

Houston Community College
BIOL 2320 – Microbiology
Summer 10 Weeks Semester 2019 (CRN 11699)
Professor: Dr. Jyoti R. Wagle



This is an online BIOL 2320 lecture course!

Your semester will start on June 3rd. If you do not log-in the course section on HCC Eagle Online CANVAS Learning Management System before the official record date (4:00 pm, June 17th, 2019), you will be marked “Never attended” and dropped from the course by HCC business office. You will not be reinstated into the course once you have been dropped for non-attendance.

Instead of attending lectures on campus, you will be using textbook and online study tools provided for each chapter.

As a DE student, you are responsible for having access to a reliable computer with a reliable internet connection. Smart phones/iPads may not give you full access to the resources and the exams. No accommodations will be made for breakdown of any of the above.

Online class is not easier....it just gives you time flexibility.

You must stay organized and study hard in order to do well.

Four biggest mistakes made by students taking online courses:

- 1. Not logging into CANVAS on regular basis.**
- 2. Under-estimating the study time.**
- 3. Waiting till the last minute to study.**
- 4. Missing the assignment and exam deadlines.**

Print the semester schedule and post it somewhere that you can check on daily basis.

You are responsible for starting the course in time and going through the course policies.

All the deadlines for the entire semester are available to you through the posted syllabus.

As a DE student, you are responsible for planning your time, completing the mandatory Pearson assignments and exams before the deadlines. *Do not wait till the last minute to study or to take the exams.* Your activity in CANVAS will be tracked and no accommodations will be made for missing the deadlines for any reason.... personal, medical or technical.

You are responsible for buying the MANDATORY textbook immediately. It is available at HCC Central College bookstore. You will benefit if you purchase early, before the semester begins. Buying online may delay your start.

You must also register for Pearson Mastering immediately (information below).

This is only a general syllabus. The detail syllabus is provided on Eagle Online on the first day of the semester.

In order to access HCC Eagle Online Learning Management System, you must log in:

<http://eagleonline.hccs.edu>

Use your HCC email address as your user ID and then your password. If this is your first time using Eagle Online, follow directions to create your password. Then select the course. **It is your responsibility to confirm your log-in access for Eagle Online website ahead of time so that you are able to start the course on the first day of the semester.**

You are recommended to check Eagle Online on the first day and then at least 2-3 times in a week in order to access study tools, exams, announcements, reminders and emails.

Use of a PC or a laptop is recommended.....iPad or telephone is not guaranteed to give you full accessibility of the resources or the exams.

CONTACT INFORMATION:

Email: jyoti.wagle@hccs.edu

Telephone: 713-718-2541

Learning web site: <http://learning.hccs.edu/faculty/jyoti.wagle>

Office location and hours: My office is in LHSB 401, Central College, 1300 Holman.

Monday/Wednesday 1:00-3:00 pm. Please email to arrange the meeting time.

Instructional Materials

1. Microbiology With Diseases by Taxonomy
by Robert W. Bauman, 5th edition, Pearson Publishers, 2017
2. CANVAS online section for this course is available on the first day of the semester by going to: <http://eagleonline.hccs.edu>
3. Pearson Mastering (www.pearsonmastering.com) where you will complete mandatory assignments to help you review chapter information. You will need **Access Code** and **Course ID (wagle33603)**. More information provided below. Technology contact at Pearson: 1-800-677-6337
4. Free tutoring is offered by HCC at several campuses. For locations and timings, go to: <https://www.hccs.edu/resources-for/current-students/tutoring/>

Prerequisites:

College reading level as determined by SAT, ACT, TASP, or successfully passing ENGL 0305 with a "C" or better.

Although BIOL 1406 is not a required prerequisite for BIOL 2320, it is highly recommended to understand some of the key concepts taught in this course.

Instructional Methods

This is an online lecture course.

Through CANVAS and Pearson website, you will have access to PowerPoints, animations, flashcards and practice quizzes for each chapter. After going through the textbook and the study tools you will take online and in-person exams.

Course Goals & Description

In this course, you will study basic structure, biochemistry, metabolism, nutrition, reproduction, and genetics of microorganisms. You will explore the mechanisms of transmission, microbial entry, pathogenesis, prophylaxis, epidemiology, and control of selected human pathogens. Basic body defense mechanisms and immunological responses to pathological conditions will also be examined.

