BIOL221001, MICROBIOLOGY FOR HEALTH PROFESSIONALS LABORATORY
Summer, 2015 1 Credit

Instructor: Holli Rowedder  email: Rowedder@bc.edu
Office: Higgins 378
Office Hours: Open door, by appointment  Telephone: 2-2782
Schedule (class times and day(s): Mon-Thurs; 4-6:30  Room: Higgins 375

Boston College Mission Statement
Strengthened by more than a century and a half of dedication to academic excellence, Boston College commits itself to the highest standards of teaching and research in undergraduate, graduate and professional programs and to the pursuit of a just society through its own accomplishments, the work of its faculty and staff, and the achievements of its graduates. It seeks both to advance its place among the nation's finest universities and to bring to the company of its distinguished peers and to contemporary society the richness of the Catholic intellectual ideal of a mutually illuminating relationship between religious faith and free intellectual inquiry.

Boston College draws inspiration for its academic societal mission from its distinctive religious tradition. As a Catholic and Jesuit university, it is rooted in a world view that encounters God in all creation and through all human activity, especially in the search for truth in every discipline, in the desire to learn, and in the call to live justly together. In this spirit, the University regards the contribution of different religious traditions and value systems as essential to the fullness of its intellectual life and to the continuous development of its distinctive intellectual heritage.

Course Description
Exercises in this laboratory course deal with aseptic techniques, microbial cultivation and growth characteristics, staining and bacterial isolation techniques, differential biochemical tests, identification of unknown bacterial species, and testing effectiveness of antimicrobial agents.

Course Objectives
1. Learning to apply course materials such as fundamental principles, generalizations, and theories to improve thinking and decision-making in a laboratory setting
2. Developing specific skills, competencies, and points of view needed by professionals in this field by providing hands-on laboratory activities similar to those found in hospital settings
3. The student will demonstrate knowledge across cultural settings and will learn the impact of culture, gender, and age on microbiology and infectious diseases as demonstrated by case studies and global epidemiology activities.
4. The student will demonstrate ethical competency pertaining to microbiology as demonstrated by case studies pertaining to the cause, treatment and symptoms of common infectious diseases

Grading
- Pre-lab Quizzes 10%
- Final/Practical 25%
- Reports 30%
- Lab Data Sheets 15%
- Participation 20%
WCAS Grading System
The undergraduate grading system consists of twelve categories: A (4.00), A- (3.67), excellent; B+ (3.33), B (3.00), B- (2.67), good; C+ (2.33), C (2.00), C- (1.67), satisfactory; D+ (1.33), D (1.00), D- (.67), passing but unsatisfactory; F (.00), failure; I (.00), incomplete; F (.00), course dropped without notifying office; W (.00), official withdrawal from course. The graduate grading system is A (4.00), A- (3.67), Excellent; B+ (3.33), B (3.00), good; B- (2.67), C (2.00), passing but not for degree credit; F (.00), failure.

Grade Reports. All students are required to log into the web through Agora to access their semester grades. Students must utilize their BC username and password to log on. If your username or password is not known the HELP Desk located in the Campus Technology Resource Center (CTRC) in O’Neill Library will issue a new one. The CTRC requires a valid picture ID (a BC ID, driver’s license or passport) to obtain your password.

Text(s)/Readings (Required)
A lab manual will be provided by the instructor during the first session

Text(s)/Readings (Recommended)

Important Policies
http://www.bc.edu/content/bc/schools/advstudies/guide/academicinteg.html

Written Work
Graduate and undergraduate students are expected to prepare professional, polished written work. Written materials must be typed in the format required by your instructor. Strive for a thorough, yet concise style. Cite literature appropriately, using APA, MLA, CLA format per instructors decision. Develop your thoughts fully, clearly, logically and specifically. Proofread all materials to ensure the use of proper grammar, punctuation, and spelling. You are encouraged to make use of campus resources for refining writing skills as needed [http://www.bc.edu/libraries/help/tutoring.html].

Scholarship and Academic Integrity
It is expected that students will produce original work and cite references appropriately. Failure to reference properly is plagiarism. Scholastic dishonesty includes, but is not necessarily limited to, plagiarism, fabrication, facilitating academic dishonesty, cheating on examinations or assignments, and submitting the same paper or substantially similar papers to meet the requirements of more than one course without seeking permission of all instructors concerned. Scholastic misconduct may also involve, but is not necessarily limited to, acts that violate the rights of other students, such as depriving another student of course materials or interfering with another student’s work.

