



# HOUSTON COMMUNITY COLLEGE

## Spring Branch Campus

### BIOL 2120 Microbiology I Lab

### Spring REGULAR TERM 2018

#### INSTRUCTOR CONTACT INFORMATION

Instructor: Dr. Michael Vu

Office Hours: By appointment only

E-mail: [michael.vu@hccs.edu](mailto:michael.vu@hccs.edu)

#### WELCOME TO

Course Title: **Microbiology I Laboratory**

Semester and Year: **Spring 2018**

Course Prefix: **BIOL 2120**

Course Number(CRN): **58034**

Lab: **Wednesday, 8:00-10:50 AM Room 529**

Credit Hours: 1

#### Course Description

The goal of this course is for the students to develop a full understanding of biology of microorganisms including morphology, metabolism, taxonomy, culture techniques, microbial genetics, immunology, virology, mycology, parasitology and diseases. Students are also given hands-on experience on handling live microorganisms using aseptic techniques and applying various staining procedures used for identification of bacteria.

## **Program Student Learning Outcomes (PSLOs) for the Biology Discipline**

Completion of the specific Student Learning Outcomes listed below does NOT and will NOT guarantee the student any specific final course grade at the end of the semester!

1. Will display an understanding of biological systems and evolutionary processes spanning all ranges of biological complexity, including atoms, molecules, genes, cells, and organisms.
2. Will integrate factual and conceptual information into an understanding of scientific data by written, oral and/or visual communication. (This may include successful completion of a course-specific research project or a case study module).
3. Will demonstrate proficiency and safe practices in the use of laboratory equipment and basic laboratory techniques.
4. Will apply principles of the scientific method to problems in biology in the collection, recording, quantitative measurement, analysis and reporting of scientific data.

## **Course Student Learning Outcomes (CSLOs) for BIOL 2120 – Microbiology Lab**

Completion of the specific Student Learning Outcomes listed below does NOT and will NOT guarantee the student any specific final course grade at the end of the semester!

1. Apply scientific reasoning to investigate questions and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.
2. Use critical thinking and scientific problem-solving to make informed decisions in the laboratory.
3. Communicate effectively the results of scientific investigations.
4. Identify unique structures and capabilities of microorganisms.
5. Compare the life cycles of different types of viruses.
6. Discuss how microscopy has revealed the structure and function of microorganisms.
7. Give examples of the range of metabolic diversity exhibited by microorganisms, impact of metabolic characteristics on growth, and control of growth.
8. Classify interactions of microorganisms on human and non-human hosts as neutral, detrimental, or beneficial.

## **GETTING READY**

Prerequisites:

Must have passed BIOL 2420/2320 with a grade of C (or higher) or co-enroll in BIOL 2320 as a co-requisite.

## **Instructional Materials (Required)**

### **Microbiology Laboratory Manual by HEBEL**

Bluedoor publishing

ISBN: 9781599849348

## Grading

### Laboratory Practical Exams

There will be a total of four exams. Questions may be multiple choice, completion, matching, diagrams, problem solving, definitions, identification, fill in the blank and short essay type questions. Of the four exams, your lowest will be dropped. **There is no makeup exam.** If you miss an exam, that will become your drop grade. The average of the remaining two exams will account for 60% of your grade.

### Quiz

There will be a total of five quizzes given during the semester. Quiz will be given either at the beginning or end of lab. You are allowed to makeup one quiz.

### Lab reports & performances, attendance:

Lab reports are due one week after the completion of the lab. No late report will be accepted. Every student is required to do his/her own lab work and individuality will be looked for in the lab reports. With instructor's approval, group effort will be allowed in the lab but each student must participate and turn in their own lab report. Students must be in lab for the entire period. Overall attendance and participation will be evaluated.

