Medical Bacteriology BIMS 4370
Department of Life Sciences
Fall 2015

A. COURSE INFORMATION

Course number/section: BIMS 4370.001
Class meeting time: M 7:00-9:30pm; Labs T 5:00-6:30pm and R 4:00-5:20pm
Class location: Lecture BH-127; Labs CS 231
Course Website: https://bb9.tamucc.edu/

B. INSTRUCTOR INFORMATION

Instructor: Tricia Rhoads, MS, MLS(ASCP) SM
Office location: TBA
Office hours: By appointment only
Telephone: 361-437-9884
e-mail: champagne1@rocketmail.com
Appointments: Contact me at the above phone number, by email, or after class to make an appointment.

C. COURSE DESCRIPTION

Catalog Course Description
Lecture and laboratory studies of common pathogenic bacteria. Emphasis is on staining, cultural, and differential biochemical characteristics, methods of isolation from body fluids and susceptibility to therapeutic agents.

Extended Course Description
This course consists of lectures and laboratory studies of human pathogenic bacteria. The lecture and laboratory studies are to familiarize the students with the morphology and biochemical characteristics of the pathogens and the diseases they cause. Their susceptibility to therapeutic agents and methods of isolation are studied.

D. PREREQUISITES AND COREQUISITES

Prerequisites
Prerequisite or Co-requisite: BIMS 2421

Corequisites
None

E. REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES

Required Textbook(s)
Textbook of Diagnostic Microbiology, 4th Edition, Authors: Mahon, Lehman, Manuselis
F. STUDENT LEARNING OUTCOMES AND ASSESSMENT

By the end of this course, students should be able to:

1. Evaluate the proper safety and quality control procedures used in the microbiological laboratory.
2. Describe the collection and proper preparation of routine specimens tested in the microbiological laboratory.
3. Summarize the type of culture media, and the principle of the biochemical tests used in the identification of the bacteria.
4. Describe the pathological significance, cultural requirements, colonial morphological characteristics, and technique for the isolation and identification of bacterial pathogens.
5. Evaluate the identification of human pathogenic bacteria using clinical microbiological methods and selected confirmatory procedures.
6. Evaluate the techniques, principles and instruments used in the diagnosis of bacteriological disease.
7. Describe antimicrobial agents and their mechanism of action. The specific laboratory objectives are contained in the lab manual and specific lecture objectives are provided.

All examination questions are keyed to those objectives.

G. INSTRUCTIONAL METHODS AND ACTIVITIES

Powerpoint lectures, case studies, and laboratory assignments will be used for instruction. Proficiency must be demonstrated in the laboratory at a minimum of 70%.

H. MAJOR COURSE REQUIREMENTS AND GRADING

The final grade will be based on the points scored on a comprehensive final examination, four term examinations, and graded laboratory and class evaluations.

| Exam I, 2, 3, 4 | 75% |
| Laboratory      | 25% |

Unscheduled quizzes may be given during lecture and lab sessions and a zero will be given for a missed quiz.

All tests will be multiple choice and may require a scantron card for an answer sheet. All examination questions are keyed to the lecture and laboratory objectives. Examinations may be taken only during the scheduled time. Documented proof of emergencies is required.
I. COURSE CONTENT/SCHEDULE

