

BIOL. 2320: Microbiology for Health Science Majors | # 12590

Summer II 2021 | 5 Weeks (7.12.2021 - 8.15.2021)

Online | Anytime

3 Credit Hours | 48 hours per semester

INSTRUCTOR CONTACT INFORMATION

Professor: Ndu Dikeocha DVM, MSc, PhD
Office: Northeast Campus – Suite 105-B
e-mail: ndu.dikeocha@hccs.edu
(*preferred*)

Office Phone: 713-718-2441
Office Hours: by appointment
Room: na
Days & Times: Online Anytime

Please feel free to contact me concerning any problems that you are experiencing in this course. Your performance in my class is very important to me. I am available to hear the concerns and just to discuss course topics.

Preferred Method of Contact

I will respond to emails within 24-48 hours Monday through Friday; I will reply to weekend messages during the following week.

What is exiting about this course:

In this course you will gain an understanding of the major historical events in microbiology and their impact on medical science. You will learn basic cell structure, biochemistry, metabolism, nutrition, reproduction, and genetics of microorganisms, with an emphasis on bacteria and their medical significance.

We will compare and contrast the various types of pathogenic microorganisms, including bacteria, fungi, viruses, protists, and helminths, with an emphasis on their medical significance, describe various means of microbial control, both in vivo and in vitro. You will demonstrate knowledge of the basic principles of epidemiology and the basic principles of immunology. You will discover the basics of biotechnology and genetic engineering, providing you with an understanding of the importance of molecular methods in the construction of microbial products for scientific, medical and industrial uses. Finally, we will compare and contrast the mechanisms of transmission, entry, pathogenesis and prophylaxis of selected human pathogens.

The information in this course will enable you to understand microorganisms as well as helping you develop new habits to increase your personal success.

Personal Welcome

Welcome to Microbiology:

I am delighted that you have chosen this course! One of my passions is to know as much as I can about human behavior, and I can hardly wait to pass that on. I will present the information in the most exciting way I know, so that you can grasp the concepts and apply them now and hopefully throughout your life.

As you read and wrestle with new ideas and facts that may challenge you, I am available to support you. The fastest way to reach me is by my HCC email. The best way to really discuss issues is in person and I'm available

during posted office hours to tackle the questions. My goal is for you to walk out of the course with a better understanding of yourself and of human behavior. So please visit me or contact me by email whenever you have a question.

Prerequisites and/or Co-Requisites

Biology 1306/1106, or equivalent, is strongly recommended for this course!!! We require college-level reading (or take GUST 0342) and college-level writing (or take ENGL 0310/0349).

This is a MAJORS level microbiology offering!! While acceptable for most nursing and allied health schools, this course may not transfer to certain healthcare related professional program schools. The student is advised to check with these schools regarding the acceptability of BIOL. 2320 before completing this course.

Please carefully read the repeater policy in the [HCCS Student Handbook](#).

Canvas Learning Management System

All Biology sections utilize [Canvas\(https://eagleonline.hccs.edu\)](https://eagleonline.hccs.edu) to supplement in-class assignments, exams, and activities.

Open Lab Locations

[HCCS Open Computer Lab locations](#) may be used to access the Internet and Canvas. **USE FIREFOX OR CHROME AS THE INTERNET BROWSER.**

HCC Online Information and Policies

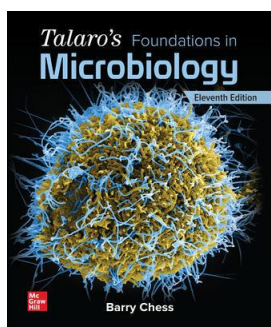
For online/hybrid students. As an online/hybrid student, you are responsible for all information/requirements provided by the online college. Here is the link to information about HCC Online classes <http://www.hccs.edu/online/>. This includes the mandatory online course prior to start of class.

Scoring Rubrics, Sample Assignments, etc.

When applicable, look in Canvas for the scoring rubrics for assignments, samples of class assignments, and other information to assist you in the course.

<https://eagleonline.hccs.edu/login/ldap>

Instructional Materials



Required Resources

The textbook listed below is **required** for this course.

