



Course Syllabus

Name of Course

MCB /CRN 85560 / Fall 2026

3 Credit Hours/3 Contact Hours

3 hr. Anatomy or 3 hr Biology or 3 hr Chemistry/prerequisite/MCB 2004L Co-requisites

Contact Information

Instructor

TBA

Division Chair

Name: Dr. Dana Hutchinson, PT, DPT
Title: Division Chair
Email dhutchin1@gulfcoast.edu
Phone Number: 850-872-3851

Division Administrative Assistant

Name Mrs. Kathy Bleday
Title Administrative Assistant
Email kbleday@gulfcoast.edu
Phone Number (850) 872-3851

Course Information

Catalog Description:

The study of bacteria, molds, yeast, and other microorganisms. Emphasis is on distribution, spread, culturing, identification, classification, and the role of these microorganisms in human diseases. This course is not intended for biology majors.

Student Learning Outcomes:

1. Describe contributions of scientists to the field of microbiology.
2. Identify similarities and differences between microbes and other types of lifeforms
3. Provide examples of how microbes impact life on earth
4. Identify mechanisms by which microbial cells are able to survive

5. Identify how the body prevents infections

Course Materials & Resources:

Textbook: Microbiology Fundamentals, A Clinical Approach, 4/e by Cowan and Bunn, published by McGraw Hill.

ISBN: 1260786048.

Delivery Method:

This course meets face to face. Course material, assignments, and announcements may be offered via Canvas as a supplemental approach to learning at the discretion of the instructor. Please make sure that you have access to a computer with a webcam and internet service, in the event a change in course delivery is needed.

Student Expectations

In this course, communication and feedback will occur through various channels, including GCSC email, Canvas Inbox, Canvas Announcements, Canvas Discussions, Microsoft Teams or Zoom, assignment feedback, and instructor office hours. Review the statements below so that you understand the expectations for communication.

As a student at Gulf Coast State College, you are expected to:

- **Adhere to Course Guidelines:** Follow the guidelines detailed in the course syllabus, along with any additional instructions provided by the instructor. This includes understanding and complying with the course objectives, grading criteria, and academic policies.
- **Maintain Regular Contact:** Keep in touch with your instructor and classmates via your GCSC email or other designated communication channels. Regular contact helps clarify doubts, share ideas, and foster a collaborative learning environment.
- **Active Participation:** Engage actively in class discussions and submit assignments on time. Your active participation is crucial for your academic success and contributes to a vibrant learning community.

As your instructor, my commitment to you is to:

- **Provide Timely Feedback:** I will review and provide feedback on your assignments and submissions promptly. My goal is to help you understand your strengths and areas for improvement, which is crucial for your academic growth.
- **Respond Via Canvas Inbox:** I will respond to your emails or messages within 24-48 hours (excluding weekends), unless otherwise noted. I understand the importance of clear and timely communication in addressing your questions and concerns.
- **Post Regular Announcements:** To keep you updated and help you manage your time effectively, I will send out weekly reminders via announcements. These reminders will include important dates, upcoming assignments, and any changes to the course schedule.
- **Maintain Weekly Office Hours:** I will maintain regular weekly office hours, but I can also be available by appointment. This is to ensure I'm available for any questions or concerns that may come up during the week.

Course Schedule*

Outline of Assignments (title, description, required readings)

