



TENTATIVE—SUBJECT TO CHANGE

BIOL 1111L: Biology I Lab COURSE SYLLABUS Lab Wednesday and Thursday Spring Semester 2021

COURSE INFORMATION

Credit Hours/Minutes: 1/2250

Class Location: Vidalia High School (VHS) 428

Class Meets: WR 11:24-12:54

CRN: 40217

INSTRUCTOR CONTACT INFORMATION

Instructor Name: Dr. Erica M. Harrison

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

Office Hours: M-R 800-1030 (Virtual only until further notice)

Email Address: eharrison@southeasterntech.edu

Phone: 912-538-3188

Fax Number: 912-538-3156

Tutoring Hours: Students must **email** to make an appointment

REQUIRED TEXT

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

REQUIRED SUPPLIES & SOFTWARE

Three-ring binder with plenty of notebook paper or composition notebook.

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 (Southeastern Technical College) 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 suggestions 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.

COVID-19 MASK REQUIREMENT

Masks or face coverings must be worn at all times while on the campus of Southeastern Technical College. Your participation in this course, while physically on the VHS campus, fall under this mandate. This measure is being implemented to reduce COVID-19 related health risks for everyone engaged in the educational process. Masks or face coverings must be worn over the nose and mouth, in accordance with the Centers for Disease Control and Prevention (CDC). A student's refusal to wear a mask or face covering will be considered a classroom disruption and the student may be asked to leave campus and/or receive further discipline.

COVID-19 SIGNS AND SYMPTOMS

We encourage individuals to monitor for the signs and symptoms of COVID-19 prior to coming on campus.

If you have experienced the symptoms listed below or have a body temperature 100.4°F or higher, we encourage you to self-quarantine at home and contact a primary care physician's office, local urgent care

facility, or health department for further direction. Please notify your instructor(s) by email and do not come on campus for any reason.

COVID-19 Key Symptoms
Fever or felt feverish
Cough: new or worsening, not attributed to another health condition
Shortness of breath, not attributed to another health condition
New loss of taste or smell
Chills; Repeated shaking with chills
Sore throat, not attributed to another health condition
Muscle pain, not attributed to another health condition or exercise
Headache, not attributed to another health condition
Diarrhea (unless due to known cause)
In the past 14 days, if you:
Have had close contact with or are caring for an individual diagnosed with COVID-19 at home (not in healthcare setting), please do not come on campus and contact your instructor (s).

COVID-19 SELF-REPORTING REQUIREMENT

Students, who test positive for COVID-19 or who have been exposed to a COVID-19 positive person, are required to self-report using the [COVID 19 Health Reporting Form](#). Report all positive cases of COVID-19 to your instructor and [Stephannie Waters](#), Exposure Control Coordinator, swaters@southeasterntech.edu, 912-538-3195.

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. 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" (Failing 0-59) 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.

Students will not be withdrawn by an instructor for attendance; however, all instructors will keep records of graded assignments and student participation in course activities. The completion dates of these activities will be used to determine a student's last date of attendance in the event a student withdraws, stops attending, or receives an "F" in a course.

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" (Withdrawn) is assigned for the course(s) when the student completes the withdrawal form.

Important – Student-initiated withdrawals are not allowed after the 65% point. After the 65% point of the term in which the student is enrolled, the student has earned the right to a letter grade and will receive a grade for the course. Please note: Abandoning a course(s) instead of following official withdrawal procedures may result in a grade of "F" (Failing 0-59) being assigned.

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

Students will be asked to bring a composition book to record lab notes, workbook work (as you cannot write in the school issued workbooks) and keep track of group work.

Lab exams

These will be given in the lab on designated days (see schedule below). 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.** In the event you know you will be absent on a lab day that has a lab exam, you have the option to schedule a time with the guidance center to take your lab exam *early*. 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 30% of the final course grade.

Lab Assignments/Lab Notebook: A laboratory notebook will be kept by each student using a three-ring binder or composition notebook (mentioned above). The lab notebook will include all completed lab workbook work, in-class assignments, and drawings/pictures of microscopic slide observations. The first page of the notebook will include: 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.

Research Assignment: Students will work on a research assignment involving *Alternatives to the Theory of Evolution*. Students will be given a prompt and guidelines at a later date. APA formatting should be followed for this paper (template will be provided). Rubric for grading this assignment can be found at the end of this syllabus. This assignment will account for 10% of the overall grade in lab.

MAKEUP GUIDELINES

Lab exams: No makeups – see above about early testing.

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

Lab notebook: As the notebook is cumulative and students have the ability to work on it throughout the term, late submission at the end of the semester is not accepted.

Research Assignment: This will be presented in class on the day(s) prescribed (see schedule). The instructor will provide all avenues of submission depending on how the semester progresses (coronavirus closures, illness, etc).