Talaro's Foundations in Microbiology, 11th edition (2021) McGraw-Hill / Connect Publishers ISBN 9781264150069

Required Material:

Do not purchase a book or access code for this course. You have already paid for your course materials through the registration process. The cost of digital course materials for this class were included in your student bill and are guaranteed to be the lowest cost available to purchase your required materials. Your course materials for this class will be accessed digitally through this Canvas site. **NO other purchase is necessary.** For students who wish to have a printed copy of the text, an optional low cost print copy is available for purchase at the Houston Community College Bookstore at Central Campus.

You have the right to opt-out and purchase your own course materials if you desire, prior to the official day of record, which is {Faculty, please insert the appropriate official day of record for the current semester for your course CRN here}. It is NOT recommended that you Opt-Out, as these materials are required to complete the course. You can choose to Opt-Out on the first day of class, but you will be responsible for purchasing your course materials at the full retail price and access to your materials may be suspended.

The book is included in a package that contains the text as well as an access code and are found at the [HCC Bookstore](#). You may either use a hard copy of the book, or rent the e-book from Pearson. Order your book here: [HCC Bookstore](#)

Other Instructional Resources

Tutoring

HCC provides free, confidential, and convenient academic support, including writing critiques, to HCC students in an online environment and on campus. Tutoring is provided by HCC personnel in order to ensure that it is contextual and appropriate. Visit the [HCC Tutoring Services](#) website for services provided.

Libraries

The HCC Library System consists of 9 libraries and 6 Electronic Resource Centers (ERCs) that are inviting places to study and collaborate on projects. Librarians are available both at the libraries and online to show you how to locate and use the resources you need. The libraries maintain a large selection of electronic resources as well as collections of books, magazines, newspapers, and audiovisual materials. The portal to all libraries' resources and services is the HCCS library web page at <http://library.hccs.edu>.

Supplementary Instruction

Supplemental Instruction is an academic enrichment and support program that uses peer-assisted study sessions to improve student retention and success in historically difficult courses. Peer Support is provided by students who have already succeeded in completion of the specified course, and who earned a grade of A or B. Find details at <http://www.hccs.edu/resources-for/current-students/supplemental-instruction/>.

Course Overview

This course covers basic microbiology and immunology and is primarily directed at pre-nursing, pre-allied health, and non-science majors. It provides an introduction to historical concepts of the nature of microorganisms, microbial diversity, the importance of microorganisms and acellular agents in the biosphere, and their roles in human and animal diseases. Major topics include bacterial structure as well as growth, physiology, genetics, and biochemistry of microorganisms. Emphasis is on medical microbiology, infectious diseases, and public health. Uses and techniques of biotechnology will be presented.

Core Curriculum Objectives (CCOs)

BIOL 2320 satisfies the Life and Physical Sciences requirement in the HCCS core curriculum. The HCC Biology Discipline Committee has specified that the course address the following core objectives:

- **Critical Thinking:** Students will demonstrate the ability to engage in inquiry and analysis, evaluation and synthesis of information, and creative thinking by completing a written assignment such as a book report, research paper, or essay.
- **Communication Skills:** Students will demonstrate effective development, interpretation and expression of ideas through written, oral, and visual communication by completing a written assignment such as a book report, research paper, or essay.
- **Quantitative and Empirical Literacy:** Students will demonstrate the ability to draw conclusions based on the systematic analysis of topics using observation, experiment, and/or numerical skills by completing textbook reading assignments, completing assignments, and answering questions on quizzes and exams that pertain to Course Student Learning Outcomes #2, #3, and #4 below.
- **Teamwork** – Students will demonstrate the ability to consider different points of view and to work

effectively with others to support a shared purpose or goal by working together in study groups on and off campus to fulfill Course Student Learning Outcomes #3 and #4 below.

