



TENTATIVE—SUBJECT TO CHANGE

**CLBT 1050 IMMUNOLOGY AND SEROLOGY
COURSE SYLLABUS
FALL SEMESTER 2021 (202212)**

COURSE INFORMATION

Credit Hours/Minutes: 3/3750
Class Location: Room 739, Gillis Building
Class Meets: Monday-Thursday 10:20 am-12:30pm
Course Reference Number (CRN): 20193

INSTRUCTOR INFORMATION

Instructor Name: Rebecca James, B.S. MLS(ASCP)^{cm}
Email Address: rjames@southeasterntech.edu
Preferred method of contact: Email or GroupMe
Campus/Office Location: Vidalia campus, Gillis Building, Office 716
Office Hours: 7:30-8:30 am; 1:00-5:00 pm
Phone: 912-538-3183
Fax Number: 912-538-3106
Tutoring Hours (if applicable): By appointment

SOUTHEASTERN TECHNICAL COLLEGE'S (STC) CATALOG AND HANDBOOK

Students are responsible for all policies and procedures and all other information included in Southeastern Technical College's [Catalog and Handbook](http://www.southeasterntech.edu/student-affairs/catalog-handbook.php) (<http://www.southeasterntech.edu/student-affairs/catalog-handbook.php>).

REQUIRED TEXT

Immunology and Serology in the Laboratory Medicine, Turgeon 6th Edition & Quick Review Cards, Valorie Polanski 2nd edition

REQUIRED SUPPLIES & SOFTWARE

Ink pens, pencil, highlighter, permanent marker, paper and any other supplies deemed necessary by instructor. Calculator is provided. Students should not share login credentials with others and should change passwords periodically to maintain security.

COURSE DESCRIPTION

Introduces the fundamental theory and techniques applicable to serology and immunology practice in the medical laboratory. Topics include immune system, antigen and antibody reactions, immunological diseases, concept in molecular diagnostics, common serological and molecular techniques, safety and quality control, and quality improvement.

MAJOR COURSE COMPETENCIES

- 1-Immune System
- 2-Antigen and Antibody Reactions
- 3-Immunological Diseases
- 4-Related Lab Math
- 5-Common Serological Techniques and Molecular techniques
- 6-Safety and Quality Control
- 7-Quality Improvement

PREREQUISITE(S)

MATH 1111, BIOL 2113, BIOL 2113L, ENGL1101, CLBT 1010

COURSE OUTLINE

Order	Description	Learning Domain	Level of Learning
1	Describe immune system characteristics.	Cognitive	Knowledge
2	Summarize the immune defense system roles and functions.	Cognitive	Comprehension

Antigen and antibody reactions

Order	Description	Learning Domain	Level of Learning
1	Define selected terms.	Cognitive	Knowledge
2	Interpret immunoglobulin structures and functions.	Cognitive	Comprehension
3	Identify the characteristics and functions of the complement system.	Cognitive	Knowledge
4	Distinguish the basic concept and reactions of the serologic tests.	Cognitive	Analysis

Immunological diseases

Order	Description	Learning Domain	Level of Learning
1	Correlate clinical symptoms and test results with immunological/serological diseases	Cognitive	Analysis
2	Recognize normal and abnormal test results.	Cognitive	Analysis

Related lab math

Order	Description	Learning Domain	Level of Learning
1	Apply and perform dilutions, serial dilutions, and calculation of titers to serological test procedures.	Psychomotor	Mechanism

Common Serological techniques and Molecular techniques

Order	Description	Learning Domain	Level of Learning
1	Describe serological tests for syphilis, viruses, bacteria, and miscellaneous microorganisms.	Cognitive	Knowledge
2	Perform selected serological tests.	Psychomotor	Guided Response
3	Evaluate serological result and normal value recording and reporting.	Cognitive	Evaluation
4	Identify proper specimen collection and handling techniques.	Cognitive	Knowledge
5	Describe foundation concepts and definitions in molecular diagnostic including nucleic acid structures and functions.	Cognitive	Knowledge

