

Syllabus for BIOL 105: Topics in Biology – The Biology of Medicine

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Office Hours: TBA

Lecture MWF 9:30-11, TR 8:30-10:00; Lab TR Intro-10:15-11:15, Labwork-12:00-2:00

Overview

Lecture/Discussion

The course will be divided into a series of subtopics that each focus on an aspect of medical science. Subtopics will be devoted to a particular type of disease or system, e.g. cancer, genetic diseases, diabetes, bacterial and viral infections, cardiovascular disease, etc. Lectures and readings will provide students with the basic science necessary to understand the disease processes and available diagnostic procedures and treatments. Readings will range from textbook chapters to science publications for a lay audience to scientific and medical journal review and research articles. Discussion will develop the students' sense of impact of medical science and particular diseases on human history, economics, politics, philosophy, etc. The overall goal will be to provide a solid scientific foundation upon which students may participate in important decisions regarding healthcare for themselves and society at large.

Laboratory

The laboratory will range widely in scope from enzymology, molecular genetics, microbiology to anatomy and physiology. Each laboratory will be closely relevant to the lecture/discussion material and will serve to illustrate important scientific principles and mechanisms as well as involve students in the scientific method of inquiry.

Class Schedule (see accompanying Moodle screencapture)

Learning Assessment

Student work will be assessed by various means with 100% of points apportioned as follows.

Class Work (75%)

Exam 1	13%
Exam 2	13%
Exam 3	13%
Exam 4	13%
Presentation	13%
Participation	10% (in-class discussion and on-line assignment completion)

Lab Work (25%)

Graded lab work will include quizzes, worksheets, presentation and lab report.

Exams

Exams will consist of multiple choice, fill-in-the-blank, short answer, matching, and/or essay questions. Students will be expected to know, understand and apply the structures, mechanisms, processes, concepts and techniques presented in class. Exams 1-4 will cover material since the previous exam, except that Exam 4 will include questions of a cumulative nature. No exams may be taken beyond the scheduled time unless medical or personal emergency warrants it. In such cases, the professor must be consulted for approval prior to the exam time or as soon after as possible, and the professor may allow a re-exam or may average final grades without the exam, at his discretion. Generally, students may obtain permission from the professor to take an exam prior to the regular exam time if they know they will be absent on an exam day. Missed exams for reasons deemed not excusable by the professor will receive a grade of 0.

You may not consult quizzes, worksheets, exams, or other student work from previous offerings of this or a similar course.

Note: Electronic sources of information (e.g. notes, study guides and PowerPoint presentations), are provided as supplements to your readings and note-taking. Technical difficulty in accessing such supplements will not be accepted as an excuse for missing or delaying an exam. You should always anticipate such difficulties and obtain electronic copies or hard copies well in advance of each exam.

Presentation

Each student will give a formal presentation (20-30 minutes, depending on course enrollment) on a health-related topic. Topics will be selected in consultation with the professor. Students may select a topic related to their major (e.g. economics of health care, impact of disease on history, etc.) or a topic on a disease of interest. Detailed instructions, grading rubric, and citation format requirements will be provided when the topic is assigned.

Additional Assignments

Additional work in the form of problems, worksheets, literature readings and summaries, short presentations, critical thought questions, small group projects, etc. may be assigned throughout the course. While the syllabus does not contain a provision for individual grading of each such assignment, these assignments are designed to aid your learning, and questions related to them may appear on exams. Furthermore, lack of participation in these activities will reduce your participation grade.

Attendance

Attendance in laboratories is mandatory. Absence from a scheduled lab will result in a 10% reduction in the overall lab grade. Assignments turned in late but within 24 hours of the time and date due will receive a 10% reduction for tardiness; assignments will not be accepted more than 24 hours late and will receive a grade of 0. Attendance in class is expected. In a small class, your participation is critical and your absence easily noted. If you must miss class, please notify the professor prior to your absence. Students with poor attendance will receive a poor participation grade. Students with excessive

absences will be so notified and may be asked to withdraw from the course, as per the Rhodes College Catalogue.

Class Preparation

Students should read the assigned readings in the text and review any notes, study questions or on-line assignments before each class. These readings and activities will serve as the basis for class discussion and lecture and are important in preparing you for participation and for exams.

Grading Scale

Final grades will be determined strictly according to the following scale after rounding to the tenths place. On rare occasions, the professor may increase a borderline grade resulting from a single poor performance that is well below a student's typical work.

A	93-100	C	73-76.9
A-	90-92.9	C-	70-72.9
B+	87-89.9	D+	67-69.9
B	83-86.9	D	63-66.9
B-	80-82.9	D-	60-62.9
C+	77-79.9	F	0-59.9

Honor Code

Conduct in this course must adhere to the Rhodes College Honor Code. This system is critical to maintaining the Rhodes Community. As such, we must all be diligent in our responsibilities under this system. All work must be your own. Unless specifically indicated in the instructions to an assignment, you may not consult anyone or any source of information after beginning work on an assignment. In no case may you consult quizzes, worksheets, exams, or other student work from previous offerings of this or a similar course.