



TENTATIVE—SUBJECT TO CHANGE

BIOL 1111L: Biology I Lab COURSE SYLLABUS Lab Wednesday and Thursday Fall Semester 2019

COURSE INFORMATION

Credit Hours/Minutes: 1/2250

Class Location: HSA 902-903

Class Meets: WR 11:00-12:15

CRN: 20142

INSTRUCTOR CONTACT INFORMATION

Instructor Name: Dr. Erica M. Harrison

Office Location: HSA 901 (Vidalia), 8145 (Swainsboro)

Office Hours: M-R 800-1030 (Vidalia)

Email Address: eharrison@southeasterntech.edu

Phone: 912-538-3188

Fax Number: 912-538-3156

Tutoring Hours: By appointment only

REQUIRED TEXT

1. Biology, Mader & Windelspecht, 12th edition, McGraw Hill
2. Laboratory Manual to accompany Biology, Mader, 12th edition, McGraw Hill

REQUIRED SUPPLIES & SOFTWARE

3 hole binder, clear front report cover (make sure it is sturdy and can hold 100 pages or more), colored pencils, ink pens, highlighter, and any other supplies deemed necessary by instructor.

Note: Although students can use their smart phones and tablets to access their online course(s), exams, discussions, assignments, and other graded activities should be performed on a personal computer. Neither Blackboard nor Georgia Virtual Technical Connection (GVTC) provide technical support for issues relating to the use of a smart phone or tablet so students are advised to not rely on these devices to take an online course.

Students should not share login credentials with others and should change passwords periodically to maintain security.

COURSE DESCRIPTION

Selected laboratory exercises paralleling the topics in BIOL 1111. The laboratory exercises for this course include chemical principles related to cells, cell structure and function, energy and metabolism, cell division, protein synthesis, genetics, and biotechnology

MAJOR COURSE COMPETENCIES

1. Lab Safety
2. Microscope use and microscopic observation
3. Organization and Chemical Basis of Life
4. Cell Structure and Function
5. Metabolism
6. Cell Division
7. Protein Synthesis
8. Central Dogma of Biology
9. Genetics
10. Biotechnology
11. Evolutionary concepts

PREREQUISITE(S)

Regular Admission

Co-requisites: All Required

BIOL 1111 - Anatomy and Physiology

COURSE OUTLINE

LABORATORY SAFETY

1. Discuss and apply laboratory exercises encompassing the appropriate practice of laboratory precautions and laboratory safety

MICROSCOPE USE AND MICROSCOPIC OBSERVATION

1. Perform and apply laboratory exercises encompassing proper use of the microscope for microscopic observations

ORGANIZATION AND CHEMICAL BASIS OF LIFE

1. Perform and apply laboratory exercises encompassing organization and the chemical basis of life

METABOLISM

1. Perform and apply laboratory exercises encompassing metabolism

CELL DIVISION

1. Perform and apply laboratory exercises encompassing cell division

PROTEIN SYNTHESIS

1. Perform and apply laboratory exercises encompassing protein synthesis

THE CENTRAL DOGMA OF BIOLOGY

1. Perform and apply laboratory exercises encompassing the central dogma of biology

GENETICS

1. Perform and apply laboratory exercises encompassing genetics

BIOTECHNOLOGY

1. Perform and apply laboratory exercises encompassing biotechnology

EVOLUTIONARY CONCEPTS

1. Perform and apply laboratory exercises encompassing evolutionary concepts

GENERAL EDUCATION CORE COMPETENCIES

STC has identified the following general education core competencies that graduates will attain:

1. The ability to utilize standard written English.
2. The ability to solve practical mathematical problems.

3. The ability to read, analyze, and interpret information.

STUDENT REQUIREMENTS

In order to be successful in this class, students should study a minimum of 2 hours per credit hour each week (minimum of 2 hours). Before arriving for class, students should read assigned chapters taking special note of bold-faced vocabulary terms and any study questions within the chapter. Failure to comply with these suggestion will make it impossible to understand and follow the lecture material and will result in a student being unsuccessful in this course.

Students are responsible for the policies and procedures in the STC Student Handbook. Additionally, during exams, students are to place all notebooks, bags, and other belongings on the floor or on the counters located in the back and sides of the classroom. Also during examinations students are to be seated with one empty chair between each student. No talking is permitted once the exams are handed out. **Students found with their cellphone or any other personal communication device (including smart watches) will be considered cheating and given a zero for the exam. This includes taking out a phone or similar device after the student has completed the exam but while others in the classroom are still testing.**

Students are expected to exhibit professional behavior at all times. Each student is to show respect and concern for fellow students and for the instructor. Insubordination will not be tolerated, and disciplinary measures will be enacted.

As students taking this course are striving to become healthcare professionals, they will be expected to follow certain healthcare program rules. This includes but is not limited to: proper dress (i.e. when in lab setting or other activities in class), no perfumes or strong fragrances, cleanliness (hands, clothes, hair, etc.), and effective communication skills.

Per STC policy no cell phones are allowed in hallways or in classrooms. If your phone must be with you it must be turned off and in a bag. In cases of emergency when a student needs his or her phone, he or she is expected to 1) notify the instructor before class begins and 2) leave the phone on silent (NO VIBRATE) while they are in the class (this excludes examination guidelines for phones). No personal calls are to be taken during class, regardless of the situation. This should be handled before or after class.

No eating or drinking is permitted in the lab or lecture classroom. Water is allowed if it is in a spill-proof container and must be kept under the desk or on the sides of the classroom.

ATTENDANCE GUIDELINES

Class attendance is a very important aspect of a student's success. Being absent from class prevents students from receiving the full benefit of a course and also interrupts the learning process. Southeastern Technical College considers both tardiness and leaving early as types of absenteeism (three (3) tardies or early departures equals one (1) absences from the course). Responsibility for class attendance rests with the student. Regular and punctual attendance at all scheduled classes is required for student success. Students will be expected to complete all work required by the instructor as described in the individual course syllabus.

Instructors have the right to give unannounced quizzes/assignments. Students who miss an unannounced quiz or assignment will receive a grade of 0. Students who stop attending class, but do not formally withdraw, may receive a grade of F and face financial aid repercussions in upcoming semesters.

Instructors are responsible for determining whether missed work may be made up and the content and dates for makeup work is at the discretion of the instructor (see evaluation procedures and course lesson plan

below).

STUDENTS WITH DISABILITIES

Students with disabilities who believe that they may need accommodations in this class based on the impact of a disability are encouraged to contact the appropriate campus coordinator to request services.

Swainsboro Campus: [Macy Gay, \(mgay@southeasterntech.edu\)](mailto:mgay@southeasterntech.edu), 478-289-2274, Building 1, Room 1208

Vidalia Campus: [Helen Thomas, \(hthomas@southeasterntech.edu\)](mailto:hthomas@southeasterntech.edu), 912-538-3126, Building A, Room 108

SPECIFIC ABSENCES

Provisions for Instructional Time missed because of documented absences due to jury duty, military duty, court duty, or required job training will be made at the discretion of the instructor.

PREGNANCY

Southeastern Technical College does not discriminate on the basis of pregnancy. However, we can offer accommodations to students who are pregnant that need special consideration to successfully complete the course. If you think you will need accommodations due to pregnancy, please make arrangements with the appropriate campus coordinator.

Swainsboro Campus: [Macy Gay, \(mgay@southeasterntech.edu\)](mailto:mgay@southeasterntech.edu), 478-289-2274, Building 1, Room 1208

Vidalia Campus: [Helen Thomas, \(hthomas@southeasterntech.edu\)](mailto:hthomas@southeasterntech.edu), 912-538-3126, Building A, Room 108

It is strongly encouraged that requests for consideration be made **PRIOR** to delivery and early enough in the pregnancy to ensure that all the required documentation is secured before the absence occurs. Requests made after delivery **MAY NOT** be accommodated. The coordinator will contact your instructor to discuss accommodations when all required documentation has been received. The instructor will then discuss a plan with you to make up missed assignments.

WITHDRAWAL PROCEDURE

Students wishing to officially withdraw from a course(s) or all courses after the drop/add period and prior to the 65% point of the term in which student is enrolled (date will be posted on the school calendar) must speak with a Career Counselor in Student Affairs and complete a Student Withdrawal Form. A grade of "W" is assigned for the course(s) when the student completes the withdrawal form.

Students who are dropped from courses due to attendance after drop/add until the 65% point of the semester will receive a "W" for the course.

Important – Student-initiated withdrawals are not allowed after the 65% point. Only instructors can drop students after the 65% point for violating the attendance procedure of the course. Students who are dropped from courses due to attendance after the 65% point will receive either a "WP" or "WF" for the semester.

