



**CLBT 2120 Clinical Microbiology
Course syllabus
Summer Semester 2016**

Semester: Summer 2016
Course Title: Clinical Microbiology
Course Number: CLBT 2120
Credit Hours/ Minutes: 4/9000 Minutes
Class Location: clinical site
Class Meets: M-F
CRN: 60122

Instructor: Cynthia Williams, MS, MT(AMT)(HHS)
Office Hours: M-W 7-9am;R 1-5pm
Office Location:716 Gillis Building
Email Address: cwilliams@southeasterntech.edu
Phone: 912-538-3183
Fax Number: 912-538-3106
Tutoring: By appointment

REQUIRED TEXT: BOC Study Guide 5th ed. ASCP and Polansky review cards

REQUIRED SUPPLIES & SOFTWARE: Ink pens, pencil, highlighter, permanent marker, paper, pocket notebook, calculator, **Polanski review cards** and any other supplies deemed necessary by instructor.

METHODS OF INSTRUCTION: May include, but not limited to, hands on laboratory work, discussions, study questions, case studies, and handouts. Students will have instruction, demonstration, supervised performance and evaluation by experienced Medical Technologist at the assigned clinical site.

COURSE DESCRIPTION: Provides students with an opportunity for in-depth application and reinforcement of Microbiology principles and techniques in a clinical laboratory job setting. This clinical practicum allows the student to become involved in a work situation at a professional level of technical application and requires concentration, practice, and follows through. Topics include: Specimen inoculations, stains, culture work-ups, bacterial identification, anti-microbial sensitivity, media preparation, special area, safety, documentation/quality control, and process improvement. The clinical practicum is implemented through the use of written training plan, written performance evaluation, and coordinated supervision.

MAJOR COURSE COMPETENCIES:

1. Specimen Inoculations
2. Stains
3. Culture Work-Ups
4. Bacterial Identification
5. Anti-Microbial Sensitivity
6. Media Preparation
7. Special Areas
8. Safety
9. Documentation/Quality Control
10. Process Improvement

General Core Educational Competencies: STC has identified the following general education core competencies that graduates will attain:

- 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.

PREREQUISITE(S): CLBT 1080

COURSE OUTLINE:**Learning Outcomes****Specimen inoculations**

Order	Description	Learning Domain	Level of Learning
1	Follow guidelines for routine specimen collection and inoculations (including blood cultures).	Cognitive	Application

Stains

Order	Description	Learning Domain	Level of Learning
1	Interpret stain results.	Cognitive	Comprehension
2	Perform staining techniques.	Psychomotor	Guided Response

Culture work-ups

Order	Description	Learning Domain	Level of Learning
1	Adhere to rules and regulations concerning culture work-ups.	Cognitive	Synthesis

Bacterial identification

Order	Description	Learning Domain	Level of Learning
1	Correctly identify bacteria using appropriate techniques.	Cognitive	Knowledge
2	Adhere to bacteria handling rules. Report any major handling discrepancies to a supervisor.	Cognitive	Synthesis

Anti-microbial sensitivity

Order	Description	Learning Domain	Level of Learning
1	Perform and read anti-microbial sensitivities.	Psychomotor	Guided Response
2	Relate results to disease management.	Cognitive	Application

Media preparation

Order	Description	Learning Domain	Level of Learning
1	Perform media.	Psychomotor	Guided Response
2	Practice safety procedures associated with handling, processing, and disposing of all chemical agents and microbials in accordance with federal, state, and local guidelines.	Cognitive	Comprehension
3	Adhere to quality control guidelines.	Affective	Valuing

Special areas

Order	Description	Learning Domain	Level of Learning
1	Follow guidelines for testing in special areas of microbiology.	Cognitive	Application
2	Follow guidelines for specimen collection and handling.	Cognitive	Application
3	Report any test result discrepancies to a supervisor.	Affective	Responding

Safety

Order	Description	Learning Domain	Level of Learning
1	Record test results accurately.	Cognitive	Knowledge
2	Adhere to federal, state, and local safety and quality control guidelines.	Cognitive	Synthesis