Program Student Learning Outcomes (PSLOs)

Can be found at:

<https://www.hccs.edu/programs/areas-of-study/science-technology-engineering--math/biology/>

Course Student Learning Outcomes (CSLOs)

Upon completion of BIOL 2320, the student will be able to:

1. Describe distinctive characteristics and diverse growth requirements of prokaryotic organisms compared to eukaryotic organisms.
2. Provide examples of the impact of microorganisms on agriculture, environment, ecosystem, energy, and human health, including biofilms.
3. Distinguish between mechanisms of physical and chemical agents to control microbial populations.
4. Explain the unique characteristics of bacterial metabolism and bacterial genetics.
5. Describe evidence for the evolution of cells, organelles, and major metabolic pathways from early prokaryotes and how phylogenetic trees reflect evolutionary relationships.
6. Compare characteristics and replication of acellular infectious agents (viruses and prions) with characteristics and reproduction of cellular infectious agents (prokaryotes and eukaryotes).
7. Describe functions of host defenses and the immune system in combating infectious diseases and explain how immunizations protect against specific diseases.
8. Explain transmission and virulence mechanisms of cellular and acellular infectious agents.

Learning Objectives

Learning Objectives for each CSLO can be found at:

<http://learning.hccs.edu/programs/biology/faculty-information/microbiology-instructor-information-non-majors-health-science-majors/program-instructional-plan-2320/view>

Student Success

Academic standards require a minimum of 3 study hours for every contact hour; meaning for a class that meets 3 hours per week, you need to budget and set aside a minimum of 9 hours each week to study and prep for your course success. Expect to spend at least twice as many hours per week outside of class as you do in class studying the course content. Additional time will be required for written assignments. The assignments provided will help you use your study hours wisely. Successful completion of this course requires a combination of the following:

- Reading the textbook
- Attending class in person and/or online
- Timely completion of assignments
- Participating in class activities
- Successful exam performance, including the mandatory final

There is no short cut for success in this course; it requires reading and studying the material using the course objectives as a guide.

Instructor and Student Responsibilities

As your Instructor, it is my responsibility to:

- Provide the grading scale and detailed grading formula explaining how student grades are to be derived.
- Facilitate an effective learning environment through learner-centered instructional techniques.
- Provide a description of any special projects or assignments.

- Inform students of policies such as attendance, withdrawal, tardiness, and making up assignments.
- Provide the course outline and class calendar that will include a description of any special projects or assignments.
- Arrange to meet with individual students before and after class as required.

As a student, it is your responsibility to:

- Attend class in person and/or online.
- Participate actively by reviewing course material, interacting with classmates, and responding promptly in your communication with me.
- Read and comprehend the textbook.
- Complete the required assignments and exams.
- Ask for help when there is a question or problem.
- Keep copies of all paperwork, including this syllabus, handouts, and all assignments.
- Attain a raw score of at least 50% on the departmental final exam.
- Be aware of and comply with academic honesty policies in the [HCCS Student Handbook](#).

STUDENT LEARNING OUTCOMES:

The student will be able to:

- To understand and apply method and appropriate technology to the study of natural sciences.
- To recognize and understand the scientific contributions by past scientists and the events leading to the discovery of microorganisms, their activities, and their functions.
- To identify, recognize, and distinguish the morphology and differences between prokaryotic and eukaryotic cells.
- To understand the relationship between infectious diseases, and how to treat them.
- To understand the patho-physiology of bacterial, parasitic, viral, and fungal diseases around us.

Learning Objectives:

The students:

- Review the cellular components of microorganisms.
- Examine the structure and function of bacterial cells.
- Review the chemical components of life.
- Identify the components of viruses.
- Examine different culture methods.
- Familiarize students with diseases caused by microorganisms.
- Practice Gram Staining Methods and other microbiological staining.

LEARNING ACTIVITIES:

- Students are responsible for reading text assignments **before** class time so that they may engage in discussion of the material.
- Lectures may expand the scope of the text.
- Students should make full use of study groups.
- Students are required to work together in small groups on specific assignments.
- Laboratory sessions coincide with lecture and reading material and include conducting experiments as well as dissections and observations of preserved specimens.
- Each student is required to write one formal typed report and make one class presentation.
- Students are encouraged to bring specimens pertaining to the material being covered; *however, nothing should be brought that could pose a health or safety risk.*

ASSIGNMENTS:

All assignments are to be completed and submitted to the instructor on the scheduled due date. No late assignments will be accepted.