Informing your instructor that you will not return to his/her course, does not satisfy the approved withdrawal procedure outlined above.

There is no refund for partial reduction of hours. Withdrawals may affect students' eligibility for financial aid for the current semester and in the future, so a student must also speak with a representative of the Financial Aid Office to determine any financial penalties that may be assessed due to the withdrawal. A grade of 'W' will count in attempted hour calculations for the purpose of Financial Aid.

Remember - Informing your instructor that you will not return to his/her course does not satisfy the approved withdrawal procedure outlined above.

EVALUATION PROCEDURES

Lab exams will be given in the lab on designated days. Be sure to review your course schedule! **THERE WILL BE NO MAKE UP FOR LAB EXAMS. FAILURE TO TAKE LAB EXAMS ON SPECIFIED DATE WILL RESULT IN A ZERO FOR THAT EXAM.** Lab exams account for 50% of overall lab grade.

Lab Final

A comprehensive final examination will be given at the end of the semester. There will be no make-up exam for the final examination. Failure to take the final examination on the specified date will result in a grade of zero. The final exam will include all chapters covered. A total of 100 points may be earned on the final examination. The Final exam will account for 40% of the final course grade.

Lab Assignments/Lab Report: A laboratory report will be created by each student using a clear front cover report (see required supplies pg. 1 on syllabus). The lab report will include all completed lab worksheets, assignments, learning objective assignments for lecture, and drawings of microscopic slide observations (using color pencils). Lab reports are due at the end of each lab exercise and all lab work should be submitted bound in "clear front" report cover. Lab reports will not be taken home; all assignments completed in the lab must be turned in on the day assigned. The first page on the report will include in typewritten format: full name, course name, course number, semester and year in the above mentioned order. This lab notebook will account for 10% of the final grade. Points will be deducted for any missing assignment.

MAKEUP GUIDELINES

Lecture examinations: Students will be allowed to make up one lecture examination (excluding the final exam), due to a documented, excused absence approved by the instructor. Any subsequently missed lecture exam will result in an automatic zero.

Lab exams: There is no make-up opportunity for lab exams.

Lecture assignments: Late assignments will be accepted but not for full credit. Assignments submitted after the due date will incur a 10% deduction per day late.

Lab assignments: Late assignments will be accepted but not for full credit. Assignments submitted after the due date will incur a 10% deduction per day late.

Laboratory activities and experiments: There will be no make-up opportunity for missed lab activities, in-class assignments, experiments or dissections.

ASSIGNMENTS

Students will be asked to bring a three prong notebook for the submission of learning objectives and lab assignments. This notebook will stay in the classroom and new material will be added each week including: in-class assignments, completed pre-lab and lab activities, signed policies and procedures and other signature sheets, group project information, and learning objectives for lecture. Students are required to read each chapter and complete learning objectives for each chapter. Learning objectives can be found on the M-Drive. All completed learning objectives should be hand written in blue ink and submitted EACH WEEK in the student's lab notebook.

GROUP PROJECT PRESENTATION

Students will work in small groups and give an educational presentation on a disease of disorder that affects certain body systems related to the chapters covered in this course. A list of topics, guidelines for arrangement, content, requirements, and a rubric can be found on the M-Drive. Presentations should be 15-

20 minutes long. Points will be deducted for going under or over the time limits. Students are required some type of visual aid. Informative videos or other media may be used if it will enhance the presentation. These video clips or other media are not to exceed 7 minutes of the presentation.

Group members should have equal participation in the completion of this project. A team rating scale will be provided for students to “grade” each other on the work they have done concerning their project. Additionally, students are encouraged to report team member failure to comply with scheduled meetings, discussions, emails, group texts, etc. Failure to correspond and communicate with group members will result in very different project grades.

The week of the presentations (see course schedule), all presentations are to be submitted to the instructor, saved on the classroom computer’s desktop from a jump drive, or downloaded from the web prior to the day of the presentations. Thus, no procrastination will be accepted.

ACADEMIC DISHONESTY POLICY

The STC Academic Dishonesty Policy states All forms of academic dishonesty, including but not limited to cheating on tests, plagiarism, collusion, and falsification of information, will call for discipline. The policy can also be found in the STC Catalog and Student Handbook.