Weekly Reading Schedule and Exam Dates

* The instructor reserves the right to make changes in this syllabus to accommodate unforeseen circumstances and changes in departmental policies. You will be informed of these changes within reasonable time period. **This is a tentative schedule. Please confirm the dates once Eagle Online course section becomes available to you on the first day of the semester.**

Week of	Reading and Testing Schedule
June 3	Review syllabus and course organization (eagleonline.hccs.edu) Register and review Pearson Assignment website (pearsonmastering.com) 1. A Brief History of Microbiology 3. Cell Structure and Function
June 10	4. Microscopy, Staining and Classification Mastering Assignments-Chap. 1, 3 & 4 – To be completed before 11:55pm, Thurs, June 13th Exam 1 - To be completed at HCC Testing Center June 14th – 16th
June 17	6. Microbial Nutrition and Growth 7. Microbial Genetics
June 24	8. Recombinant DNA Technology Mastering Assignment-Chap. 6, 7 & 8 – To be completed before 11:55pm, Thurs, June 27th Exam 2 – To be completed at HCC Testing Center June 28th –June 30th
July 1	9. Controlling Microbial Growth in the Environment 10. Controlling Microbial Growth in the Body: Antimicrobial Drugs
July 8	11. Characterizing and Classifying Prokaryotes 12. Characterizing and Classifying Eukaryotes
July 15	<u>Deadline to withdraw: 4:30 pm, Monday July 15th, 2019</u> Mastering Assignments-Chap. 9, 10, 11 & 12 – To be completed before 11:55pm, Mon, July 15th Exam 3 - To be completed ONLINE before 5:00 pm, Tues, July 16th 13. Characterizing and Classifying Viruses, Viroids and Prions 14. Infections, Infectious Diseases, and Epidemiology
July 22	15. Innate Immunity 16. Adaptive Immunity
July 29	Mastering Assignment-Chap. 13, 14, 15 & 16– To be completed before 11:55pm, Mon, July 29th Exam 4 – To be completed ONLINE before 5:00 pm, Tues, July 30th Mandatory Departmental Final Comprehensive Exam - To be completed at HCC Testing Center Aug 2nd – 4th
Aug 5	Final grades posted

*Chapters 2 and 5 are a review of General Biology information. Students enrolled in BIOL 2320 are recommended to review these chapters ahead of time to better prepare themselves for this course. A reference to the information in these chapters will be made when needed in other chapters.

Student Learning Objectives (SLOs)

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.

Student Responsibility

Your first day of the semester is June 3rd. You are responsible for buying your textbook in a timely manner. Buying textbook online or requesting its delivery at another campus may delay your start. You must also acquire Pearson Mastering Access Code in a timely manner. The semester schedule is already provided to you. All exams and mandatory Pearson Mastering Assignments are available for multiple days but they have firm deadlines. You must complete them in a timely manner. ***No accommodations will be made if you miss them due to whatever reason.....personal, medical or technical.***

Grading

All assignments and exams must be taken independently. No sharing of information is allowed. If sharing is suspected, a zero score will be given for the exam.

Exams and Quizzes		Grading Scale
Exam 1 (In-person):	65 points	90 – 100% = A
Exam 2 (In-person):	65 points	80 - 89% = B
Exam 3 (Online):	65 points	70 - 79% = C
Exam 4 (Online):	65 points	60 - 69% = D
Pearson Mastering Assignments (Online):	65 points	Below 60% = F
Drop 1 lowest score:	<u>-65 points</u>	
Total Exams/Assignments	260 points	
HCC Departmental Final Exam (In-person):	<u>30 points</u>	
Total:	290 points	

1. There are 5 exams. Each exam will be composed of multiple-choice, true-false, and matching questions. Use textbook and Chapter resources provided on CANVAS to study for the exams.

2. **Exams 1 and 2 must be taken in-person at the HCC Testing Center** on days posted in the semester schedule. Make sure you bring a photo ID and a pencil. Be there in time.

No textbook, telephone, calculator, or reference tools will be allowed during the exam. These exams will be a proctored, paper pencil, closed book exams.

For information on HCC Testing Centers (locations, dates and times), go to:

<https://www.hccs.edu/online/proctoring-services/>

Admit Time:

* 4:00-7:00 pm, Friday at Central Campus (1st Floor, SJAC Bldg, 1300 Holman)

* 10:00 am-12:50 pm, Saturday at Spring Branch Campus (1010 W. Sam Houston Pkwy N)

* 10:00 am-1:00 pm, Sunday at Eastside Campus (Workforce Bldg., 6815 Rustic)

If you live outside the HCC service area, you are responsible for completing the Proctor Approval Form in the beginning of the semester, arranging a proctor at a local college or university and making sure that the proctor is approved by HCC DE office at least two weeks before the exam date. For details, please go to:

<https://www.hccs.edu/online/proctoring-services/>

3. **Exams 3 and 4 are to be taken online.** They are available for multiple days but you will get only **one attempt** to open the exam and complete it within limited time period. Once you exit the exam, you will not be able to re-open to continue taking it. Plan ahead based on your work schedule and family responsibilities. The deadline is for completing the exams, after which the exam will shut down. You will not be able to continue taking the exam and the deadline will not be extended for any reason.