MAKE-UP EXAMS:

No make up exam

WITHDRAWAL POLICY:

Withdrawal from the course after the official day of record (see current catalog) will result in a final grade of "W" on the student transcript and no credit will be awarded. Prior to the official day of record, it is the student's responsibility to initiate and complete a request for withdrawal from any course.

ACADEMIC INTEGRITY:

Houston Community College System is committed to a high standard of academic integrity in the academic community. In becoming a part of the academic community, students are responsible for honesty and independent effort. Failure to uphold these standards includes, but is not limited to, the following: plagiarizing written work or projects, cheating on exams or assignments, collusion on an exam or project, and misrepresentation of credentials or prerequisites when registering for a course. Cheating includes looking at or copying from another student's exam, orally communicating or receiving answers during an exam, having another person take an exam or complete a project or assignment, and obtaining or distributing an unauthorized copy of an exam or any part of an exam.

Plagiarism means passing off as his/her own the ideas or writings of another (that is, without giving proper credit by documenting sources). Plagiarism includes submitting a paper, report or project that someone else has prepared, in whole or in part. Collusion is inappropriately collaborating on assignments designed to be completed independently.

These definitions are not exhaustive. When there is clear evidence of cheating, plagiarism, collusion or misrepresentation, this faculty member will take disciplinary action including, but not limited to: requiring the student to retake or resubmit an exam or assignment, assigning a grade of zero or "F" for an exam or assignment; or assigning a grade of "F" for the course. Additional sanctions including being withdrawn from the course, program or expelled from the college may be imposed on a student who violates the standards of academic integrity.

HCC Policy Statement: Academic Honesty

A student who is academically dishonest is, by definition, not showing that the coursework has been learned, and that student is claiming an advantage not available to other students. The instructor is responsible for measuring each student's individual achievements and also for ensuring that all students compete on a level playing field. Thus, in our system, the instructor has teaching, grading, and enforcement roles. You are expected to be familiar with the college's Policy on Academic Honesty, found in the catalog. What that means is: If you are charged with an offense, pleading ignorance of the rules will not help you. **Students are responsible for conducting themselves with honor and integrity in fulfilling course requirements.** Penalties and/or disciplinary proceedings may be initiated by College System officials against a student accused of scholastic dishonesty. "Scholastic dishonesty": includes, but is not limited to, cheating on a test, plagiarism, and collusion.

Cheating on a test includes:

- Copying from another students' test paper;
- Using materials not authorized by the person giving the test;
- Collaborating with another student during a test without authorization;
- Knowingly using, buying, selling, stealing, transporting, or soliciting in whole or part the contents of a test that has not been administered;
- Bribing another person to obtain a test that is to be administered.

Plagiarism means the appropriation of another's work and the unacknowledged incorporation of that work in one's own written work offered for credit.

Collusion means the unauthorized collaboration with another person in preparing written work offered for credit. Possible punishments for academic dishonesty may include a grade of 0 or F in the particular assignment,

failure in the course, and/or recommendation for probation or dismissal from the College System. (See the Student Handbook)

HCC Policy Statements – FOR FACE-TO-FACE INSTRUCTION

Class Attendance - It is important that you come to class! Attending class regularly is the best way to succeed in this class. Research has shown that the single most important factor in student success is attendance. Simply put, going to class greatly increases your ability to succeed. You are expected to attend all lecture and labs regularly. You are responsible for materials covered during your absences. Class attendance is checked daily. Although it is your responsibility to drop a course for nonattendance, the instructor has the authority to drop you for excessive absences.

If you are not attending class, you are not learning the information. As the information that is discussed in class is important for your career, students may be dropped from a course after accumulating absences in excess of 12.5% hours of instruction. The six hours of class time would include any total classes missed or for excessive tardiness or leaving class early.

You may decide NOT to come to class for whatever reason. As an adult making the decision not to attend, you do not have to notify the instructor prior to missing a class. However, if this happens too many times, you may suddenly find that you have “lost” the class.