Lecture Week	Date	TOPIC*	HW: Assignment and Due Date**
Week 1		Chapter 1 Introduction to Microbiology	-Metric conversions due -Ch 1 Pre-Lecture due -Ch 3 Pre-Lecture due
Week 2		Chapter 3 Prokaryote Structure & Physiology	-Ch 4 Pre-Lecture due -Online Testing quiz due
Week 3		Chapter 4 Eukaryotic Microbes	-Ch 5 Pre-Lecture due
	Test 1 Opens: Closes:	EXAM 1 Chapters 1, 3, & 4	
Week 4	Sept	Chapter 8 Microbial Genetics Chapter 5 Virology	-Ch 6 Pre-Lecture due -Growth Calculation due
Week 5	Sept	Chapter 5 Virology Chapter 6 Microbial Nutrition and Growth	-Ch 9 Pre-Lecture due -Ch 10 Pre-Lecture due
	Test 2 Opens: Closes:	EXAM 2 Chapters 8, 5, & 6	
Week 6	Sept	Chapter 9 Control of Microbes Chapter 10 Antimicrobials	-Ch 11 Pre-Lecture due
Week 7	Sept	Chapter 11 Interactions of Microbes & Humans	-Ch 12 Pre-Lecture due -Ch 13 Pre-Lecture due -Abstract 1 is due
	Test 3 Opens: Closes:	EXAM 3 Chapters 9, 10, & 11	
Week 8	Oct	Chapter 12 Non-specific Defense Chapter 13 Specific Defense	
Week 9	Oct	Chapter 13 Specific Defense	-Ch 16 Pre-Lecture due
	Test 4 Opens: Closes:	EXAM 4 Chapters 12, 13, & 14	
Week 10	Oct	Chapter 16 Integumentary Infections	-Ch 17 Pre-Lecture due
Week 11	Oct	Chapter 17 Nervous System Infections	-Ch 18 Pre-Lecture due
Week 12	Nov	Chapter 18 Cardiovascular Infections	-Ch 19 Pre-Lecture due

	Test 5 Opens: Closes:	EXAM 5 Chapters 16, 17, & 18	
Week 13	Nov	Chapter 19 Respiratory Infections	-Ch 20 Pre-Lecture due DBP #6 Emerging & -Abstract 2 is due
Week 14	Nov	Chapter 20 Gastrointestinal Infections	-Ch 21 Pre-Lecture due
	Nov	Thanksgiving	
Week 15	Dec	Chapter 21 Genitourinary Infections	
	Final Exam Opens: Closes:	Final Examination Week (50 questions from Chapters 19, 20, & 21; 50 questions from prior material). Test does have additional extra credit questions.	

*This is a tentative schedule and is subject to change.

**All HW is due Sunday 11:59 pm CST, unless otherwise stated. Late HW is not accepted. Note that 2 Connect HW are dropped.

Grading

GCSC Grading Scale

The grading scale is: A= 89.5 – 100, B = 79.5 - 89, C = 69.5 - 79, D = 59.5 - 69, F = below 59.5.

Calculation of Grades

There will be five unit exams and a mandatory final exam. HW: Connect assignments. See course schedule for HW due dates

Unit exams average	= 50%
HW Average	= 10%
Two abstracts	= 15%
Comprehensive Final exam	= 25%

- If an exam is not taken during the testing period, **one** lecture exam will be dropped, regardless of the excuse.
- Each test will include different types of questions: multiple choice, true-false, and short answer questions.

Each exam will be composed of questions testing you at three levels of learning: knowledge, comprehension, and application. All tests following the first test will be cumulative, meaning that test 2 will have review questions from test 1, etc.

The unit exam grades will represent 50%. The final exam will have 100 questions and make up 25% of the grade; 10% will come from HW assignments, and 15% from the WDP.

There are no exemptions from the final exam. The final examination schedule can be found in the GCSC website (Academic Calendar) and in the Class Schedule included in this syllabus. The final exam will not be open for review, but you may come to the professor's office to review it. Questions on the final will have changes from the original unit exam questions, that will further evaluate understanding of the material.

Each unit exam will have 4-5 bonus questions (worth 1 point each). The bonus questions will be material that is cumulative in nature. Hence Test 2 will have 5 questions that deal with test 1 material. Test 3 will have 5 questions that deal with tests 1 and 2; and so on.

Concerning exam grades: **Look at total points earned**; not the percent grade due to the extra credit built into the test

Exam Feedback: Each student will have personalized feedback written to them within 1 week of taking the exam. Go to the Grade section to read the feedback. However, these exams will not be open online for review, **but** you can come to the professor's office to review it or set up a Video conference to review it. Thus, students will have at least 3 ways to get test feedback in order to help them improve their grades

Weekly HW Assignments

1. Go to the Course Calendar. Click on the Assignment (ex. Pre-lecture chapter 1). Do the HW.
2. Purpose of HW
 - a. To encourage students to pre-read and be exposed to the material before a given lecture on it. Thus, you will need to utilize the textbook/ebook to look up information before a given lecture.
 - b. To provide an alternative way of earning grades beyond taking exams.
 - c. Two lowest HW grades will be DROPPED. Thus, no HWs will be reopened once they are closed.
 - d. Lecture Homework will be allowed two (2) attempts. The highest grade will be kept.
 - e. This counts towards your 2nd weekly attendance checks.

Abstracts

1. Look at your Lecture Schedule. It will show the date that the Abstract is due
2. Purpose of Abstracts:
 - a. Enable students to further learn on topics of their choice
 - b. Allow an alternate way to earn grades
3. Students will do two writing assignments that are called abstracts. See Canvas on how to write an abstract and read examples of abstracts. Each abstract is worth 7.5% towards your overall grade.
4. Go to Orientation Module and Click on Abstracts. Print out All directions and ALL practice abstracts and articles. Students who don't print them out typically end up doing poorly on them. Hence, please print everything out.

All grades will be posted on CANVAS within one week of due date.

Feedback will be in the comments section of grades. [How to view assignment comments on Canvas](#)

All assignments are due at 11:59 pm on Calendar date posted (Central Time) unless posted otherwise.

The exams will be taken outside of class time using Respondus. The purpose of this is to allow students to take the test when they are ready, but within a time frame specified on the class schedule. Students will click on the test link (see course calendar), and follow the directions. You can also take the exam at the computer lab at the library. You do not need to notify the instructor if you decide to utilize the computer lab. All tests are **CLOSED BOOK** and **CLOSED NOTES**.

Please read carefully and follow these directions to take tests using Respondus: Students are expected to prove to the instructor that the academic integrity of the exam has been maintained. To ensure this, students are **REQUIRED** to adhere to the following policies.

- When prompted, make sure that you show a picture ID. Exams **WILL NOT** be accepted without proper identification.
- When prompted, make sure that you show the entire area that you are taking your exam, including your desk area. This will require that you video 360 of your testing area. Exams **WILL NOT** be accepted without a complete 360 video of your testing area. The environment video **MUST** include the perimeter of your monitor. If you have a detachable webcam, simply maneuver the webcam to show the monitor perimeter. If your webcam is not detachable, use a mirror to show the perimeter of your monitor. In addition, the audio of your testing session **MUST** be recorded.
- During the completion of your exam, **MAKE CERTAIN THAT YOUR EYES REMAIN FOCUSED ON YOUR COMPUTER MONITOR**. Looking away from your monitor (particularly for extended periods of time) may result in questions of academic integrity and your exam may be invalidated.
- When you take your exams, make certain that you are in your testing area alone. **NO ONE IS ALLOWED TO BE IN YOUR AREA WHILE TESTING**. If you are testing in the GCSC library, make certain that you do not interact with anyone that may be in your area.
- When taking exams, **DO NOT USE A CELL PHONE OR ANY OTHER ELECTRONIC DEVICE**.
- When taking exams, **YOU ARE NOT ALLOWED TO USE YOUR NOTES, TEXTBOOK, OR ANY OTHER ANCILLARY INFORMATION**.
- When taking exams, **NO HEADPHONES OR OTHER AUDIO DEVICE CAN BE USED**.
- While taking exams, **YOU ARE NOT ALLOWED TO LEAVE THE ROOM**.
- While taking exams, **DO NOT USE A BLANKET OR LIE UNDER ANY TYPE OF COVERING**.

If you experience any technical difficulties accessing the exam, please contact the GCSC Help Desk (850-769-1551 ext, 3303). If you have any questions concerning exams, testing policies, or any course-related information, please feel free to email me from your CANVAS email account.

It is the student's responsibility to ensure they have a robust Wi-Fi connection to take the online test. Tests close 11:59 pm of the stated date. See lecture schedule below.

You will need to accept Respondus to allow access to the camera and mic. GCSC information can be found [here](#). For further directions: click [here](#).

Incomplete Grades

Grades of Incomplete in any course can only be assigned to students who have an emergency arise during the last two weeks of the course. To receive an Incomplete, students must:

- Submit a written request to the instructor prior to the last face-to-face class meeting. For online courses, a written Incomplete request must be received no later than the week before the Final Exam period begins.
- Have completed no less than 60 percent of the course requirements and be passing the course at the time the request for an Incomplete is submitted.

Important Note: The Incomplete option provides 30 days from the date grades are due to make up any missing work; if work is not submitted during this period, the grade will automatically change to an "F" in Lighthouse.