Safety and quality control

Order	Description	Learning Domain	Level of Learning
1	Identify sources of error in serologic testing.	Cognitive	Knowledge
2	Perform and set-up selected quality control and safety procedures.	Psychomotor	Guided Response
3	Comply with safe work habits in the performance of serological testing and common serological techniques and molecular techniques.	Affective	Receiving
4	Demonstrate ability to document quality control and patient results in a legible manner.	Psychomotor	Guided Response
5	State variables in pre, analytical, and post analytical testing in common serological and molecular techniques.	Cognitive	Knowledge

Quality improvement

Order	Description	Learning Domain	Level of Learning
1	Identify methods used to improve performance in the immunology department.	Cognitive	Knowledge
2	Consider the ethical issues associated with communicable immune system diseases.	Affective	Valuing

GENERAL EDUCATION CORE COMPETENCIES

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

- Students are expected to complete all exams and daily assignments. Students are required to read the chapter prior to class. A 10 point penalty will be assessed for all late assignments. Tests **will** be timed.
- Chapter test average (no lab grades) of 70% or above must be obtained in order to take the comprehensive final exam. (Grade of 69.9 will **NOT** be rounded up.) An average grade of 70% between unit exams, labs, and the final must be obtained in order to advance in the program. If the student fails to meet the unit exam/final exam expectations, the student will receive a W for academic deficiency.
- Students are required to pass all laboratory skills in **THREE** attempts. A student may not progress until skills are mastered.
- If a student shows up late for class on an exam date or is not prepared to start the test on time, the student may not be allowed to take the exam once the faculty has shut the door. The student will have to make up the test and this will be counted as their opportunity for the one make-up exam. Students may be provided time to look at their exam score in class and a general discussion may occur; however, due to time constraints, students are encouraged to schedule an appointment with their instructor to view and get further explanation on the missed concepts.
- No talking is allowed once the exam begins. Once the exam begins, students will not be allowed to exit the classroom until the exam is completed and/or turned into the instructor. Smart watches, cell phones, or any other electronic devices will not be allowed during exams. Students found with electronic or communication devices during the exam will be considered cheating; which will result in a zero for the exam.
- No assignment opportunities will be given for extra credit. No scores will be rounded. This rule applies to every grade issued during the semester. All final averages will be recorded as is (ie a 69.9 is a 69.9). No grades will be dropped.
- Points **WILL BE** deducted for spelling due to medical liability in the work place. Laboratory results are legal documents.
- Students are required to wear name badge, solid (black) color uniform, closed toe shoes, and lab coat with the CLT STC patch.
- Students are expected to exhibit professional behavior at all times. You represent Southeastern Technical College AND the Clinical Laboratory Technology program. Each student must show respect and concern for fellow students and for the course instructor. Insubordination will not be tolerated, and disciplinary measures will be enforced.
- The student must utilize all time in the lab. Talking with peers is not permitted in the clinical area unless permission is given by the instructor. Idle time is prohibited. If a student does not utilize lab time for skills development, a minimum of 1 point will be deducted each day from the final course grade for professional development infractions.
- Students are responsible for policies, procedures, and all requirements (drug screen, background check, immunizations, Fit test, CPR...) included in the STC e-Catalog/CLT handbook.
- No cell phones will be allowed while instructor is lecturing or in the lab. If you are caught using the cell phone, you will be asked to leave class and receive an "early departure" for the class. (Note: Three (3) tardies or early departures equal one (1) absence for the course. If you are 30 minutes late to class, you will receive an absence for the day.)
- If you are asked to participate in class, you must participate or will be asked to leave class. You will receive an early departure.

COVID-19 MASK REQUIREMENT

Regardless of vaccination status, masks or face coverings must be worn at all times while in a classroom or lab of Southeastern Technical College. 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
Chills
Shortness of breath or difficulty breathing (not attributed to any other health condition)
Cough: new or worsening, not attributed to another health condition
Fatigue
Muscle or body aches
Headache
New loss of taste or smell
Sore throat (not attributed to any other health condition)
Congestion or runny nose (not attributed to any other health condition)
Nausea or vomiting
Diarrhea
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, regardless of vaccination status, who test positive for COVID-19 or who have been exposed to a COVID-19 positive person, are required to self-report using <https://www.southeasterntech.edu/covid-19/>. Report all positive cases of COVID-19 to your instructor and Stephannie Waters, Exposure Control Coordinator, swaters@southeasterntech.edu, 912-538-3195.