Poor attendance records tend to correlate with poor grades. If you miss any class, including the first week, **you are responsible for all material missed.** It is a good idea to find a friend or a buddy in class who would be willing to share class notes or discussion or be able to hand in paper if you unavoidably miss a class.

HCC Course Withdrawal Policy

If you feel that you cannot complete this course, you will need to withdraw from the course prior to the final date of withdrawal. Before, you withdraw from your course; please take the time to meet with the instructor to discuss why you feel it is necessary to do so. The instructor may be able to provide you with suggestions that would enable you to complete the course. Your success is very important. Beginning in fall 2007, the Texas Legislature passed a law limiting first time entering freshmen to no more than **SIX** total course withdrawals **throughout** their educational career in obtaining a certificate and/or degree.

To help students avoid having to drop/withdraw from any class, HCC has instituted an Early Alert process by which your professor *may* “alert” you and HCC counselors that you might fail a class because of excessive absences and/or poor academic performance. It is your responsibility to visit with your professor or a counselor to learn about what, if any, HCC interventions might be available to assist you – online tutoring, child care, financial aid, job placement, etc. – to stay in class and improve your academic performance.

If you plan on withdrawing from your class, you **MUST** contact a HCC counselor or your professor prior to withdrawing (dropping) the class for approval and this must be done **PRIOR** to the withdrawal deadline to receive a “W” on your transcript. ****Final withdrawal deadlines vary each semester and/or depending on class length, please visit the online registration calendars, HCC schedule of classes and catalog, any HCC Registration Office, or any HCC counselor to determine class withdrawal deadlines. Remember to allow a 24-hour response time when communicating via email and/or telephone with a professor and/or counselor. Do not submit a request to discuss withdrawal options less than a day before the deadline.** If you do not withdraw before the deadline, you will receive the grade that you are making in the class as your final grade.

Repeat Course Fee

The State of Texas encourages students to complete college without having to repeat failed classes. To increase student success, students who repeat the same course more than twice, are required to pay extra tuition. The purpose of this extra tuition fee is to encourage students to pass their courses and to graduate. Effective fall 2006, HCC will charge a higher tuition rate to students registering the third or subsequent time for a course. If you are considering course withdrawal because you are not earning passing grades, confer with your instructor/counselor as early as possible about your study habits, reading and writing homework, test taking skills, attendance, course participation, and opportunities for tutoring or other assistance that might be available.

Incomplete Policy:

In this course, the purposes of the “I” (incomplete) grade is for students who are caught up and passing at the student withdrawal deadline, and then have a medical or other problem that prevents them from completing the course. If you are not passing at the student withdrawal deadline, you should drop yourself from the course, or you will likely earn an “F.” An incomplete “I” grade will be given only if all of the following conditions are met:

- ✓ You have earned at least 85% of the available points by the date that the “I” grade is requested.
- ✓ You can provide documentation showing why you should earn an incomplete, such as a doctor's note, etc.
- ✓ You must be passing with a grade of “C” or better.
- ✓ In all cases, the instructor reserves the right to decline a student’s request to receive a grade of Incomplete.

nextLearning

Online on a Schedule (WS) – Students can take classes online at the scheduled class time that they select when enrolling. Students never come to campus, but log into their class on the scheduled dates and times using our learning management system (Canvas).

Biology Program Information

The Biology area of study here at HCC covers the smallest and simplest organisms (microbiology) to the largest and most complex organisms (human anatomy and physiology, zoology, botany).

AWARD TYPES: Associate in Science

AREA OF STUDY: Science, Technology, Engineering & Math

Please visit link: <https://www.hccs.edu/programs/areas-of-study/science-technology-engineering--math/biology/>

HCC Grading Scale can be found on this site under Academic Information:

<http://www.hccs.edu/resources-for/current-students/student-handbook/>

HCC Grading Scale

A = 100 – 90:	4 points per semester hour
B = 89 – 80:	3 points per semester hour
C = 79 – 70:	2 points per semester hour
D = 69 – 60:	1 point per semester hour
F = 59 and below	0 points per semester hour
IP (In Progress)	0 points per semester hour
W(Withdrawn)	0 points per semester hour
I (Incomplete)	0 points per semester hour
AUD (Audit)	0 points per semester hour
IP (In Progress)	IP is given only in certain developmental courses. The student must re-enroll to receive credit.
COM (Completed)	is given in non-credit and continuing education courses.

