

GRAYSON COLLEGE

Course Syllabus

Please Note: Due to extenuating circumstances, including public health issues, course and testing delivery methods, instructional schedules, housing contracts, campus procedures and/or operating hours may be altered, interrupted and/or ceased for a limited or extended period of time. Such changes will be posted on the College website.

Course Information

BIOL 2320 Microbiology

Section: BIOL2320

Spring 2020

Online course, instruction and interaction will be through Canvas

Professor Contact Information

Professor name: Richard Taylor

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Email: taylorr@grayson.edu

Office location: South Campus SA 105,

Office/campus hours: 9:30-3:00 M-Th

Science Department Phone: 903-463-8797 or 903-463-8702

Course Pre-requisites, Co-requisites, and/or Other Restrictions

Co-requisite: BIOL 2120. Students must have passed the reading portion of the THEA (score of at least 230). Pre-requisites: Successful completion with a grade of C or better in BIOL 2301/2101, CHEM 1406 or CHEM 1311/1111 or consent of the Science Chair required. College readiness in reading required. (R)

Course Description

BIOL 2320. Microbiology (3-0-3). Study of the morphology, physiology, and taxonomy of representative groups of pathogenic and nonpathogenic microorganisms. Pure cultures of microorganisms grown on selected media are used in learning laboratory techniques. Includes a brief preview of food microbes, public health, and immunology. An introduction is made to the principles of microbiology dealing with the essential nature of microorganisms, as well as their economic and pathologic relationships to man including microbial control and epidemiology.

Student Learning Outcomes

Student learning outcomes which will be addressed in laboratory and/or lecture.

1. Students will demonstrate an understanding of factors that lead to microbial antibiotic resistance, as well as techniques for detecting resistance, and assess the effects of such resistance on society.

2. Students will identify examples of harmful as well as beneficial actions of microorganisms, and extrapolate their effects on society.
3. Students will demonstrate critical thinking, problem solving, and decision making while identifying of bacteria in a culture.

Required Textbooks

OpenStax

Textbook Student Site

ISBN--10 1--938168--14--3

ISBN--13

978--1--938168--14--7

Revision

MB--2016--000(11/16)--BKB

<http://cnx.org/content/col12087/latest/>

Suggested Course Materials

None

Required Assignments & Academic Calendar

In case of inclement weather, emergency closings, or other unforeseen disruptions to scheduled classes, student must log onto their Canvas accounts for directions on where or how to continue their coursework.

Table 1 Course Schedule

Topics, Readings, Assignments, Deadlines
Chapter 1 An Invisible World
Chapter 3 The Cell
Chapter 4 Diversity of Prokaryotic Cells
Chapter 5 Diversity of Eukaryotic Cells
Chapter 6 Viruses-Acellular pathogens
Chapter Review questions over 1, 3, 4, 5, and 6 are due by 11:59 p.m.
Exam 1 over chapters 1, 3, 4, 5, 6.
Chapter 7 Microbial Biochemistry

Topics, Readings, Assignments, Deadlines
Chapter 8 Microbial Metabolism
Chapter 9 Microbial Growth
Chapter 13 Control of Microbial Growth
Chapter Review questions over 7, 8, 9, and 13 are due by 11:59 p.m.
Exam 2 over chapters 7, 8, 9, and 13
Chapter 14 Antimicrobial Drugs
Chapter 15 Microbial Mechanisms of Pathogenicity
Chapter 16 Disease and Epidemiology
Chapter 17 Innate Nonspecific Host Defenses
Chapter 18 Adaptive Specific Host Defenses
Chapter Review questions over 14, 15, 16, 17 and 18 are due by 11:59 p.m.
Exam 3 over chapters 14, 15, 16, 17 and 18
Chapter 19 Diseases of the Immune System
Chapter 21 Skin and Eye Infections
Chapter 22 Respiratory System Infections
Chapter 23 Urogenital System Infections
Chapter Review questions over 19, 21, 22 and 23 are due by 11:59 p.m.
Exam 4 over chapters 19, 21, 22 and 23
Chapter 24 Digestive System Infections
Chapter 25 Circulatory and Lymphatic System Infections
Chapter 26 Nervous system Infections
Chapter Review questions over 24, 25, and 26 are due by 11:59 p.m.
Final exam over chapters 24, 25, and 26

Dates and sequence of topics are subject to change. Changes will be announced in class in a timely manner.

Required Assignments & Academic Calendar

In case of inclement weather, emergency closings, or other unforeseen disruptions to scheduled classes, student must log onto their Canvas accounts for directions on where or how to continue their coursework.

Important Dates:

Methods of Evaluation

Five major examinations (including the final exam) will be given at scheduled times throughout the semester. There will be no make-ups taken after an exam has been returned to the students. Students not taking the exam will receive a grade of "0". Exams may be taken early as scheduled with the instructor for special circumstances. Exams may consist of multiple choice, matching, short answer, fill-in the-blank, true and false and/or discussion questions.

Chapter Review questions will be given in Canvas, the average of all chapter review "quizzes" will count the equivalent of an exam grade. The chapter review questions are the chapter review questions that are found in the text book. The chapter review questions will always be due the Friday before the exam at 11:59 p.m. Saturday before the exam at 12:00 a.m. the correct answers will be shown, this means no late submissions will be accepted.

Grading

The lowest of the five exam scores will be dropped, the chapter review questions will not be dropped. Four highest exams are 20% each and the average of the chapter reviews are 20% of the lecture grade.

Due to the new combined course format lab and lecture will be combined to produce a single grade. The combined grade is calculated by scoring the lab and lecture as described in their individual syllabi. Those grades will then be weighted with the lecture accounting for 60% of the student's final grade and the lab 40%.

Averages will be rounded up or down. For example, an 89.5 will be rounded up to a 90 and 89.4 will be rounded down to an 89.

Letter grades will be assigned as follows:

89.5	-	100.0	=	A
79.5	-	89.4	=	B
69.5	-	79.4	=	C
59.5	-	69.4	=	D
0	-	59.5	=	F

Methods of Instruction

The main method of instruction will be online activities in Canvas that are drawn from the textbook.

Computer Hardware and Software Requirements

Students may access Canvas either with mobile devices or with PC/Mac. It is highly recommended that students use a PC with Chrome browser to take exams and participate in other activities. On many mobile devices pictures will not display in the exams leaving the student unable to answer the question. Students have also reported they are unable to participate in announcements etcetera with mobile devices and this is often used for attendance purposes. Students will also need Microsoft Word to write the required laboratory report and open documents from their instructor.

Class Attendance and Participation

Attendance and Participation Academic success is closely associated with regular class attendance and course participation. All successful students, whether on campus or online, are expected to be highly self-motivated. All students are required to participate in courses regularly and are obliged to participate in class activities and complete and submit assignments following their faculty' instructions. Students taking courses during compressed semester timeframes such as mini-mester, summer sessions, and 8-week courses should plan to spend significantly more time per week on the course. Responsibility for work missed because of illness or school business is placed upon the student. Instructors are required to include in their syllabi the attendance policy for the course(s) they teach. The college considers absences equal to or greater than 15% of the course's requirements to be excessive.

In order for students to be counted as having attended a class before the census date, the following guidelines are to be used: • Physical attendance in class with an opportunity for instructor and student interaction • Submission of an academic assignment • Completion of an exam, interactive tutorial, or computer-assisted instruction • Attendance at a study group assigned by the faculty • Participation in an online discussion in the class • Contact with a faculty member to ask a question

Important information for Online Lecture

The instructor will be communicating with the student via announcements, discussions, or email.

The instructor will monitor online announcement responses, discussions, and email.

All students are expected to maintain a level of online decorum befitting a college student.

All students are required to be able to use a computer to navigate and use Canvas as well as Microsoft Word.

In the event of technical difficulties the student may make an appointment with the instructor to explore alternatives acceptable to both.

There are no on-campus meetings required.

Student Conduct & Discipline

Please use this link for the Grayson College Student Handbook.

<http://www.grayson.edu/current-students/catalogs-and-handbooks/Student%20Handbook%202016.pdf> (Links to an external site.)Links to an external site.

Classroom Behavior:

Students are expected to maintain classroom decorum that includes respect for other students and the instructor, prompt and regular attendance and an attitude that seeks to take full advantage of the educational opportunity.

Defacing College Property:

Anyone caught defacing property in the classroom will be responsible for cleaning, repairing or replacing the defaced property. Defacing property includes, but is not limited to, writing, marking or scratching on the tables, tabletops, chairs, cabinets, counter tops, shelving or walls.

Cell Phone Policy:

All cell phones and other electronic devices must be turned off before entering the classroom. Text messaging is not permitted during class. If you have an emergency and need to take a call during class, you must inform the instructor before the beginning of class. Turn your ringer to vibrate, and when your call comes in, pick up all of your belongings and leave the classroom. You may return to class the next time the class meets.

Academic Integrity

The faculty expects from its students a high level of responsibility and academic honesty. Because the value of an academic degree depends upon the absolute integrity of the work done by the student for that degree, it is imperative that a student demonstrate a high standard of individual honor in his or her scholastic work.

Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, and the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts. Plagiarism, especially from the web, from portions of papers for other classes, and from any other source is unacceptable and will be dealt with under the college's policy on plagiarism (see GC Student Handbook for details). Grayson College subscribes to turnitin.com, which allows faculty to search the web and identify plagiarized material.

Plagiarism is a form of scholastic dishonesty involving the theft of or fraudulent representation of someone else's ideas or words as the student's original work. Plagiarism can be intentional/deliberate or unintentional/accidental. Unintentional/Accidental plagiarism may include minor instances where an attempt to acknowledge the source exists but is incorrect or insufficient. Deliberate/Intentional plagiarism violates a student's academic integrity and exists in the following forms:

- Turning in someone else's work as the student's own (such as buying a paper and submitting it, exchanging papers or collaborating on a paper with someone else without permission, or paying someone else to write or translate a paper)
- Recycling in whole or in part previously submitted or published work or concurrently submitting the same written work where the expectation for current original work exists, including agreeing to write or sell one's own work to someone else
- Quoting or copy/pasting phrases of three words or more from someone else without citation, • Paraphrasing ideas without citation or paraphrasing incompletely, with or without correct citation, where the material too closely matches the wording or structure of the original
- Submitting an assignment with a majority of quoted or paraphrased material from other sources
- Copying images or media and inserting them into a presentation or video without citation,
- Using copyrighted soundtracks or video and inserting them into a presentation or video without citation
- Giving incorrect or nonexistent source information or inventing source information
- Performing a copyrighted piece of music in a public setting without permission
- Composing music based heavily on someone else's musical composition.

The policy of the Science Department: Any instance of a) plagiarism, b) collusion, c) cheating, or d) falsifying records, will result in a "0" for the assignment. The "0" assigned for cheating cannot be dropped or replaced by another grade when calculating the course average.

COVID-19 Syllabus Information

Grayson College continues to monitor the evolving COVID-19 situation and align our college planning with guidance from the local and state health officials. Our primary goal is to protect the health and safety of our students, faculty, staff, and the Grayson community, while delivering quality education. We will continue to communicate as more information becomes available. Safety requirements for students, faculty, staff, and the general public will be posted and kept current, so please stay tuned to your Viking email and the COVID 19 page on the Grayson College website for additional information or other changes that may be announced.

Grayson College COVID-19 Safety Protocol

The best way to prevent illness is to avoid being exposed to this virus. However, as a reminder, the Centers for Disease Control and Prevention (CDC) always recommends everyday preventive actions to help prevent the spread of respiratory diseases, including:

- Wash your hands often with soap and water for at least 20 seconds, especially after going to the bathroom; before eating; and after blowing your nose, coughing, or sneezing. If soap and water are not readily available, use an alcohol-based hand sanitizer with at least 60% alcohol.
- Always wash hands with soap and water if your hands are visibly dirty. For information about handwashing, see CDC's Handwashing website.
- Avoid touching your eyes, nose, and mouth.
- Cover your cough or sneeze with a tissue, then throw the tissue in the trash.
- Avoid close contact with people who are sick.
- Stay home when you are sick.

Grayson College COVID-19 Instructional Guidelines

Grayson College continues to monitor information relating to the COVID-19 Pandemic. The College has taken steps to ensure that as many of our programs/courses can continue in the event that the College must re-institute partial and/or full campus closure to the public. Quality education will be moved to a remote delivery format, when feasible, which includes one or more of the following methods:

- Live Streaming instruction (synchronous)
- Recorded instruction (asynchronous)
- Online or web activities using the Canvas platform
- Video capture, both live and recorded sessions
- Use of open educational resources (OER) in place of traditional textbooks

Grayson College COVID-19 Lab Safety Protocol

In accordance with the Texas Department of Health and Human Services, Grayson College will follow these guidelines:

Groups of 9 or less may be scheduled for small group labs, where hands-on skills are necessary to be practiced or demonstrated

Social distancing will be practiced to reduce the risk of transferring germs

Faculty and students will be screened prior to entering a lab or classroom, which will include:

Taking each person's temperature

Asking CDC-standard questions

All persons will wash hands with soap and water upon admittance

Students and faculty will participate in sanitation and cleaning of equipment and workspace at the conclusion of each session.

Students are encouraged to:

- Log in to Canvas and communicate with your faculty as needed.
- Study and complete assignments in a timely manner
- Ask questions along the way

Student Responsibility

You have already made the decision to go to college; now the follow-up decisions on whether to commit to doing the work could very well determine whether you end up working at a good paying job in a field you enjoy or working at minimum wage for the rest of your life. Education involves a partnership that requires both students and instructors to do their parts. By entering

into this partnership, you have a responsibility to show up for class, do the assignments and reading, be engaged and pay attention in class, follow directions, and put your best effort into it. You will get out of your experience here exactly what you put into it – nothing more and nothing less.

TITLE IX

GC policy prohibits discrimination on the basis of age, ancestry, color, disability, gender identity, genetic information, national origin, race, religion, retaliation, serious medical condition, sex, sexual orientation, spousal affiliation and protected veterans status.

Furthermore, Title IX prohibits sex discrimination to include sexual misconduct: sexual violence (sexual assault, rape), sexual harassment and retaliation.

For more information on Title IX, please contact:

- Dr. Molly M. Harris, Title IX Coordinator (903)463-8714
 - Ms. Logan Maxwell, Title IX Deputy Coordinator - South Campus (903) 415-2646
 - Mr. Mike McBrayer, Title IX Deputy Coordinator - Main Campus (903) 463-8753
 - Website: <http://www.grayson.edu/campus-life/campus-police/title-ix-policies.html>
 - GC Police Department: (903) 463-8777- Main Campus) (903-415-2501 - South Campus)
 - GC Counseling Center: (903) 463-8730
 - For Any On-campus Emergencies: 911
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**Grayson College is not responsible for illness/injury that occurs during the normal course of classroom/lab/clinical experiences.

**These descriptions and timelines are subject to change at the discretion of the Professor.

** Grayson College campus-wide student policies may be found at the following URL on the College website: <https://www.grayson.edu/currentstudents/Academic%20Resources/index.html>