

CASPER COLLEGE COURSE SYLLABUS
MOLB 2210 GENERAL MICROBIOLOGY H1

Semester/Year: Fall 2015

Lecture and Lab Hours: 6

Credit Hours:4

Lecture Times: All Online

Lab Times/Dates: H1 10:00 – 1:00pm

H2 1:00 – 4:00 pm

Weekend Dates: Both Saturdays and Sundays Lab dates:
9/12-9/13, 9/26-9/27, 10/24-10/25, 11/14-11/15, 12/5-12/6
All labs are in AH 107

Instructor's Name: Dr. John Chase

Instructor's Contact Information:

Office: LS211

Office Phone: 268-2898

Email: Jchase@caspercollege.edu

Course Description: A study of microorganisms, focusing on fundamental biochemical principles, microbial physiology, identification and the laboratory techniques used to study these microorganisms. **This is a self motivated course designed to be accompanied by the text: Brock Biology of Microorganisms 12th edition. Not the newer edition.**

Statement of Prerequisites: None are required. **However, a knowledge of general biological and chemical concepts is needed.**

Goal: The goal of this class is to provide an understanding of the general morphologies of microorganisms, biochemical pathways found in prokaryotes and eukaryotes, ecological abundance of microbes as well as the genetics and phylogenic relationship of microbes.

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Outcomes: The degree to which the student achieves these objectives is dependent on the effort provided by the student and is reflected in the grade earned in this class. The students will have an understanding of :

1. The principles of aseptic technique and culture isolation.
2. Microbial morphology and growth.
3. The principles of metabolism.

4. Bacterial enumeration and staining.
5. Environmental influence of microbial growth and chemical control of growth.
6. Microbial identification.
7. Microbial genetics.
8. Demonstrate effective oral and written communication
9. Use the scientific method
10. Solve problems using critical thinking and creativity
11. Demonstrate knowledge of diverse cultures and historical perspectives
12. Appreciate aesthetic and creative activities
13. Use appropriate technology and information to conduct research
14. Describe the value of personal, civic, and social responsibilities
15. Use quantitative analytical skills to evaluate and process numerical data

Methodology: 75 % Text Material and 25% Lab Materials. A general rubric is outline within the MOODLE course.

Evaluation Criteria: The student will be given **Seven Tests** worth 125-point each covering all material provided including but not limited to: Lectures, Animations, Videos, Specified Online Links or Assignments, etc. **The best six of seven tests will be used in grade calculations.** Additionally, 10 laboratory problem-sets a worth a total of 100 points will also be calculated into the overall grade along with 2 quizzes worth 100 pts .

Lecture Grade:

- 6 exams/ 125 points each = 750 pts

Lab Grade:

- 10 Problem Sets/ 10 points each = 100 pts
- 2 quizzes/50 pts each = 100 pts

Total = 950 points

Grading will be assigned on the following basis:

- 90% and above = A
- 80% - 89 % = B
- 70%- 79% = C
- 60% - 69% = D
- Below 60% = Failing

Suggested Text, Readings, and Materials: Lecture Text: ***Biology of Microorganisms, Brock . (12th edition)***
Explore all links provided. No Lab Manual is needed!

Class Policies: Last date to change to audit status or to withdraw with a W grade is Nov.12th .

Student Rights and Responsibilities: Please refer to the Casper College Student Conduct and Judicial Code for information concerning your rights and responsibilities as a Casper College Student.

Chain of Command: If you have any problems with this class, you should first contact the instructor to attempt to solve the problem. If you are not satisfied with the solution offered by the instructor, you should then take the matter through the appropriate chain of command starting with the Department Head/Program Director, the Dean, and lastly the Vice President for Academic Affairs.

Academic Dishonesty: (Cheating & Plagiarism) Casper College demands intellectual honesty. Proven plagiarism or any form of dishonesty associated with the academic process can result in the offender failing the course in which the offense was committed or expulsion from school. See the Casper College Student Code of Conduct for more information on this topic.

Official Means of Communication: Casper College faculty and staff will employ the student's assigned Casper College email account as a primary method of communication. Students are responsible to check their account regularly. This is also, where you will find course evaluation links during course evaluation periods.

ADA Accommodations Policy: If you need academic accommodations because of a disability, please inform me as soon as possible. See me privately after class, or during my office hours. To request academic accommodations, students must first consult with the college's Disability Services Counselor located in the Gateway Building, Room 344, (307) 268-2557, bheuer@caspercollege.edu. The Disability Services Counselor is responsible for reviewing documentation provided by students requesting accommodations, determining eligibility for accommodations, and helping students request and use appropriate accommodations.

Calendar or schedule indicating course content: See Moodle course calendar and Schedule Icon.