<table>
<thead>
<tr>
<th>DATE</th>
<th>Lecture (Monday 7:00 – 9:30)</th>
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<tbody>
<tr>
<td>August 31</td>
<td>Introduction, Staphylococcus, and Streptococcus</td>
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<tr>
<td>September 7</td>
<td>Labor Day Holiday</td>
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<tr>
<td>September 14</td>
<td>Gram Positive Bacilli, Gram Negative Cocci, and Haemophilus</td>
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<td>September 21</td>
<td>Enterobacteriaceae “Enterics”</td>
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<td>September 28</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; Exam</td>
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<tr>
<td>October 5</td>
<td>Review of Test, Nonfermenters</td>
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<td>October 12</td>
<td>Vibrio, Campylobacter, and Aeromonas</td>
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<td>Miscellaneous Gram Negative Bacilli</td>
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<td>October 19</td>
<td>Anaerobes, and Miscellaneous Microorganisms</td>
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<tr>
<td>October 26</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt; Exam</td>
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<tr>
<td>November 2</td>
<td>Culturing Specimens</td>
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<td>November 9</td>
<td>Antimicrobial Susceptibility Testing and Antibacterial Drugs</td>
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<td>November 16</td>
<td>Mycobacteria and Nocardia</td>
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<tr>
<td>November 23</td>
<td>3&lt;sup&gt;rd&lt;/sup&gt; Exam</td>
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<tr>
<td>November 30</td>
<td>Review</td>
</tr>
<tr>
<td>December 7</td>
<td>Final Exam 7:15-9:45</td>
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Note: Changes in this course schedule may be necessary and will be announced to the class by the Instructor. The assignments and exams shown are directly related to the Student Learning Outcomes described in Section F.

J. COURSE POLICIES

**Attendance/Tardiness**
Attendance is expected and is included in the grading policy.

**Late Work and Make-up Exams**
No late work will be accepted and no exams made up without an excuse.

**Extra Credit**
No extra credit is offered.

**Cell Phone Use**
Cell phones will be turned off during class and laboratory meetings.

**Laptop Use**
Laptops are not required but can be used during class and lab meetings.

**Food in Class**
No eating in the classroom or laboratory.
Missed Exam
Any missed exams must be discussed with the instructor and a different exam may be given to the student.

Participation
Participation is encouraged in the classroom and mandatory in the laboratory.

Others
Professionalism is practiced in the CLS program as students will be entering a professional environment in their clinical practicums and their careers.

K. COLLEGE AND UNIVERSITY POLICIES

- **Academic Integrity (University)**
  It is expected that university students will demonstrate a high level of maturity, self-direction, and ability to manage their own affairs. Students are viewed as individuals who possess the qualities of worth, dignity, and the capacity for self-direction in personal behavior.
  See Full University Policy at
  [http://catalog.tamucc.edu/content.php?catoid=10&navoid=313#Academic_Integrity](http://catalog.tamucc.edu/content.php?catoid=10&navoid=313#Academic_Integrity)

- **Classroom/Professional Behavior**

- **Deadline for Dropping a Course with a Grade of W (University)**
  The grade of W will be assigned to any student officially dropping a course by Friday, November 6, 2015. No student is eligible to receive a W without completing the official drop process by this deadline. Visit the Office of the University Registrar for the Course Drop Form that must be submitted. After November 6, 2015 a student will not be allowed to drop a course.

- **Grade Appeals (College of Science and Engineering)**
  As stated in University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules website at [http://www.tamucc.edu/provost/university_rules/index.html](http://www.tamucc.edu/provost/university_rules/index.html), and the College of Science and Engineering Grade Appeals webpage at [http://sci.tamucc.edu/students/GradeAppeal.html](http://sci.tamucc.edu/students/GradeAppeal.html). For assistance and/or guidance in the
grade appeal process, students may contact the chair or director of the appropriate department or school, the Office of the College of Science and Engineering Dean, or the Office of the Provost.

- **Disability Services**
  Disability Services (DS) is the hub for coordinating services and accommodations to ensure accessibility and utilization of all programs for all Texas A&M University-Corpus Christi students with disabilities. Our services are designed to meet the unique educational needs of enrolled students with documented permanent or temporary disabilities. DS provides intake and consultation services to students seeking to register with our office. DS reviews an individual’s documentation of disability and assesses eligibility for services and the determination of reasonable accommodations. For more information visit the Disability Services Office at 116 Corpus Christi Hall or go to [http://disabilityservices.tamucc.edu/](http://disabilityservices.tamucc.edu/)

**GENERAL DISCLAIMER**
I reserve the right to modify the information, schedule, assignments, deadlines, and course policies in this syllabus if and when necessary. I will announce such changes in a timely manner during regularly scheduled lecture periods.