSE NUMBER: CLSC 134

Contact Hours/Week  Weight  ILU's

LECTURE/RECITATION  =  2  x  LECTURE/RECITATION  (1.0)  =  2

LAB  =  1.5  x  LAB  (0.85)  =  1.28

CLINICAL  =  x  CLINICAL  (1.0)  =

TOTAL CONTACT HOURS:  =  3.5  TOTAL COURSE ILU’s  =  3.28  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 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:  Yes

IS THERE A SEPARATELY SCHEDULED CLINICAL:  No

SPECIAL FACILITIES:

START YEAR/SEMESTER: Fall 2009

PREREQUISITE: CLSC 132, CLSC 133

(Please indicate course/s that must be taken before this course.)

COREQUISITE: CLSC 136

(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:
Hematologic and cytochemical findings in anemias, leukemias and selected diseases; instrumentation; calculations; abnormal histogram and scattergram interpretation; basic theory in hemostasis and coagulation test procedures. College laboratory required with competency in hematology and coagulation procedures. (A special fee will be assessed.)

Prerequisites: CLSC 132, 133; Corequisite: CLSC 136

Italicized areas can be Fast-tracked though the Divisions/Provost/VP ALS
REQUIRED TEXTBOOK(S)/MATERIAL(S):

- Course Syllabus
- Lecture Handouts

TOPICAL OUTLINE: (COMMON CORE TOPICS)

- Cell-Counting Instrumentation Theory
- Red Blood Cell Indices
- Classification of Anemias
- Micro/Hypo Anemias
- Macro/Normo Anemias
- Normo/Normo Anemias
- Erythroleukemias and Polycythemias
- Leukemias
- Myeloma and Lymphomas
- Introduction to Hemostasis and Coagulation Pathways
- Coagulation Testing
- Coagulation Disorders and Abnormalities

COURSE OUTCOMES & ASSESSMENT:  
(Tools, Methods, and Expected Results)

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Assessment Method(s)</th>
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<tbody>
<tr>
<td>Cognitive / Knowledge: What should the students know from studying this discipline?</td>
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</table>
| 1. Describe principles and procedures of tests performed in a clinical laboratory in the areas of Hematology and Coagulation. | ● Objective Assessment (e.g., quizzes and exams)  
● College laboratory worksheets  
● National Certification Exam results (ASCP)  
● Research Poster Presentation with rubric |
| 2. Relate normal and abnormal laboratory test results to their corresponding clinical significance in the areas of Hematology and Coagulation. | ● Objective Assessment (e.g., quizzes and exams)  
● College laboratory worksheets  
● National Certification Exam results (ASCP)  
● Research Poster Presentation with rubric |

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<th>Behavior / Skills: What should a student be able to do as a result of studying this discipline?</th>
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<tr>
<td>3. Operate and maintain laboratory instruments used in the performance of tests in the areas of Hematology and Coagulation, with entry-level skill at the Medical Laboratory Technician / Clinical Laboratory Technician level.</td>
</tr>
<tr>
<td>● College laboratory Competency evaluation</td>
</tr>
<tr>
<td>4. Demonstrate satisfactory entry-level skill at the Medical Laboratory Technician / Clinical Laboratory Technician level in the performance of laboratory tests in the areas of Hematology and Coagulation.</td>
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<td>● College laboratory Competency evaluation</td>
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<th>Values / Attitudes: What additions or changes should the student experience in interest, appreciations, beliefs, judgments, etc. as a result of studying this discipline?</th>
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<td>5. Demonstrate decision-making problem-solving skills in the performance of laboratory tests in the areas of Hematology and Coagulation.</td>
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<tr>
<td>● College laboratory Competency evaluation</td>
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<tr>
<td>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.</td>
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<tr>
<td>● Student signature pages acknowledging understanding of all program policies and procedures</td>
</tr>
<tr>
<td>● 100% of students will comply with program policies and procedures.</td>
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**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.

*Italicized areas can be Fast-tracked though the Divisions/Provost/VP ALS*
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<th>General Education Outcomes</th>
<th>Corresponding Course Outcomes</th>
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<td>In1 Critical Thinking: Employ critical thinking skills in addressing issues and problems.</td>
<td>#2, 4, 5,</td>
</tr>
<tr>
<td>In2 Communication: Demonstrate competence in verbal and nonverbal communication.</td>
<td>#1, 2</td>
</tr>
<tr>
<td>In4 Ethics: Apply personal, professional, social and civic values.</td>
<td>#6</td>
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SUGGESTED INSTRUCTIONAL METHOD(S) AND TECHNIQUE(S):

- Lecture
- Demonstrations
- Laboratory practice exercises and evaluations

GRADING PROCEDURES:

- Quizzes 33%
- Midterm Examination 25%
- Final Examination 25%
- College Laboratory Exercises and Worksheets 17%
- Research Poster Presentation with rubric 17%

TRANSFER MODULE REQUIREMENT CHANGE(S):

- 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) CLSC 131 + CLSC 134 = OHL.009
- Add “G” for International Course (at least 30% of content is outside U.S.)
- Course/Cluster Program Review Underway

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

- Laboratory Glassware
- Pipettes
- Spectrophotometers
- Spectrophotometer Calibration Standards
- Wright Stain
- Binocular Student Microscopes
- Differential Counters
- Cell Counting Chambers
- Analytical Balance
- Conference Microscope
- Gloves
- Goggles
- Microscope Slides / Cover Glasses
- Biohazard Containers
- MLA 750 Instrument / KC-4Δ Coagulation Instrument
- Coulter T540 Cell Counting Instrument / Coulter ACT-5diff Cell Counting Instrument
- Microhematocrit Equipment and Centrifuge
- Table Top Centrifuge

Rev:
Date: August 1, 2008
JD/JM

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