PLEASE NOTE: The deadline to complete these online exams is **5:00 pm (Houston time)** on specific days that are posted in the semester schedule.

Reminders will be posted on the homepage banner of CANVAS.

As a DE student, you are responsible for making sure that you have access to a reliable computer and internet connection. You are responsible for any technical or personal problems.....exam may shut down, computer may crash, internet may go down, family emergencies, etc. No extensions will be made and no exam will be re-opened. You will get limited time to complete an online exam. Make sure you study ahead and be prepared.....***there will not be any time to search for the answers on internet or the textbook during the exam!***

4. Do not wait till the last minute to complete the exams. No accommodations will be made if the exam is taken last minute or missed due to whatever reason..... personal, medical or technical.

5. **PLEASE NOTE:** There are 5 extra credit questions in all the exams. However, only a maximum of 65 points will be given on any exam. **If you score above 65 points in an exam, your score will be changed to 65 maximum.** Getting 65 points is like getting 100% on the exam. To calculate your grade on an exam, divide your score by 65 (not by 70) and then multiply by 100.

6. **You must take the Mandatory Departmental Comprehensive Final Exam in-person, during the weekend of August 3rd through 5th. Review all the chapters by going through the Powerpoints or chapter notes that you may have prepared.**
This exam cannot be used as a drop exam.
For details on testing locations, days and timings, please go to:
<https://www.hccs.edu/online/proctoring-services/>
7. You will be using Pearson Mastering for this course (www.pearsonmastering.com) that is provided by the publisher of your textbook. On this website, you will get study tools and **mandatory online assignments** that you must complete as per semester schedule.
 If you have purchased a new textbook through HCC bookstore, then the **Access Code** is included in the book.
 Otherwise you will need to purchase the access code for Pearson Mastering by going to www.pearsonmastering.com.
 If you get temporary access, that will be valid only for two weeks, after which, if you do not pay, your registration will be cancelled.
 You will also need the **course ID: wagle33603**
 If you have technical difficulty, please contact technology at Pearson: **1-800-677-6337**
8. If you take all the exams and complete Pearson Mastering Assignments, one lowest score will be dropped at the end of the semester. HCC Departmental Final Exam cannot be used as the lowest drop scores.
9. If, for whatever reason, you miss one exam, that exam will automatically become your drop exam. A missed exam will not be re-opened to give you additional attempt.
10. If, for whatever reason, you miss a second exam, it will be included as a zero score while calculating the final grade. No exceptions.
11. **PLEASE DO NOT ASK FOR A MAKE-UP OR EXTENTION OF A DEADLINE OR ADDITIONAL CREDIT OPPORTUNITY IF YOU MISSED OR MESSED UP AN EXAM OR ASSIGNMENT.**
12. All grades will be posted on Eagle Online as soon as the exams are graded.

Course Policies

1. You must purchase the textbook and get access to Pearson Mastering immediately.
2. Once you are registered in the course, you will be required to log into CANVAS (<http://eagleonline.hccs.edu>) on the first day and then weekly to access study tools, grades, announcements, reminders and emails.
3. Your attendance begins on the first day of the semester (June 3rd).
 Your log-in and completion of the assignments will be tracked in CANVAS and Pearson Mastering website during the semester.
If you stop attending the course or do not participate in the assessment, you are still responsible for withdrawing from the course before the withdrawal deadline (4:30 pm, Monday, July 15, 2019). Failing to do so can result into an F or FX grade at the end of the semester.
4. **VERY IMPORTANT EXAMS POLICY:**
 Exams that are conducted online or at HCC testing centers. Even though they are available for multiple days, they do have a firm deadline. Please allow adequate time to complete your exam and to resolve any unanticipated employment or personal problems.

Any exam that is not attempted or not completed in time will be considered as a missed exam. Missed exams will be graded as zero score and there are no makeup exam opportunities. In fairness to other students, these missed exams will be counted as 0 scores. When computing your final grade, missed exam zero score will be averaged into the calculation for the final grade. Even though one lowest score is dropped at the end of the semester, more than one missed exam can greatly jeopardize your final grade and may cause you to get an undesirable grade or fail the entire course.

PLEASE BE ADVISED THAT ALL STUDENTS WILL RECEIVE A GRADE OF ZERO FOR MISSED EXAMS. NO ACCOMMODATION IS MADE FOR MISSING OR MESSING AN EXAM FOR WHATEVER REASON.....PERSONAL, WORK RELATED OR TECHNICAL ISSUES. NO MAKE UP EXAM OR EXTRA CREDIT ASSIGNMENTS ARE AVAILABLE.