PROCEDURE FOR ACADEMIC MISCONDUCT

The procedure for dealing with academic misconduct and dishonesty is as follows:

1. First Offense

Student will be assigned a grade of "0" for the test or assignment. Instructor keeps a record in course/program files and notes as first offense. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus. The Registrar will input the incident into Banner for tracking purposes.

2. Second Offense

Student is given a grade of "WF" for the course in which offense occurs. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus indicating a "WF" has been issued as a result of second offense. The Registrar will input the incident into Banner for tracking purposes.

3. Third Offense

Student is given a grade of "WF" for the course in which the offense occurs. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus indicating a "WF" has been issued as a result of second offense. The Vice President for Student Affairs, or designee, will notify the student of suspension from college for a specified period of time. The Registrar will input the incident into Banner for tracking purposes.

STATEMENT OF NON-DISCRIMINATION

The Technical College System of Georgia (TCSG) and its constituent Technical Colleges do not discriminate on the basis of race, color, creed, national or ethnic origin, gender, religion, disability, age, political affiliation or belief, genetic information, disabled veteran, veteran of the Vietnam Era, spouse of military member, or citizenship status (except in those special circumstances permitted or mandated by law). This nondiscrimination policy encompasses the operation of all technical college-administered programs, federally financed programs, educational programs and activities involving admissions, scholarships and loans, student life, and athletics. It also applies to the recruitment and employment of personnel and contracting for goods and services.

All work and campus environments shall be free from unlawful forms of discrimination, harassment and retaliation as outlined under Title IX of the Educational Amendments of 1972, Title VI and Title VII of the Civil Rights Act of 1964, as amended, the Age Discrimination in Employment Act of 1967, as amended, Executive Order 11246, as amended, the Vietnam Era Veterans Readjustment Act of 1974, as amended, Section 504 of the Rehabilitation Act of 1973, as amended, the Americans With Disabilities Act of 1990, as amended, the Equal Pay Act, Lilly Ledbetter Fair Pay Act of 2009, the Georgia Fair Employment Act of 1978, as amended, the Immigration Reform and Control Act of 1986, the Genetic Information Nondiscrimination Act of 2008, the Workforce Investment Act of 1998 and other related mandates under TCSG Policy, federal or state statutes. The Technical College System and Technical Colleges shall promote the realization of equal opportunity through a positive continuing program of specific practices designed to ensure the full realization of equal opportunity.

The following individuals have been designated to handle inquiries regarding the nondiscrimination policies:

ADA/Section 504 - Equity- Title IX (Students) - OCR Compliance Officer	Title VI - Title IX (Employees) - EEOC Officer
Helen Thomas, Special Needs Specialist Vidalia Campus 3001 East 1 st Street, Vidalia Office 165 Phone: 912-538-3126 hthomas@southeasterntech.edu	Blythe Wilcox, Director of Human Resources Vidalia Campus 3001 East 1 st Street, Vidalia Office 138B Phone: 912-538-3147 bwilcox@southeasterntech.edu

GRIEVANCE PROCEDURES

Grievance procedures can be found in the Catalog and Handbook located on STC's website.

ACCESS TO TECHNOLOGY

Students can now access Blackboard, Remote Lab Access, Student Email, Library Databases (Galileo), and BannerWeb via the mySTC portal or by clicking the Current Students link on the [STC website](#).

TCSG GUARANTEE/WARRANTY STATEMENT

The Technical College System of Georgia guarantees employers that graduates of State Technical Colleges shall possess skills and knowledge as prescribed by State Curriculum Standards. Should any graduate employee within two years of graduation be deemed lacking in said skills, that student shall be retrained in any State Technical College at no charge for instructional costs to either the student or the employer.

GRADING POLICY

Assessment/Assignment	Percentage
Lab Exams	50%
Lab Notebook	10%
Lab Assignments	10%
Comprehensive Final	30%

GRADING SCALE

Letter Grade	Range
A	90-100
B	80-89
C	70-79
D	60-69

Letter Grade	Range
F	0-59

DISCLAIMER STATEMENT

Instructor reserves the right to change the syllabus and/or lesson plan as necessary. The official copy of the syllabus is located on the STC M Drive and will be discussed on the first day of class. The syllabus displayed in advance of the semester in any location is for planning purposes only.

BIOL 1111L: Biology I Lab

Fall Semester 2019 Lesson Plan

Subject to change at instructor's discretion

Date/Week	Content <i>Note: Laboratory Units DO NOT match textbook chapters!</i>	Assignments & Tests Due Dates	Competency Area
08/14	Introduction, Policies & Lab Safety 1. The Scientific Method	1.1-1.3, Lab Review 1	C: 1,2 G: a-c
08/15	2. Metric Measurement and Microscopy	2.1-2.5, Lab Review 2 HANDOUT	C: 1,2 G: a-c
08/21	3: Chemical Composition of Cells	Read material in 3.1-3.4 HANDOUT Lab Review 3	C: 1,2 G: a-c
08/22	3: Chemical Composition of Cells	Lab Exam 1 – Units 1-3 (parallel of lecture chapters)	C: 1,2 G: a-c
08/28	4: Cell Structure and Function	4.1-4.2, 4.4 Read material in 4.3 Lab Review 4	C: 2-5 G: a-c
08/29	4: Cell Structure and Function		C: 2-5 G: a-c
09/04	5: How Enzymes Function	Read material in 5.1-5.5 HANDOUT	C: 5-6 G: a-c
09/05	5: How Enzymes Function	Bring laptop/tablet to class this day!	C: 5-7 G: a-c
09/11	7: Cellular Respiration	HANDOUT	C: 5-7 G: a-c
09/12	7: Cellular Respiration	HANDOUT Lab Exam 2 – Units 4, 5, 7	C: 6-7 G: a-c
09/18	6: Photosynthesis	HANDOUT	C: 6-7 G: a-c
09/19	6: Photosynthesis	HANDOUT	C: 6-7 G: a-c
09/25	8: Mitosis: Cellular Reproduction	8.1-8.1 Laboratory Review 8	C: 6-7 G: a-c
09/26	8: Mitosis: Cellular Reproduction	Lab Exam 3 – Units 6, 8	C: 6-7 G: a-c
10/02	9: Meiosis: Sexual Reproduction	9.1-9.3 Laboratory Review 9	C: 1-7 G: a-c
10/03	10: Mendelian Genetics	10.1-10.4 Laboratory Review 10	C: 1-7 G: a-c
10/09	10: Mendelian Genetics		C: 1-9 G: a-c
10/10	Staff Development	No class	
10/16	11: Human Genetics	11.1-11.3 Laboratory Review 11	C: 1-9 G: a-c

Date/Week	Content <i>Note: Laboratory Units DO NOT match textbook chapters!</i>	Assignments & Tests Due Dates	Competency Area
10/17	11: Human Genetics		C: 1-9 G: a-c
10/23	12: DNA Biology and Technology	12.1-12.3, Read 12.4 and answer questions on p 143, 12.5 Laboratory Review 12	C: 1-10 G: a-c
10/24	12: DNA Biology and Technology	Lab Exam 4 – Units 9-12	C: 1-10 G: a-c
10/30	13: Evidence of Evolution	13.1 (no observations), 13.2 (do observations using figures in text) Laboratory Review 13: 1-7, 10	C: 1-11 G: a-c
10/31	14: Natural Selection	14.1, 14.2 Laboratory Review 14	C: 1-11 G: a-c
11/06	Alternatives to the Theory of Evolution	Bring tablets/laptops	C: 1-11 G: a-c
11/07	Alternatives to the Theory of Evolution	Bring tablets/laptops	C: 1-11 G: a-c
11/13	Evolution Presentations		C: 1-11 G: a-c
11/14		Lab Exam 5 Units 13-14, alternatives to the theory of evolution	C: 1-11 G: a-c
11/20	Notebook check offs	All Lab Assignments are due TODAY – late work is better than no work!	C: 1-11 G: a-c
11/21	Final Exam Review		C: 1-11 G: a-c
11/25-11/28	Thanksgiving Holidays	NO CLASS	
12/04	Final Exam	Comprehensive Final Exam	C: 1-11 G: a-c

Competency Areas (C)

1. Lab Safety
2. Microscope use and microscopic observation
3. Organization and Chemical Basis of Life
4. Cell Structure and Function
5. Metabolism
6. Cell Division
7. Protein Synthesis
8. Central Dogma of Biology
9. Genetics
10. Biotechnology
11. Evolutionary concepts

General Core Educational Competencies (G)

- a) The ability to utilize standard written English.
- b) The ability to solve practical mathematical problems.
- c) The ability to read, analyze, and interpret information.