ATTENDANCE GUIDELINES

It is essential that educational programs meet requirements and standards necessary for successful employment in business and industry. In view of the intensive nature of educational programs, it is necessary for every student to be present and on time every day for all classes as is required in the work environment.

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 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.

ADDITIONAL ATTENDANCE GUIDELINES FOR HEALTH SCIENCES

Requirements for instructional hours within Health Science programs reflect the rules of respective licensure boards and/or accrediting agencies. Therefore, these programs have stringent attendance policies. Each program's attendance policy is published in the program's handbook and/or syllabus which specify the number of allowable absences. All provisions for required makeup work in the classroom or clinical experiences are at the discretion of the instructor.

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.

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: Daphne Scott (dscott@southeasterntech.edu) 478-289-2274, Building 1, Room 1210.

Vidalia Campus: Helen Thomas (hthomas@southeasterntech.edu), 912-538-3126, Building A, Room 165.

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: Daphne Scott (dscott@southeasterntech.edu) 478-289-2274, Building 1, Room 1210.

Vidalia Campus: Helen Thomas (hthomas@southeasterntech.edu), 912-538-3126, Building A, Room 165.

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.

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" (Withdrawn Passing) or "WF" (Withdrawn Failing) 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.

MAKEUP GUIDELINES

- Students are allowed to make up only one missed exam excluding the final examination. This is only if they have an excused absence approved by the instructor. The makeup exam may be given in a different format than the original exam. A doctor's excuse and/or additional documentation will be requested. **Ten points will be deducted** from the test for taking the test late. All other missed exams will result in a grade of zero. It is expected that the test will be taken the following day.
- **No labs will be made up.** If you miss a lab, you will receive a zero for the lab.
- If you enter the classroom late, you will not be allowed to take the exam, and you will be issued a grade of zero for the exam. PLEASE be on time! If I beat you to class, you are counted tardy.
- Failure to complete any homework assignments will result in one point being deducted from the final course grade for each assignment not completed by the deadline specified. Late or incomplete assignments will still need to be completed and turned in for instructor review and feedback. If you are going to be absent, you should deliver your assignment to your instructor prior to the deadline to ensure credit.
- Extenuating circumstances are determined at the instructor's discretion. Failure to follow all procedures will result in a grade of zero. Procedures of the program may be reviewed on an individual basis related to extenuating circumstances/COVID.

ACADEMIC DISHONESTY POLICY

The Southeastern Technical College Academic Dishonesty Policy states that 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 Southeastern Technical College Catalog and 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" (Withdrawn Failing) 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 third 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:

American With Disabilities Act (ADA)/Section 504 - Equity- Title IX (Students) – Office of Civil Rights (OCR) Compliance Officer	Title VI - Title IX (Employees) – Equal Employment Opportunity Commission (EEOC) Officer
Helen Thomas, Special Needs Specialist Vidalia Campus 3001 East 1 st Street, Vidalia Office 108 Phone: 912-538-3126 Email: Helen Thomas hthomas@southeasterntech.edu	Lanie Jonas, Director of Human Resources Vidalia Campus 3001 East 1 st Street, Vidalia Office 138B Phone: 912-538-3230 Email: Lanie Jonas ljonas@southeasterntech.edu

ACCESSIBILITY STATEMENT

Southeastern Technical College is committed to making course content accessible to individuals to comply with the requirements of Section 508 of the Rehabilitation Act of Americans with Disabilities Act (ADA). If you find a problem that prevents access, please contact the course instructor.

GRIEVANCE PROCEDURES

Grievance procedures can be found in the Catalog and Handbook located on Southeastern Technical College'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 [Southeastern Technical College \(STC\) Website \(www.southeasterntech.edu\)](http://www.southeasterntech.edu).

TECHNICAL COLLEGE SYSTEM OF GEORGIA (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

Chapter test average of 70 or higher is required to sit for the comprehensive final (grades of 69.9 will not be rounded up). You MUST pass all skills in this course to pass this course. Test and labs will be timed. Points will be deducted for spelling due to Medical Liability in the work place. Laboratory results are legal documents. NO GRADES WILL BE DROPPED! You must receive a "C" or higher in all CLBT, core, and clinical courses to progress in the CLT program. 1 grade scantron.