5. All grades will be posted on your Eagle online and can be accessed 24/7.

HCC Policy Statement - ADA

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, Houston, TX 77266-7517 or Houston, TX 77266-7517 or Institutional.Equity@hccs.edu

Houston Community College is dedicated to providing an inclusive learning environment by removing barriers and opening access for qualified students with documented disabilities in compliance with the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act. Ability Services is the designated office responsible for approving and coordinating reasonable accommodations and services in order to assist students with disabilities in reaching their full academic potential. In order to receive reasonable accommodations or evacuation assistance in an emergency, the student must be registered with Ability Services.

If you have a documented disability (e.g. learning, hearing, vision, physical, mental health, or a chronic health condition), that may require accommodations, please contact the appropriate Ability Services Office below. Please note that classroom accommodations cannot be provided prior to your Instructor's receipt of an accommodation letter and accommodations are not retroactive. Accommodations can be requested at any time during the semester, however if an accommodation letter is provided to the Instructor after the first day of class, sufficient time (1 week) must be allotted for the Instructor to implement the accommodations.

Ability Service Contact Information

<http://www.hccs.edu/support-services/disability-services/>

Central College 713.718.6164

Coleman College 713-718-7376

Northeast College 713-718-8322

Northwest College 713-718-5422 713-718-5408
Southeast College 713-718-7144
Southwest College 713-718-5910
Adaptive Equipment/Assistive Technology 713-718-6629 713-718-5604
Interpreting and CART services 713-718-6333

HCC Policy Statement: Academic Honesty

All assignments and exams must be completed independently. No sharing of information is allowed. If sharing is suspected, a zero score will be given for the exam.

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 professor 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 professor 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 mean 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

Class Attendance –It is important that you log into Eagle online during the first week of the semester and then 2-3 times each week! Participating regularly is the best way to succeed in this class. Research has shown that the single most important factor in student success is attendance. Class attendance is checked, tracked, and reported to the business office. Although it is your responsibility to drop a course for nonattendance, the instructor has the authority to drop you for excessive absences.

HCC Course Withdrawal Policy

Beginning Fall 2007, the State of Texas imposes penalties on students who drop courses excessively. Students are limited to no more than SIX total course withdrawals throughout their educational career at a Texas public college or university.

To help you avoid having to drop/withdraw from any class, contact your DE professor regarding your academic performance. You may also want to contact your DE counselor to learn about helpful HCC resources (e.g. online tutoring, child care, financial aid, job placement, etc.).

How to Drop

- If a student decides to drop or withdraw from a class upon careful review of other options, the student can drop online prior to the deadline through their HCC Student Center.

<https://hccsaweb.hccs.edu:8080/psp/csprd/?cmd=login&languageCd=ENG>

- HCC and/or instructors may drop students for excessive absences without notification (see Class Attendance below).
- Students should check HCC's Academic Calendar by Term for drop/withdrawal dates and deadlines:

<http://www.hccs.edu> → Current Students → Calendar-Academic → Select specific semester.

Classes of other duration (mini-term, flex-entry, 8-weeks, etc.) may have different final withdrawal deadlines. Please contact the HCC Registrar's Office at 713.718.8500 to determine mini-term class withdrawal deadlines.

If you do not withdraw before the deadline, you will receive the grade that you are making in the class as your final grade.

Class Attendance

As stated in the HCC Catalog, all students are expected to participate in the course activities on regular basis. You need to log into Eagle Online and Pearson Mastering and complete all the exams and assignments in a timely manner. Although it is the responsibility of the student to drop a course for non-attendance, the instructor also has the authority to block a student from accessing Eagle online, and/or to drop a student for excessive absences or failure to participate regularly.

International Students

Receiving a W in a course may affect the status of your student Visa. Once a W is given for the course, it will not be changed to an F because of the visa consideration. Since January 1, 2003, international students are restricted in the number of distance education courses that they may take during each semester. ONLY ONE online/distance education class may be counted towards the enrollment requirement for International Students per semester. Please contact the International Student Office at 713-718-8520 if you have any questions about your visa status and other transfer issues.

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.

Classroom Behavior

As your professor and as a student in this class, it is our shared responsibility to develop and maintain a positive learning environment for everyone. Your professor takes this responsibility very seriously and will inform members of the class if their behavior makes it difficult for him/her to carry out this task. As a fellow learner, you are asked to respect the learning needs of your classmates and assist your professor achieve this critical goal.

Campus Carry Law

At HCC the safety of our students, staff, and faculty is our first priority. As of August 1, 2017, Houston Community College is subject to the Campus Carry Law (SB11 2015). For more information, visit the HCC Campus Carry web page at <http://www.hccs.edu/district/departments/police/campus-carry/>.

Title IX and Sex Discrimination (US Department of Education)

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 Houston, TX 77266-7517 or Institutional.Equity@hccs.edu

Use of Course Contents

As a student active in the learning community of this course, it is your responsibility to be respectful of the learning tools provided to you by your professor. To show respect, you will not copy or share the contents with others unless you receive permission from the professor.