Documentation/quality control

Order	Description	Learning Domain	Level of Learning
1	Follow and display adherence to quality control guidelines.	Affective	Responding
2	Report test results.	Cognitive	Application

Process improvement

Order	Description	Learning Domain	Level of Learning
1	Promote teamwork and use organizational skills in performing duties in the clinical laboratory.	Affective	Characterization

STUDENT REQUIREMENTS: Students must pass a pre-test before attending clinical rotation. Students are required to record clinical hours each day and be signed by the clinical preceptor. Each week this time sheet will be faxed to the program director. Caution: falsification of time sheets or preceptor signatures will result in expulsion from the CLT program! Students are expected to complete all clinical hours and assignments by the due dates. A ten point penalty will be assessed for each day a case study or study questions are late. Students are responsible for policies and procedures included in the STC E-Catalog/CLT handbook. Students are responsible for requirements (drug screen, background check, immunizations, Fit test, CPR...) included in the STC E-Catalog/CLT handbook. No cell phones allowed. Read the infraction section of CLT Handbook. Stay busy during clinicals! Learn work flow, instrument operation, QC, and maintenance. If you have any down time- study the Polansky cards IN YOUR POCKET! Preceptors are watching you for prospective job opportunities. Take the initiative to draw patients, put up stock, answer phones, and load the instruments with samples.

STC ATTENDANCE POLICY: If the student must be absent, the student must call the clinical site preceptor by 7 am and the Program Director (Ms. Williams) by 8am. Daily attendance and punctuality are of the utmost importance for the successful completion of each rotation. The student is expected to arrive and begin work promptly and to stay until the scheduled rotation is complete. Every day at the clinical site is important. This course requires 9000 minutes of clinical participation (4 weeks at 5 days per week= 160 hours) in addition to skills check list by the preceptor, case study and study questions.

Any tardiness or early departure will be logged in the student file. Tardiness and early departure on more than three occasions per rotation may result in the removal of the student and an unsatisfactory grade of "F" for the course. I expect the student to have perfect attendance. Under no circumstances is a student permitted to request permission from the clinical instructor(s) for time off during the 4 week experiences.

Excessive absences or failure to notify the clinical facility and STC on the day of the absence will result in removal of the student from the clinical site and an "F" will be assigned to the course. The student will be dismissed from the program. Students who miss more than 2 days for each clinical rotation will be required to bring a doctor's excuse before makeup time will be allowed. All minutes MUST be made up before the end of the semester!

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 and face financial aid repercussions in upcoming semesters.

ADDITIONAL ATTENDANCE PROVISIONS

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 make-up work in the classroom or clinical experiences are 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. Time and/or 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.

It is essential that educational programs maintain requirements and standards necessary for successful employment of its graduates in business and industry. In view of the intensive nature of the educational programs, it is necessary for every student to be present and on time every day for all clinical rotations and review course at the college.

TRADITIONAL ATTENDANCE ADDENDUM: **For each clinical rotation, which meets 5 days a week for 4 weeks, the maximum number of days a student may miss is 2 days during EACH clinical rotation. All minutes MUST be made up before the end of the semester!**

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.

SPECIAL NEEDS: Students with disabilities who believe that they may need accommodations in this class based on the impact of a disability are encouraged to contact Jan Brantley, Room 2108 Swainsboro Campus, 478-289-2274, or Helen Thomas, Room 108 Vidalia Campus, 912-538-3126, to coordinate reasonable accommodations.

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 advise me and make appropriate arrangements with the Special Needs Office. Swainsboro Campus: Jan Brantley, Room 1208, (478) 289-2274 -- Vidalia Campus: Helen Thomas, Room 108, (912) 538-3126.

MAKEUP GUIDELINES: Clinical time missed will be made up at the discretion of the clinical preceptor/instructor. Case studies and study questions are due on the dates posted on the syllabus. Late assignments will have 10 points deducted for each day late.

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:

--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.

--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.