To compute grade point average (GPA), divide the total grade points by the total number of semester hours attempted. The grades “IP,” “COM” and “I” do not affect GPA.

EGLS³

The EGLS³ ([Evaluation for Greater Learning Student Survey System](#)) will be available for most courses near the end of the term until finals start. This brief survey will give invaluable information to your faculty about their teaching. Results are anonymous and will be available to faculty and division chairs after the end of the term. EGLS³ surveys are only available for the Fall and Spring semesters. EGLS3 surveys are not offered during the Summer semester due to logistical constraints.

<http://www.hccs.edu/resources-for/current-students/egls3-evaluate-your-professors/>

Campus Carry Link

Here is the link to the HCC information about Campus Carry: <http://www.hccs.edu/departments/police/campus-carry/>

HCC Email Policy

When communicating via email, HCC requires students to communicate only through the HCC email system to protect your privacy. If you have not activated your HCC student email account, you can go [to HCC Eagle ID and activate it now.](#) You may also use Canvas Inbox to communicate.

Housing and Food Assistance for Students

Any student who faces challenges securing their foods or housing and believes this may affect their performance in the course is urged to contact the Dean of Students at their college for support. Furthermore, please notify the professor if you are comfortable in doing so.

This will enable HCC to provide any resources that HCC may possess.

HCC Policies

Here is the link to the HCC Student Handbook <http://www.hccs.edu/resources-for/current-students/student-handbook/> In it you will find information about the following:

- Academic Information
- Academic Support
- Attendance, Repeating Courses, and Withdrawal
- Career Planning and Job Search
- Childcare
- disAbility Support Services
- Electronic Devices
- Equal Educational Opportunity
- Financial Aid TV (FATV)
- General Student Complaints
- Grade of FX
- Incomplete Grades
- International Student Services
- Health Awareness
- Libraries/Bookstore
- Police Services & Campus Safety
- Student Life at HCC
- Student Rights and Responsibilities
- Student Services
- Testing
- Transfer Planning
- Veteran Services

Office of Institutional Equity

Use the link below to access the HCC Office of Institutional Equity, Inclusion, and Engagement(<http://www.hccs.edu/departments/institutional-equity/>)

disAbility Services

HCC strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including long and short term conditions, mental health, chronic or temporary medical conditions), please meet with a campus Abilities Counselor as soon as possible in order to establish reasonable accommodations. Reasonable accommodations are established through an interactive process between you, your instructor(s) and Ability Services. It is the policy and practice of HCC to create inclusive and accessible learning environments consistent with federal and state law. For more information, please go to <http://www.hccs.edu/support-services/disability-services/>

Title IX

Houston Community College is committed to cultivating an environment free from inappropriate conduct of a sexual or gender-based nature including sex discrimination, sexual assault, sexual harassment, and sexual violence. Sex discrimination includes all forms of sexual and gender-based misconduct and violates an individual's fundamental rights and personal dignity. Title IX prohibits discrimination on the basis of sex-including pregnancy and parental status in educational programs and activities. If you require an accommodation due to pregnancy please contact an Abilities Services Counselor. The Director of EEO/Compliance is designated as the Title IX Coordinator and Section 504 Coordinator. All inquiries concerning HCC policies, compliance with applicable laws, statutes, and regulations (such as Title VI, Title IX, and Section 504), and complaints may be directed to:

David Cross
Director EEO/Compliance
Office of Institutional Equity & Diversity
3100 Main
(713) 718-8271
Houston, TX 77266-7517 or
Institutional.Equity@hccs.edu
<http://www.hccs.edu/departments/institutional-equity/title-ix-know-your-rights/>

Assignments, Exams and Activities

Methods of Assessment/Evaluation:

Grades will be based on: **4-lecture exams, 2-quizzes, Canvas Home-works, participation and the two final exams** (mandatory)

- a. 4-lecture exams, 4-100** points exams that **may** be a combination of short answer, fill in the blank, multiple choice and true/false.
- b. 2-Quizzes.** Only materials covered in the book will be on the quiz and will total **200** points. No makeup quizzes will be given *unless* the students can provide signed documented evidence.
- c. Participation:** It comprises of student's ability to finish assignments on time, presence in online labs and worth **100** points.
- d. Canvas Home-works:** Students are expected to complete the Home-works on Canvas and worth **100** points.
- e. Two (2) final exams**
 - i. Lecture final**
 - ii. District final exams**

BOTH EXAM ARE MANDATORY are mandatory and worth **200** points (**100 points each**). The finals exam will consist of multiple choice, matching and true/false. Questions will cover all lecture materials.

LETTER GRADE ASSIGNMENT:

Final letter grades will be assigned after computing individual final averages in percent as follows:

Final average in points	Letter grade
900 - 1000	A
800 - 899	B
700 - 799	C
600 - 699	D
< 599%	F

Grading:

4-lecture exams	400
2 quizzes	200
Canvas Homework	100
Participation	100
Final Exams:	
Lectures	100
Departmental	<u>100</u>
Total points	1000

HCC-BookStore Phone Numbers:

Alief.....713-718-6656
Central.....713-528-0872
Eastside.....713-640-1441
Northline.....713-692-1472

Spring Branch.....713-468-5300
Westloop.....713-218-0391
Katy.....713-718-5982
Stafford.....281-499-6413

Office of the Dean of Students

Contact the office of the Dean of Students to seek assistance in determining the correct complaint procedure to follow or to identify the appropriate academic dean or supervisor for informal resolution of complaints.

<https://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-complaints/speak-with-the-dean-of-students/>

Department Chair Contact Information

Dr. DaeJan Grigsby

Email: daejan.grigsby@hccs.edu

Phone: 713-718-7775

TENTATIVE LECTURE OUTLINE:

Not all material in each chapter will be studied or on the exam. The following is a tentative schedule and subject to change by the instructor.

LECTURES/LABORATORIES/EXAMINATIONS		
Chapter 1:	The Main Themes of Microbiology	2
Chapter 2:	The Chemistry of Biology	28
QUIZ 1:		
7/14/2021 6:00pm – 11:59pm		
Chapter 3:	Tools of the Laboratory: Methods of Studying Microorganisms	60
Chapter 4:	A survey of Prokaryotic cells and Microorganisms	90
Chapter 5:	A survey of Eukaryotic cells and Microorganisms	126
LECTURE EXAM #1		
7/19/2021 6:00pm – 11:59pm		
Chapter 6:	An Introduction to Viruses: Viroids, and Prions	164
Chapter 7:	Microbial Nutrition, Ecology, and Growth	192
Chapter 8:	An Introduction of Microbial Metabolism: The Chemical Crossroads of Life	226
LECTURE EXAM #2		
7/26/2021 6:00pm – 11:59pm		
Chapter 9:	An introduction to Microbial Genetics	266
Chapter 10:	Genetic Engineering: A Revolution in Molecular Biology	304
Chapter 11:	Physical and Chemical Agents for Microbial Control	334
Quiz 2		
7/29/2021 6:00pm – 11:59pm		
Chapter 12:	Drugs, Microbes, Host – The Elements of Chemotherapy	368
LECTURE EXAM #3		
8/2/2021 6:00pm – 11:59pm		
Chapter 13:	Microbe – Human Interactions: Infection, Disease and Epidemiology	406
Chapter 14:	An Introduction to Host Defenses and Innate Immunities	448
Chapter 15:	Adaptive, Specific Immunity and Immunization	478
Chapter 16:	Disorders in Immunity	514
LECTURE EXAM #4		
**8/9/2021 6:00pm – 11:59pm		

*****Lecture and District Final Exams**

**** 8/11/2021 1:00pm – 11:59pm**