Course Policies

Accessibility Statement

Gulf Coast State College supports an inclusive learning environment for all students. If there are aspects of the instruction or design of this course that hinder your full participation, reasonable accommodations can be arranged. Prior to receiving accommodations, you must register with Student Accessibility Resources. Appropriate academic accommodations will be determined based on the documented needs of the student. Please visit [GCSC's Student Accessibility Resource \(SAR\) webpage](#) to learn more. For information regarding the registration process, email sar@gulfcoast.edu or call 850-747-3243.

Attendance Policy

Regular class attendance and participation are significant factors that help to promote success in college. Students are expected to attend all class meetings of all courses for which they are registered.

You are expected to know the instructor's specific attendance policy, as stated in the syllabus for each course. In the event of absence, you should contact your instructor as soon as possible to indicate the reason and to inquire whether make-up work is possible. (Make-up work is offered solely at the discretion of your professor.)

If your absences in a class become excessive, as stated in the course syllabus, your professor may contact you, indicating that further absence may result in your withdrawal from the course. Your professor can withdraw you from a course for excessive absences without your permission.

Instructors will monitor attendance at the beginning of each semester. If you are not in attendance during this period, you may be withdrawn from the course. You will be financially responsible for the course and a "W or NS" will appear on your transcript. Withdrawal from a course may also have implications for financial aid.

Withdrawal Policy

Two withdrawals are permitted per credit course. After that, a grade will be assigned. Please be concerned about withdrawals. When admitting students into certain programs, universities may calculate withdrawals as grades. It is your responsibility to verify the effects of enrollment and/or withdrawal upon your financial assistance (financial aid, scholarships, grants, etc.). There are two kinds of withdrawals---student and administrative.

- *Student Withdrawal (W1)* - Students wishing to withdraw must complete the online Student Withdrawal Form before the scheduled withdrawal deadline as published in the College catalog. Student withdrawals initiated prior to the scheduled withdrawal deadline will be recorded as a grade of "W." The withdrawal deadline for an off-term or condensed term is one week after midterm.
- *Administrative Withdrawal (W2)* – A faculty member may withdraw a student up to the published withdrawal deadline for violation of the class attendance policy in which case the student will receive a grade of "W." The withdrawal deadline for an off-term or condensed term is one week after midterm.

Students cannot withdraw from developmental studies courses (college-preparatory classes) after the drop/add period without written permission from their instructor and/or their academic advisor.

Academic Integrity

Honest participation in academic endeavors fosters an environment in which optimal learning can take place and is consistent with the college's mission. Academic misconduct, including cheating or plagiarism, is destructive to the spirit of an educational environment. GCSC professors report every instance of student academic misconduct to the college for inclusion on the student's records. Most course syllabi include an academic honesty policy and the consequences for violating this policy. Familiarize yourself with course policies regarding authorized or unauthorized use of AI to avoid the pitfalls of academic dishonesty.

The following definitions will apply:

"Cheating"

includes but is not limited to use of any unauthorized assistance in taking quizzes, tests, or examinations; dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; the acquisition without permission of tests or other academic materials belonging to a member of the College's faculty.

"Plagiarism"

includes, but is not limited to, the use by paraphrase or direct quotation of the published or unpublished work of another person without full and clear acknowledgment as well as the purchase of papers or projects. It can also include overuse of an editing program like Grammarly or submitting work written by an Artificial Intelligence (AI) generator like ChatGPT. Make certain to consult your course syllabi for your instructor's guidelines of AI material.

"Self-plagiarism"

occurs when a student submits the same or considerably similar document to fulfill requirements in different classes. For example, if a student submits a term paper in Religion they originally wrote for an English class, this is self-plagiarism. Once a paper receives a grade in one class, it cannot be submitted again for another class.

"Generative Artificial Intelligence (AI)"

is technology that uses machine learning to create new content, such as text, images or code, based on user input. These systems are trained on vast amounts of data, including large language models and image or code generators. Common examples include ChatGPT, GitHub, Copilot, Google Gemini, Perplexity, and the Grammarly AI function.

Sanctions for incidences of academic misconduct, depending on the severity of the incidence and/or its repetition, may range from receiving an F grade (or 0) for the test, assignment, or activity, to failure of the course, to suspension or dismissal from the college.