Request for Accommodations
If you have a disability and will be requesting accommodations for this course, please register with either Dr. Kathy Duggan (dugganka@bc.edu), Associate Director, Connors Family Learning Center (learning disabilities or AHD) or Dean Paulette Durrett, (paulette.durrett@bc.edu), Assistant Dean for students with disabilities, (all other disabilities). Advance notice and appropriate documentation are required for accommodations. For further information, you can locate the disability resources on the web at http://www.bc.edu/content/bc/libraries/help/tutoring/specialservices.html.

Attendance
Class attendance is an important component of learning. Students are expected to attend all classes and to arrive by the beginning of and remain for the entire class period. When an occasion occurs that
prevents a student from attending class, it is the student’s obligation to inform the instructor of the conflict before the class meets. The student is still expected to meet all assignment deadlines. If a student knows that he or she will be absent on a particular day, the student is responsible for seeing the instructor beforehand to obtain the assignments for that day. If a student misses a class, he or she is responsible for making up the work by obtaining a classmate’s notes and handouts and turning in any assignments due. Furthermore, many instructors give points for participation in class. If you miss class, you cannot make up participation points associated with that class. Types of absences that are not typically excused include weddings, showers, vacations, birthday parties, graduations, etc. Additional assignments, penalties and correctives are at the discretion of the instructor. If circumstances necessitate excessive absence from class, the student should consider withdrawing from the class. In all cases, students are expected to accept the decision of the instructor regarding attendance policies specific to the class.

Consistent with our commitment of creating an academic community that is respectful of and welcoming to persons of differing backgrounds, we believe that every reasonable effort should be made to allow members of the university community to observe their religious holidays without jeopardizing the fulfillment of their academic obligations. It is the responsibility of students to review course syllabi as soon as they are distributed and to consult the faculty member promptly regarding any possible conflicts with observed religious holidays. If asked, the student should provide accurate information about the obligations entailed in the observance of that particular holiday. However, it is the responsibility of the student to complete any and all class requirements for days that are missed due to conflicts due to religious holidays.

There may be circumstances that necessitate a departure from this policy. Feel free to contact the WCAS at 617-552-3900 for consultation.

**Deadlines**
Assignments are due at the beginning of the class period on the specified dates. Late assignments will be graded accordingly, losing 10% for each day late.

**Course Assignments** (readings, exercises and/or experiences)

It is expected that an average of 8 hours per week of your study time out of will be spent on class assignments and exercises, listed below.

In addition to readings, students will be required to view short online lectures to supplement lab time. Approximately 6 online pre-lab quizzes will assess this material. Data sheets on results of a lab will be due the following lab.
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<tr>
<th>Date</th>
<th>Topic/Reading</th>
<th>Due</th>
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<tbody>
<tr>
<td>June 22</td>
<td>Safety, MIE, Microscopy</td>
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<tr>
<td>June 23</td>
<td>Aseptic technique, Isolation streaks, simple stains</td>
<td>Datasheets: microscopy</td>
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<td>June 24</td>
<td>Staining</td>
<td>DS: simple stains, aseptic tech.</td>
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<td>June 25</td>
<td>Biochemical Tests: part I</td>
<td>DS: Gram, Endospore, Acid-Fast</td>
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<td>June 29</td>
<td>Biochemical Tests: part II</td>
<td>Foodborne Illness Report</td>
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<td>DS: Biochem I</td>
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<td>June 30</td>
<td>Biochemical Tests: part III</td>
<td>DS: Biochem II</td>
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<tr>
<td>July 1</td>
<td>Epidemiology</td>
<td>DS: Biochem III</td>
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<td>July 2</td>
<td>Food microbiology</td>
<td>DS: Epidemiology</td>
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<td>July 6</td>
<td>Antibiotics</td>
<td>DS: Food micro</td>
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<td>July 7</td>
<td>Mystery Case study</td>
<td>DS: Anitbiotic</td>
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<td>July 8</td>
<td>Wrap Up/Review</td>
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<td>July 9</td>
<td>Practical exam</td>
<td>MIE Report</td>
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