



**TENTATIVE—SUBJECT TO CHANGE**

**CLBT 1070 Clinical Chemistry  
COURSE SYLLABUS  
Summer Semester 2021 (202116)**

**COURSE INFORMATION**

Credit Hours/Minutes: 4/6000

Campus/Class Location: Vidalia Campus, Gillis Building, Room 739

Class Meets: Monday-Thursday, 12:40 PM-4:00 PM

Course Reference Number (CRN): 60067

**INSTRUCTOR CONTACT INFORMATION**

Instructor Name: Rebecca James, B.S., MLS (ASCP)<sup>CM</sup>

Email Address: [rjames@southeasterntech.edu](mailto:rjames@southeasterntech.edu)

Preferred method of contact: Email, GroupMe, or Microsoft Teams

Campus/Office Location: Vidalia campus, Gillis Building, Office 716

Office Hours: 4:00-6:00 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](https://catalog.southeasterntech.edu/college-catalog/downloads/current.pdf) (<https://catalog.southeasterntech.edu/college-catalog/downloads/current.pdf>).

**REQUIRED TEXT**

Clinical Chemistry, Principles, Procedures, Correlations, 8th Edition, Bishop, Michael L. et al. ISBN: 978-1-4963-3558-6

**REQUIRED SUPPLIES & SOFTWARE**

Pen, pencil, paper, highlighter, Sharpie marker, notebook, computer and internet access, personal lab coat, closed toe shoes, and any other supplies deemed necessary by instructor.

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

**COURSE DESCRIPTION**

Develops concepts and techniques of clinical chemistry applicable to medical laboratory technology. Topics include: carbohydrates, electrolytes and acid-base balance, nitrogenous compounds, related lab math, enzymes and endocrinology, liver functions, lipids, toxicology and therapeutic drug monitoring, safety and

quality control, correlation of disease states, process improvement (team approach), and critical thinking skills.

### MAJOR COURSE COMPETENCIES

1. Carbohydrates,
2. Electrolytes and acid-base balance,
3. Nitrogenous compounds,
4. Related lab math
5. Enzymes and endocrinology,
6. Liver functions,
7. Lipids,
8. Toxicology and therapeutic drug monitoring,
9. Safety and quality control,
10. Correlation of disease states,
11. Process improvement (team approach)
12. Critical thinking skills

### PREREQUISITE(S)

BIOL 2114, BIOL 2114L, Chem 1151, Chem 1151L, CLBT 1010

### COURSE OUTLINE

#### Carbohydrates

ORDER	DESCRIPTION	LEARNING DOMAIN	LEVEL OF LEARNING
1	Describe carbohydrate metabolism.	Cognitive	Comprehension
2	Discuss test principles and procedures.	Cognitive	Comprehension
3	Perform selected tests.	Psychomotor	Guided Response

#### Electrolytes and Acid-Base Balance

ORDER	DESCRIPTION	LEARNING DOMAIN	LEVEL OF LEARNING
1	Describe and discuss electrolyte functions and procedures.	Cognitive	Comprehension
2	Explain acid-base balance.	Cognitive	Comprehension
3	Perform selected tests.	Psychomotor	Guided Response
4	Discuss carbon dioxide (CO <sub>2</sub> ) content in the blood.	Cognitive	Comprehension
5	Discuss carbon dioxide (CO <sub>2</sub> ) procedures.	Cognitive	Comprehension
6	Discuss the carbonate-bicarbonate buffer system.	Cognitive	Comprehension
7	Discuss blood gases.	Cognitive	Comprehension
8	Interpret arterial blood gases (ABG) results.	Cognitive	Comprehension
9	Discuss selected mineral (e.g., iron, calcium, phosphorus, and magnesium) physiology.	Cognitive	Comprehension
10	Discuss mineral test principles and procedures.	Cognitive	Comprehension

## Nitrogenous Compounds

ORDER	DESCRIPTION	LEARNING DOMAIN	LEVEL OF LEARNING
1	Discuss nitrogenous compound physiology including blood urea nitrogen (BUN), uric acid, proteins, and creatinine/creatine.	Cognitive	Comprehension
2	Discuss concept of clearance tests.	Cognitive	Comprehension
3	Discuss nitrogenous compound selected testing principles and procedures.	Cognitive	Comprehension
4	Interpret electrophoretic patterns.	Cognitive	Comprehension
5	Perform selected tests.	Psychomotor	Guided Response
6	Discuss the critical factors relating to therapeutic drug monitoring (TDM) such as patient blood levels, dosage administered, and specimen collection times.	Cognitive	Comprehension

## Related Lab Math

ORDER	DESCRIPTION	LEARNING DOMAIN	LEVEL OF LEARNING
1	Perform related quality control (QC) math calculations--mean, median, mode, standard deviation, coefficient of variation.	Cognitive	Synthesis
2	Perform related math calculations using Beer's law.	Cognitive	Synthesis
3	Perform related math calculations for clearances, dilutions, metric system and preparation of solutions using $V_1C_1 = V_2C_2$ .	Cognitive	Synthesis
4	Perform related math calculations for calculation of globulin, (A/G ratio), Ion gap, Blood gases (Henderson Hasselbach), Low density Lipoprotein(LDL)-Cholesterol, LDL: High density lipoprotein (HDL) ratio, Indirect bilirubin, %Creatine kinase (CK)-MB of total CK.	Cognitive	Synthesis

## Enzymes and Endocrinology

ORDER	DESCRIPTION	LEARNING DOMAIN	LEVEL OF LEARNING
1	Discuss the physiology of selected enzymes.	Cognitive	Comprehension
2	Relate selected enzymes to tissue locations.	Cognitive	Application
3	Discuss isoenzymes and the clinical implications.	Cognitive	Comprehension
4	Discuss selected test principles and procedures.	Cognitive	Comprehension
5	Interpret electrophoretic patterns.	Cognitive	Comprehension
6	Perform selected tests.	Psychomotor	Guided Response
7	Discuss the physiology of selected hormones.	Cognitive	Comprehension
8	Discuss thyroid functions and testing.	Cognitive	Comprehension
9	Discuss other hormone functions and testing.	Cognitive	Comprehension

## Liver Functions

ORDER	DESCRIPTION	LEARNING DOMAIN	LEVEL OF LEARNING
1	Discuss the physiology of the liver.	Cognitive	Comprehension
2	Describe bilirubin metabolism.	Cognitive	Comprehension
3	Discuss selected liver function test principles/procedures.	Cognitive	Comprehension
4	Perform selected tests such as bilirubin and ammonia.	Psychomotor	Guided Response

## Lipids

ORDER	DESCRIPTION	LEARNING DOMAIN	LEVEL OF LEARNING
1	Describe the physiology of selected lipids and lipoproteins.	Cognitive	Comprehension
2	Discuss cholesterol, triglyceride, fatty acid, and lipoprotein test principles and procedures.	Cognitive	Comprehension
3	Interpret electrophoretic patterns.	Cognitive	Comprehension
4	Perform selected tests.	Psychomotor	Guided Response

## Toxicology and Therapeutic Drug Monitoring

ORDER	DESCRIPTION	LEARNING DOMAIN	LEVEL OF LEARNING
1	Discuss the application of therapeutic drug testing.	Cognitive	Comprehension
2	Discuss critical factors relating to TDM such as patient blood levels, dosage administered, and specimen collection times.	Cognitive	Comprehension
3	Discuss legalities of testing for drugs of abuse (including alcohol).	Cognitive	Comprehension
4	Discuss selected tests for toxic substances.	Cognitive	Comprehension

## Safety and Quality Control

ORDER	DESCRIPTION	LEARNING DOMAIN	LEVEL OF LEARNING
1	Implement established safety guidelines when considering biological, chemical, electrical, mechanical, fire, and radiation hazards.	Cognitive	Application
2	Calibrate and operate selected instrumentation.	Cognitive	Application
3	Discuss blood gas instrumentation.	Cognitive	Comprehension
4	Perform selected tests.	Psychomotor	Guided Response
5	Establish standard curve for selected procedure.	Cognitive	Application
6	Set up standard deviation chart for selected lab procedure.	Cognitive	Application
7	Calculate and prepare common laboratory solutions.	Psychomotor	Complex Response
8	Evaluate test procedure using quality control guidelines.	Cognitive	Evaluation
9	Identify and discuss normal/ abnormal/critical values.	Cognitive	Knowledge
10	Correlate abnormal/normal findings with disease states.	Cognitive	Analysis

## Correlation of Disease States

ORDER	DESCRIPTION	LEARNING DOMAIN	LEVEL OF LEARNING
1	Evaluate laboratory data and correlate with disease states.	Cognitive	Evaluation

## Process Improvement (Team Approach)

ORDER	DESCRIPTION	LEARNING DOMAIN	LEVEL OF LEARNING
1	Discuss current and potential issues in the chemistry lab.	Cognitive	Comprehension
2	Describe methods used to improve performance in the clinical chemistry laboratory using numerical data.	Cognitive	Comprehension

## Critical Thinking Skills

ORDER	DESCRIPTION	LEARNING DOMAIN	LEVEL OF LEARNING
1	Evaluate situations determining correct steps to take to troubleshoot the instrument to report reliable results.	Cognitive	Evaluation
2	Evaluate laboratory data to determine which tests are needed and whether the results are reliable.	Cognitive	Evaluation
3	Determine whether results are "critical values".	Cognitive	Application

## 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 **TWO** 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 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 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.)

### **COVID-19 MASK REQUIREMENT**

Masks or face coverings must be worn at all times while on the campus 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.

<b>COVID-19 Key Symptoms</b>
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

<b>COVID-19 Key Symptoms</b>
Headache, not attributed to another health condition
Diarrhea (unless due to known cause)
<b>In the past 14 days, if you:</b>
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 https://bit.ly/2Xq4g0f](https://bit.ly/2Xq4g0f). Report all positive cases of COVID-19 to your instructor and [Stephannie Waters](mailto:swaters@southeasterntech.edu), Exposure Control Coordinator, [swaters@southeasterntech.edu](mailto:swaters@southeasterntech.edu), 912-538-3195.

### **ATTENDANCE GUIDELINES**

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.

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.

**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.**

Attendance is counted from the first scheduled class meeting of each semester. To receive credit for a course a student must attend at least 90% of the scheduled instructional time. All work missed due to tardiness or absences must be made up at the convenience of the instructor. Any student attending less than the required scheduled instructional time (90%) may be dropped from the course as stated below in the Withdrawal Procedure.

Tardy means arriving after the scheduled time for instruction to begin. Early departure means leaving before the end of the scheduled time. Three (3) tardies or early departures equal one (1) absence for the course.

**For this class, which meets 4 days a week for 9 weeks, the maximum number of days a student may miss is 4 days during the semester.**

Procedures of the program may be reviewed on an individual basis related to extenuating circumstances related to COVID.

### **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.

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

### **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 1210.

Vidalia Campus: [Helen Thomas \(hthomas@southeasterntech.edu\)](mailto: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.

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

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. Students who are dropped from courses due to attendance after the 65% point will receive a WP (Withdrawal Passing) or a WF (Withdrawal Failing). Students will receive a grade of **zero** for all assignments missed beginning with the Last Date of Attendance (LDA) and the date the student exceeds the attendance procedure.

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. You will receive zero's for all assignments until appropriate steps are taken.



## **MAKEUP GUIDELINES (TESTS, QUIZZES, HOMEWORK, PROJECTS, ETC.)**

- 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.
- **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:

<p><b>American With Disabilities Act (ADA)/Section 504 - Equity- Title IX (Students) – Office of Civil Rights (OCR) Compliance Officer</b></p>	<p><b>Title VI - Title IX (Employees) – Equal Employment Opportunity Commission (EEOC) Officer</b></p>
<p>Helen Thomas, Special Needs Specialist Vidalia Campus 3001 East 1<sup>st</sup> Street, Vidalia Office 165 Phone: 912-538-3126 Email: <a href="mailto:hthomas@southeasterntech.edu">Helen Thomas</a> <a href="mailto:hthomas@southeasterntech.edu">hthomas@southeasterntech.edu</a></p>	<p>Lanie Jonas, Director of Human Resources Vidalia Campus 3001 East 1<sup>st</sup> Street, Vidalia Office 138B Phone: 912-538-3230 Email: <a href="mailto:ljonas@southeasterntech.edu">Lanie Jonas</a> <a href="mailto:ljonas@southeasterntech.edu">ljonas@southeasterntech.edu</a></p>

**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

Assessment/Assignment	Percentage
Chapter tests	60%
Instrument presentation	5%
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 1070 Clinical Chemistry Summer Semester 2021 Lesson Plan

\*Lesson plan is subject to change at the discretion of the instructor.

DATE/WEEK	CHAPTER	CONTENT	ASSIGNMENTS & TESTS DUE DATES	COMPETENCY AREA
Week 1 5/17-5/20	1,2,	Syllabi review Chapter 1: Basic Principles and Practices Chapter 2: Lab Safety and Regulations	Read assigned chapters <i>Lab Safety</i> Assign Instrumentation Presentation Immunizations, Drug screen, and background check required this semester.	Course 4,9,11,12 Core A-C
Week 2 5/24-5/27	3,5	Chapter 3: Quality Control (QC) and Statistics Chapter 5: Analytical Techniques	Read assigned chapters QC Lab/Trouble shoot QC <i>Serial dilution lab</i> <i>Pipetting lab</i> <i>Linearity Lab</i> <b>TEST 1,2,3,5</b>	Course 4,9,11,12 Core A-C
Week 3 5/31-6/3 Holiday 5/31	11	Chapter 11: Amino Acids and Proteins	Read assigned chapter Khan academy videos : 3 videos	Course 3,9,11,12 Core A,C
Week 4 6/7-6/10	12	Chapter 12: Non protein Nitrogen Compounds	Read assigned chapter	Course 3,9,10,11,12 Core A-C
Week 5 6/14-6/17	13	Chapter 13: Enzymes	Read assigned chapter	Course 4,5,10,12 Core A-C
Week 6 6/21-6/24	14	Chapter 14: Carbohydrates	Read assigned chapter <b>Test: Chapters 11,12,13</b>	Course 1,10,11,12 Core A-C
Week 7 6/28-7/1  <b>SUMMER BREAK 7/5-7/8</b>	15	Chapter 15: Lipids and Lipoproteins	Read assigned chapter	Course 7,9,10 Core A-C
Week 8 7/12-7/15	16	Chapter 16: Electrolytes	Read assigned chapter	Course 2,4,9,10 Core A-C
Week 9 7/19-7/22	17	Chapter 17: Blood Gases, pH and Buffer Systems	<b>Test Chapters: 14,15,16</b> Practice: acid/ base handout	Course 2,9,10 Core A-C
Week 10 7/26-7/29	25	Chapter 25: Liver Function	Read assigned chapter	Course 6,10 Core A-C

DATE/WEEK	CHAPTER	CONTENT	ASSIGNMENTS & TESTS DUE DATES	COMPETENCY AREA
Week 11 8/2-8/5	26	Chapter 26: Lab Markers of Cardiac Damage and Function	Read assigned chapter Students draw chemistry lab Piccolo lab	Course 4,5,10 Core A-C
Week 12 8/9-8/12	18,30,31	18: Trace Elements 30: Therapeutic Drug Monitoring 31: Toxicology	Read assigned chapter <b>Test Chapters: 17,25,26</b> Hormones Hand out	Course 4,8,10,12 Core A-C
Week 13 8/16-8/19	23,32	22: Thyroid 31: Tumor markers Vitamins	Read assigned chapter Vitamin Hand out <i>Calculations skills</i> Correlate lab values to disease states	Course 4,5,9,10,12 Core A-C
Week 14	Review	Review	<b>TEST 18,30,31,23,32,&amp; Vitamins</b> Review Polanski cards, study stack, Clinical Lab review, Handouts and Purpose of the test	Course 1-12 Core A-C
Week 14 cont.	Review	Finals	<b>Comprehensive Final</b>	Course 1-12 Core A-C

#### COMPETENCY AREAS:

1. Carbohydrates
2. Electrolytes and acid-base balance
3. Nitrogenous compounds
4. Related lab math
5. Enzymes and endocrinology,
6. Liver functions
7. Lipids
8. Toxicology and therapeutic drug monitoring,
9. Safety and quality control
10. Correlation of disease states
11. Process improvement (team approach)
12. Critical thinking skills

#### 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