Assessment/Assignment	Percentage
Chapter tests	65%
Lab Reports	5%
Comprehensive Final	30%

GRADING SCALE

Letter Grade	Range
A	90-100
B	80-89
C	70-79
D	60-69
F	0-59

CLBT 1050 IMMUNOLOGY AND SEROLOGY

FALL SEMESTER 2021 LESSON PLAN

Lesson Plan is subject to change at the discretion of the instructor.

WEEK	CHAPTER	CONTENT	ASSIGNMENTS AND TESTS DUE	COMPETENCY AREA
Week 1 9/27-10/1 9/29- Last day to drop	<u>Chapter 6</u> - Safety in the Immunology-Serology Laboratory	<i>Syllabi review</i> <i>COVID-19 powerpoint</i> <i>STC Policy and Procedures</i> <i>CLT Handbook</i> Handouts and Charts	Introduction to class Review syllabus, COVID 19 procedures, & STC policies Cell lineage chart and CBC normal values Immunology Overview Review Questions	Course 1,2,3,4,5,6 Core A,C
Week 2 10/4-10/8 10/7- Payment deadline for tuition	Chapters 1&7	Overview of Immunology Safety, QA, QC	Videos Microscope- ID: seg, lymph, mono, RBC's Review Questions	Course 1,4,5,6 Core A,C
Week 3 10/11-10/15 10/12- Students with account balance will be removed	Chapters 2&3	Antigen/ Antibody Cells and cellular activity of the immune system; grans and monos	Test 1,6,7 Blood Type Ag/Ab Practice Lab: Forward blood type Forensic/Paternity case Review Questions	Course 1,2,3 Core A,C
Week 4 10/18-10/22	Chapter 4	Cells and cellular activity of the immune system: plasma cells and lymphocytes	Khan videos Review Questions	Course 1,2,3,4,5,6 Core A,C
Week 5 10/25-10/29 10/28- Midterm	Chapters 5&10	Soluble mediators of the immune system Agglutination methods	Test 2,3,4 PCR, ELISA Lab- draw blood Review Questions	Course 1,2,3,4,5,6 Core A,C
Week 6 11/1-11/5	Chapters 11&14	Electrophoresis techniques Molecular techniques	Khan-DNA/Electrophoresis videos Serum protein electrophoresis handout and video Serial Dilutions Review Questions	Course 1,2,3,4,5,6 Core A,C

Week 7 11/8-11/12 11/10- 65% point; Last day to withdraw without academic penalty	Chapters 15,16,17,18	Immune response to Infectious disease Streptococcal infection Syphilis Vector-borne diseases	Test 5,10,11,14 Lab: ASO, RPR Review Questions	Course 1,2,3,4,5,6 Core A,B,C
Week 8 11/15-11/19	Chapters 19,20,21,28,29	Toxoplasmosis Cytomegalovirus Infectious mono SLE,RA	Test 15,17,18,19 Lab: Mono, RF Review Questions	Course 1,2,3 Core A,B,C
Week 9 11/22-11/26 Holiday 11/24-11/25	Chapters 22,23,24	Viral Hepatitis Rubella HIV	Lab: Rubella Discuss performance improvement Troubleshooting/ Possible errors in testing Case studies Review Questions MOCK final	Course 1-7 Core A,B,C
Week 10 11/29-12/3	All chapters	Review for final	Review for Final Mock Final	Course 1-7 Core A,B,C
Week 11 12/6-12/7	Final	Review and take Final	Final December 7	Course 1-7 Core A,B,C

MAJOR COURSE COMPETENCIES:

- 1-Immune System
- 2-Antigen and Antibody Reactions
- 3-Immunological Diseases
- 4-Related Lab Math
- 5-Common Serological Techniques
- 6-Safety and Quality Control
- 7-Process Improvement

GENERAL CORE EDUCATIONAL COMPETENCIES:

- 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.



**CLBT 1050 Immunology and Serology
Syllabus Acknowledgement**

I _____ have read and understand the syllabus for CLBT 1050. I have also been given the opportunity to ask questions to clarify any requirements listed on the syllabi. By signing this agreement, I am acknowledging that I fully understand my requirements and grading criteria that I am responsible for. I agree to follow the guidelines and rules listed on the syllabi.

Print Name

Student Signature

Date