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%
Research Assignment	10%
Comprehensive Final	30%

GRADING SCALE

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

Spring Semester 2021 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
01/13	Introduction, Policies & Lab Safety 1. The Scientific Method	1.1 Handout Lab Review 1: 1-10	C: 1,2 G: a-c
01/14	2. Metric Measurement and Microscopy	2.1, 2.2, 2.4 Lab Review 2 (1-10) HANDOUT	C: 1,2 G: a-c
01/20	3: Chemical Composition of Cells	Read material in 3.1-3.4 Bring laptop/tablet to class this day! Answer only questions that apply to online procedures	C: 1,2 G: a-c
01/21	3: Chemical Composition of Cells	Lab Review 3 (1-10)	C: 1,2 G: a-c
01/27	4: Cell Structure and Function	4.1-4.2 HANDOUTS, 4.4 Read material in 4.3 for knowledge of procedure for 01/28.	C: 2-5 G: a-c
01/28	4: Cell Structure and Function	Tables presented in class Lab Review 4 (1-10)	C: 2-5 G: a-c
02/03	5: How Enzymes Function	Bring laptop/tablet to class this day! Record data, table, and graph from online lab in your notebook.	C: 5-6 G: a-c
02/04	5: How Enzymes Function	Bring laptop/tablet to class this day! Lab Review 5 (1-4, 7-10)	C: 5-7 G: a-c
02/10	Lab Practical 1	Units 1-5	C: 5-7 G: a-c
02/11	7: Cellular Respiration 8: Photosynthesis	HANDOUT to be given 02/09 in lecture	C: 6-7 G: a-c
02/17	Intro to the Cell Cycle	8.1-8.3 – no experimental procedures Laboratory Review 8 (1-10)	C: 6-7 G: a-c
02/18	Mitosis Review	Due via email by midnight 9/25	C: 6-7 G: a-c
02/24	9: Meiosis: Sexual Reproduction	9.1-9.3 Laboratory Review 9 (1-10)	C: 1-7 G: a-c
02/25	10: Mendelian Genetics	10.1-10.4 READ One-trait problems p108 Two-trait problems p112-113 X-linked problems p113-115 Laboratory Review 10 (1-3, 7-10)	C: 1-7 G: a-c
03/03	11: Human Genetics	11.1-11.3, Lab Review 11 (1-10)	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
03/04	STC Staff Development Day	No class Midterm review will be given in class 03/03	
03/10	Lab Practical 2	Units 6, 8-11	C: 1-9 G: a-c
03/11	Student Holiday	No class	
03/17	12: DNA Biology and Technology	12.1-12.3 Lab Review 12 (1-6)	C: 1-10 G: a-c
03/18	12: DNA Biology and Technology	Laboratory Review 12	C: 1-10 G: a-c
03/24	13: Evidence of Evolution	13.1 (no observations) use tables in text to answer summary questions, 13.2 (do observations using figures in text) Laboratory Review 13 (1-3, 5-6, 10)	C: 1-11 G: a-c
03/25	14: Natural Selection	Laboratory Review 14 (5-6, 8-10)	C: 1-11 G: a-c
03/31	Alternatives to the Theory of Evolution	Bring tablets/laptops	C: 1-11 G: a-c
04/01	Alternatives to the Theory of Evolution	Bring tablets/laptops	C: 1-11 G: a-c
04/05-04/08	Spring Break	No classes	
04/14	Alternatives to the Theory of Evolution Assignment due	May submit during class but latest possible is 5 pm	C: 1-11 G: a-c
04/15	Notebook check offs Final Exam Review	All Lab Assignments are due TODAY – late work is better than no work!	C: 1-11 G: a-c
04/21	Lab Final Exam	Comprehensive Final Exam	C: 1-11 G: a-c
04/22	No formal class	Can come to review Lab Final Exam grade	

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.

Alternative to the Theory of Evolution Assignment/Paper Evaluation

PRESENTATION TOPIC:

STUDENT:

RUBRIC

Students must adhere to rubric for full credit

Section/Points Possible	Criteria	Comments	Points Earned
Focus and Sequencing 20	All material clearly related to topic. Strong organization and integration of material within subtopics. Strong transitions linking subtopics, and main topic.		
Support for Opinion 20	Strong peer-reviewed research-based support for opinion.		
Grammar and Mechanics 20	The paper is free of grammatical errors and spelling and punctuation.		
APA Style and Communication 20	No errors in APA style. Scholarly style. Writing is flowing and easy to follow. See checklist below.		
Citation and References 20	All references and citations are correctly written and present.		

APA **MAJOR** Errors:

- APA Reference Errors (ABC order, 1:1 reference/citation)
- APA Punctuation Errors
- APA in-text citation errors (incorrect author, year, *et al.* usage)
- Title page (header, spacing, content, etc.)
- APA page numbering
- APA verb problems (verb-subject-article agreement)
- Pronoun errors (which, that, who, whom)
- Formatting errors (line, letter, word-spacing, pagination, indentations)
- Use of abbreviations or numerals to begin paragraphs
- Undefined abbreviations
- Unprofessional writing tone
- Lack of empirical evidence for points made
- Other:

APA Minor Errors:

- Wrong font, font size, font color
- Inappropriate use of secondary sources
- Excessive abbreviations
- Occasional problems with hanging indent
- Using ampersand in text
- Other: