Course Inventory Change Request

Date Submitted: 02/02/15 4:49 pm

Viewing: **MLS 2212: Clinical Microbiology I**

Last edit: 02/10/15 3:33 pm

Changes proposed by: vHughes

Catalog Pages referencing this course

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**Associate of Applied Science in Medical Laboratory Science**

**Bachelor of Science in Medical Laboratory Science**

Other Courses referencing this course

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In Workflow

1. MLS Chair
2. HSC Admin
3. HSC Dean
4. University Curriculum Committee Chair
5. Banner

Approval Path

1. 02/06/15 10:23 am
   Virginia Hughes (vhughes): Approved for MLS Chair
2. 02/06/15 11:01 am
   Colleen Hales (hales): Rollback to MLS Chair for HSC Admin
3. 02/10/15 3:10 pm
   Virginia Hughes (vhughes): Approved for MLS Chair
4. 02/10/15 3:12 pm
   Colleen Hales (hales): Approved for HSC Admin
5. 02/10/15 3:33 pm
   Carole Grady (grady): Approved for HSC Dean
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<th>Course Number:</th>
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<td>Effective Semester:</td>
<td>Fall 2015</td>
<td></td>
<td></td>
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Catalog Prerequisites:
Admission to the AAS Program in Medical Laboratory Science; AND MLS 1113 AND MLS 1123.
Grade Required on Prerequisite(s): N/A

Corequisites? | No |
Course/Lab Fee? | Yes |
### Course/Lab Fee

<table>
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**Fee Deposit:**

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**Fee Justification:**

Cover significant increasing cost of laboratory reagents and test kits for course.

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### Instruction Index Code

<table>
<thead>
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<th>Code:</th>
<th>HEA217</th>
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### GE Status Requested

<table>
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### Catalog Description

Introduces students to clinically significant bacteria including epidemiology, pathogenicity, and procedures for the traditional laboratory identification and antimicrobial testing. FA

### Course Rotation

**Fall (every)**

### Justification for course/change:

funds for lab kits, reagents, supplies

### Library Resources Adequate:

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### Tech Resources Adequate:

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### Course Learning Outcomes:

1. List three protective barriers around a bacterial cell wall
2. Diagram and label the cell wall of a Gram positive and Gram negative bacteria
3. Explain the function of teichoic acid and autolysins
4. Explain how lipid A and O polysaccharides of Gram negative cells contribute to the pathology of infection
5. List terms used to describe colony morphology and characteristics
6. Explain in detail the Gram stain procedures, listing the function of each reagent.
7. Perform a gram stain using quality control slides.
8. Practice standard precautions.
9. Describe the morphologies of S. aureus, S. epidermidis, and S. saprophyticus as they are seen on SBA, PEA, and MAC plates
10. Discuss the streptolysin O test. Include test principle, purpose, and interpretations.
11. List the ingredients of a TSI tube and function of each.
12. Identify bacterial organisms using various biochemical tests and media.
How do your Course Learning Outcomes align to your Program Learning Outcomes?

- List three protective barriers around a bacterial cell wall aligns with PLO5 (demonstrate knowledge of microbiology)
- Diagram and label the cell wall of a Gram positive and Gram negative bacteria aligns with PLO5 (demonstrate knowledge of microbiology)
- Explain the function of teichoic acid and autolysins aligns with PLO5 (demonstrate knowledge of microbiology)
- Explain how lipid A and O polysaccharides of Gram negative cells contribute to the pathology of infection aligns with PLO5 (demonstrate knowledge of microbiology)
- List terms used to describe colony morphology and characteristics aligns with PLO5 (demonstrate knowledge of microbiology)
- Explain in detail the Gram stain procedures, listing the function of each reagent aligns with PLO5 (demonstrate knowledge of microbiology)
- Perform a gram stain using quality control slides aligns with PLO2 (perform accurate lab testing of body fluids, cells, and other substances) and PLO6 (use quality assurance to monitor procedures)
- Practice standard precautions aligns with PLO1 (safely handle biological specimens and other substances for analysis adhering to standard precautions and regulatory guidelines)
- Describe the morphologies of S. aureus, S. epidermidis, and S. saprophyticus as they are seen on SBA, PEA, and MAC plates aligns with PLO5 (demonstrate knowledge of microbiology)
- Discuss the streptolysin O test. Include test principle, purpose, and interpretations aligns with PLO5 (demonstrate knowledge of microbiology)
- List the ingredients of a TSI tube and function of each aligns with PLO5 (demonstrate knowledge of microbiology)
- Identify bacterial organisms using various biochemical tests and media aligns with PLO3 (evaluate and interpret lab test data while recognizing factors that affect procedures and results correlating test data to disease processes)

Schedule of lesson activities that meet Course Learning Outcomes

- lectures, student labs, lecture exams, lab practicals, oral presentation

Assessment activities that provide evidence of student learning

https://newcatalog.dixie.edu/courseleaf/courseleaf.cgi?pg=/courseadmin/969/index.html&step=tcadif
three lecture exams, one final exam, two lab practicals, one oral presentation

Course Reviewer

Comments

**dwade (02/02/15 11:39 am):** Rollback: Virginia asked for rollback

**hales (02/06/15 11:01 am):** Rollback: Carole would like the Outcomes sections filled out