### Grade Computation

3 lab practical exams (20% each)	60%
Laboratory Reports	20%
Quiz	10%
Attendance and Participation	10 %
	100%

A = 90-100%      B = 80-89%      C = 70-79%      D = 60-69%      F = 59% and below

### Instructor's Incomplete Policy

**It is important that you come to class. Attendance is mandatory and will be taken at every class. Attending class regularly is the best way to succeed in this class. You are expected to attend all labs regularly. If you are absent, you are responsible for all materials covered during your absences. It is your responsibility to obtain any laboratory data and turn in your lab report; You must turn in your lab report one week from the due date, or you will not get credit for that report. You should check with your colleagues to see what you missed.**

If you are absent for five or more consecutive lab meetings and have not email me, you will be dropped from the class. Please email me if you are unable to attend a lab. You are responsible for obtaining any necessary experimental data to complete your lab report and turn the lab report the following class meeting.

## 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 University'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 proceeding may be initiated by College System officials against a student accused of "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 O 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)

## EGLS3 -- Evaluation for Greater Learning Student Survey System

At Houston Community College, professors believe that thoughtful student feedback is necessary to improve teaching and learning. During a designated time, you will be asked to answer a short online survey of research-based questions related to instruction. The anonymous results of the survey will be made available to your professors and division chairs for continual improvement of instruction. Look for the survey as part of the Houston Community College Student System online near the end of the term.

## Use of Camera and/or Recording Devices

As a student active in the learning community of this course, it is your responsibility to be respectful of the learning atmosphere in your classroom. To show respect for your fellow students and instructor, you will turn off your phone and other electronic devices, and will not use these devices in the classroom unless you receive permission from the instructor. Use of recording devices, including camera phones and tape recorders, is prohibited in classrooms, laboratories, faculty offices, and other locations where instruction, tutoring, or testing occurs. Students with disabilities who need to use a recording device as a reasonable accommodation should contact the Office for Students with Disabilities for information regarding reasonable accommodations.

## Students with Disabilities

Any student with a documented disability (e.g. physical, learning, psychiatric, vision, hearing, etc) who needs to arrange reasonable accommodations must contact the appropriate HCC Disability Support Service (DSS) Counselor at the beginning of each semester. Faculty is authorized to provide only the accommodations requested by the Disability Support Services Office. Students who are requesting special testing accommodations must first contact the appropriate (most convenient) DSS office for assistance:

Disability Support Services Offices: System: 713.718.5165

Central: 713.718.6164

Northwest: 713.718.5422

Northeast: 713.718.8420

Southeast: 713.718.7218

Southwest: 713.718.7909

After student accommodation letters have been approved by the DSS office and submitted to DE Counseling for processing, students will receive an email confirmation informing them of the Instructional Support Specialist assigned to their professor.

## HCC Course Withdrawal Policy

Be certain you understand HCC policies about dropping a course and consult with a counselor/advisor to determine if withdrawing is in your best interest. It is your responsibility to withdraw officially from a class and prevent an “F” from appearing on your transcript. Senate Bill 1231 limits the number of W’s a student can have to 6 classes over the course of their entire academic career. This policy is effective for students entering higher education for the first time in fall 2007 and subsequent terms. Withdrawals accumulated at any other Texas public higher education institution count toward the 6 course total. Withdrawals for certain circumstances beyond the students control may not be counted toward the 6-drop limit.

In addition, withdrawing from a course may impact your financial aid award or eligibility. Contact the Financial Aid Office or website to learn more about the impact of withdrawing on financial aid. 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.).

It is your responsible to drop the course in a timely manner. Unless of excessive absences as mentioned earlier, I will not drop you from the class due to poor performance. 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.

## **Last day to Withdraw: April 3, 2018**

- After this date the Department of Education requires instructors to assign the final grade of “F” or “FX” for failure due to lack of attendance. Once a grade of F or FX is assigned, faculty will not be allowed the option of changing the grade to a W.
- Be aware that a “FX” mark on your transcript can affect your financial aid and visa status.

- 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. 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.

### HCCS Course Repeater Policy

Course Repeater Policy Beginning fall 2006, students who repeat a course for a third or more times will face significant tuition/fee increases at HCC and other Texas public colleges and universities. Please ask your instructor and/or counselor about opportunities for tutoring/other assistance prior to considering course withdrawal or if you are not receiving passing grades.

### HCCS IS COMMITTED TO YOUR SUCCESS

#### **Early Intervention Program and Services**

Your success is our primary concern! If you are experiencing challenges achieving your academic goals, please contact your instructor or an early intervention coach. We can provide assistance with academic needs, ADA accommodations, classroom difficulties, financial concerns, and other issues.

Questions/Problem: Please make sure that if you have any questions or problems at any time, that you first contact me as soon as possible. The worst thing you can do is wait near the end of the semester to contact me or to not take advantage of the resources available to you. As an adult it is your responsibility to ask for assistance when needed. By taking an active part in your education, you will make your academic experience much more rewarding and exciting.

Tutoring HCCS provides free online tutoring for all HCC students. Go to [www.hccs.askonline.net](http://www.hccs.askonline.net); use your own e-mail address; choose a username and password you will remember; put your HCC student ID number in the Comment Box.

Counseling Services Counseling services are available to students who are experiencing difficulty with academic issues, selection of college major, career planning, disability accommodations, or personal issues.

#### **Library Resources**

The library system, which is made up of libraries and electronic resource centers (ERCs) provides you with an extensive, up-to-date collection of resources, including books, magazines and newspapers--in both paper and electronic formats—as well as Videos. Online resources can be accessed at <http://library.hccs.edu>

#### **Classroom Conduct and Dress Code**

All students in HCC courses are required to follow all HCC Policies & Procedures, the Student Code of Conduct, the Student Handbook, and relevant sections of the Texas Education Code when interacting and communicating in a virtual classroom with faculty and fellow students. Students who violate these policies and guidelines will be subject to disciplinary action that could include denial of access to course-related email, discussion groups, and chat rooms or being removed from the class. Students who poses a threat to the safety of others will be subject to immediate withdrawal from the classroom. Please refer to the HCC Student Handbook.

As a courtesy to other please do not answer your phone or text during lecture and lab. If it is an emergency, quietly leave the classroom to answer your phone.

Students are expected to dress in appropriate attire in accordance to HCC Student Handbook. For your safety, students are required to wear closed shoes and long pants during lab. For your safety please tie back long hair, and remove any dangling jewelries during lab. Absolute NO EATING AND DRINKING DURING LAB. No smoking is permitted in lab. At time, some chemical agents used in laboratory experiments could permanently stain clothing when come in contact. Student are welcome to bring a lab coat to wear during lab.

### **Institutional Policies Regarding Emails**

All email contacts must be sent using your hccs.edu official email. You must use your hccs.edu student email account for any correspondences. Microsoft Office is available for free to all student when registered using your EDU account. You can use both the web-based software and download the complete suite to your personal computer to use for free for the duration of your education.

### **TITLE IX OF THE EDUCATION AMENDMENTS OF 1972, 20 U.S.C. A§ 1681 ET. SEQ.**

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 the ADA Counselors for assistance. Additional information can be found at <http://www.hccs.edu/departments/institutional-equity/title-ix-know-your-rights/>.

It is important that every student understands and conforms to respectful behavior while at HCC. Sexual misconduct is not condoned and will be addressed promptly. Know your rights and how to avoid these difficult situations. Log in to: [www.edurisksolutions.org](http://www.edurisksolutions.org) . Sign in using your HCC student e-mail account, then go to the button at the top right that says Login and enter your student number.

### **Campus Carry**

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/>.

Any student who may be facing challenges in affording or accessing sufficient food to eat every day, or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is encouraged to contact the Dean of Students Services for support. Additionally, please notify your professor (me) if you are comfortable in doing so. This will enable me to provide you with guidance on resources that I am aware of relating to essential needs.

## **EQUAL OPPORTUNITY STATEMENT**

It is the policy of the HCCS to provide equal employment, admission and educational opportunities without regard to race, color, creed, national origin, gender, age, veteran's status, sexual orientation, or disability.

## **FERPA**

The academic, financial and non-directory information on your student account is confidential and protected by the Family Educational Rights & Privacy Act (FERPA). We cannot release certain information to another person without your written authorization. Further information regarding Student Records and FERPA can be found at; <http://www.hccs.edu/district/about-us/procedures/student-rights-policies--procedures/>

## **International Students**

Receiving a W or WF in a course may affect the status of your student Visa. Once a W/WF 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.