Classroom Recording

In accordance with federal and state privacy laws, students may record class lectures for their own personal educational use, in connection with a complaint to the college, or as evidence in internal or external legal proceedings. Students may not publish or upload the recordings or any components thereof without the knowledge and written permission of the faculty member. Failure to obtain permission to publish could lead to the students' having to pay damages, attorney fees, and court costs. For more information about what can be recorded, please see the guidelines in the GCSC Student Handbook.

Generative Artificial Intelligence (AI) Policy

The use of generative AI tools in academic work requires clear guidelines to maintain academic integrity. Please review the policy selected for this course regarding the use of AI tools such as ChatGPT, Copilot, Grammarly's AI features, and similar platforms for assignments, research, and other coursework.

See the student handbook for further information. Students with questions about acceptable use should consult their instructor.

Limited Assistive Use Only

Students may use basic assistive technologies for spelling, grammar, and formatting (e.g., PaperRater or SpellCheckPLUS); however, the use of AI tools (e.g., ChatGPT, Copilot, Grammarly's AI function, etc.) for generating, rewriting, or enhancing content is not permitted. All work must reflect the student's original ideas and writing. Representing work created by AI as one's own is a violation of academic integrity and may result in penalties, including a zero on the assignment and additional disciplinary actions as outlined in the college's academic integrity policy.

Anti-Discrimination Policy

Gulf Coast State College does not discriminate against any person in its programs, activities, policies or procedures on the basis of race, ethnicity, color, national origin, marital status, religion, age, gender, sex, pregnancy, sexual orientation, gender identity, genetic information, disability, or veteran status. All questions or inquiries regarding compliance with laws relating to non-discrimination and all complaints regarding sexual misconduct or discrimination may be directed to Amanda Reed, Executive Director of Human Resources/Title II/504/Title IX Coordinator and Employment Equity Officer, Gulf Coast State College, 5230 W. US Highway 98, Panama City, FL 32401; 850-769-1551, ext. 3516. Rules, policies, fees, and courses described in this catalog are subject to change without notice.

Syllabus Policy

For any syllabus posted prior to the beginning of the term, the instructor reserves the right to make minor changes prior to or during the term. The instructor will notify students via e-mail or Canvas announcement when changes are made in the requirements and/or grading of the course.

Student Support Resources

Gulf Coast State College is committed to providing you with the resources you need for success as a student and beyond. View all the academic and student support resources provided at GCSC on the [Student Services web page](#).

Course Technology & Support

To successfully participate in this online course, students must have basic computer and digital information literacy skills and meet the following technology requirements:

- **Computer:** Up-to-date web browser that supports the Canvas learning management system; please refer to the system requirements for compatibility and information on using the Canvas app on mobile devices.
- **Internet Speed:** Minimum bandwidth of 8 Mbps upload/download speed to effectively engage in online activities and access multimedia.
- **Office 365 software:** Available for free download through GCSC Information Technology Services (ITS).

If you need technical support, contact the ITS Help Desk, available 24/7 at (850) 913-3303.

Natural Science Division Policies

POLICIES OF THE DIVISION OF NATURAL SCIENCES

1. In order for faculty to attest to the academic integrity of any student testing online, certain pre-exam setup conditions must be met. Students are required (via a web camera and microphone) to perform an environment scan and provide a recording of their exam. This will be done through Respondus or a similar proctoring tool. These recordings will be watched and evaluated by the instructor.

The environment scan will consist of a video showing a 360-degree scan of their testing environment (including their desk or other testing space) and a video of their computer monitor (this can be done with a removable webcam, a mirror, or the camera on a student's phone). The testing area must be clear and clean. Students may not test from a bed or couch. There can be no pillows, blankets, or the like in the vicinity. Once the environment scan is done, the student must show, on video during the environment scan, themselves turning off their phone and storing it away from the testing area. If any other resources are allowed (scrap paper, calculator, etc.) the student must show each of these (front and back) individually during their environment scan. Through Respondus or other approved proctoring tool, the student must show their identification, which must be easy to read and seen clearly. Students may not talk out loud during the exam.

During the exam itself, the student must ensure a recording is being made (via the Respondus or the proctoring tool), and their face must remain centered in the screen. Students must be by themselves, or if they are in the library, may not interact with anyone else for the duration of the exam. They must remain on screen the entire time, so cannot leave the room. Headphones, earbuds, or other listening devices (such as a smart home device or watch) are not permitted during the exam.