--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: Southeastern Technical College does not discriminate on the basis of race, color, creed, national or ethnic origin, gender, religion, disability, age, disabled veteran, veteran of Vietnam Era or citizenship status, (except in those special circumstances permitted or mandated by law). This school is in compliance with Title VI of the Civil Rights Act of 1964, which prohibits discrimination on the basis of race, color, or national origin; with the provisions of Title IX of the Educational Amendments of 1972, which prohibits discrimination on the basis of gender; with the provisions of Section 504 of the Rehabilitation Act of 1973, which prohibits discrimination on the basis of handicap; and with the American with Disabilities Act (ADA).

ACCESS TO TECHNOLOGY: For information regarding Blackboard, the Information Delivery System (IDS), Student Owl Mail, and BannerWeb, please see the IT Department link on STC's website at <http://www.southeasterntech.edu>.

GRADING: A clinical grade of 70 or above is required to pass clinical rotations. (Grades of 69.9 will not be rounded up). NO GRADES WILL BE DROPPED!!! You must receive a "C" or higher in all CLT, core, and clinical courses to progress in the CLT program.

GRADING POLICY

Clinical rotation evaluation 70%
Case study 20%
ASCP/AMT Study questions 10%
(Study questions: Complete=10%
Study questions: Incomplete=0%)

GRADING SCALE

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

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.*

**CLBT Clinical Rotations 2100 & 2120
SUMMER SEMESTER 2016 LESSON PLAN**
Lesson Plan is subject to change at the discretion of the instructor.

Week	Chap / Less	Content	Assignments & Tests Due	Comp Area
***Report to school Thursday May 19 at 9am				
Week 1 May 23-27				
1		CLBT 2120 Microbiology	Case study, Record # of tests Study questions Polanski review cards Fax time sheet 912-538-3106 Attention: Cindy Williams	Course 1-9 Core A-C
Monday May 30-Holiday! Week 2 May 31- June 3				
2		CLBT 2120 Microbiology	Case study, Record # of tests Study questions Polanski review cards Fax time sheet 912-538-3106 Attention: Cindy Williams	Course 1-9 Core A-C
Week 3 June 6-10				
3		CLBT 2120 Microbiology	Case study, Record # of tests Study questions Polanski review cards Fax time sheet 912-538-3106 Attention: Cindy Williams	Course 1-9 Core A-C
Week 4 June 13-17				
04		CLBT 2120 Microbiology	Case study Record # of tests, Study questions Polanski review cards Fax time sheet 912-538-3106 Attention: Cindy Williams	Course 1-9 Core A-C
Week 5 June 20-24				
5		Monday: Make up hours missed May 30 th Tuesday and Wednesday can be used for make-up hours, case study, # of tests, and study questions if 160 hours in microbiology are complete. Thursday report to STC 9am to present case study and all evaluations		Course 1-9 Core A-C
Week 6 June 27-July 1				

6		CLBT 2100 Blood Bank Clinical rotation	Case study Study questions Polanski review cards Fax time sheet 912-538-3106 Attention: Cindy Williams	Course 1-9 Core A-C
Holiday week July 4-8				
Week 7 July 11-15				
7		CLBT 2100 Blood Bank Clinical rotation	Case study Study questions Polanski review cards Fax time sheet 912-538-3106 Attention: Cindy Williams	Course 1-9 Core A-C
Week 8 July 18-22				
8		CLBT 2100 Blood Bank Clinical rotation	Case study Study questions Polanski review cards Fax time sheet 912-538-3106 Attention: Cindy Williams	Course 1-9 Core A-C
Week 9 July 20-24				
9		CLBT 2100 Blood Bank Clinical rotation	Case study Study questions Polanski review cards Fax time sheet 912-538-3106 Attention: Cindy Williams	Course 1-9 Core A-C
Week 10 July 25-27				
10		Monday and Tuesday are makeup days if clinical time missed. Complete case study, # of tests, and study questions.	Bring clinical skills check lists completed by the preceptor, micro and blood bank case studies, and study questions: due today- STC-Wednesday July 27 at 9am.	Course 1-9 Core A-C

MAJOR COURSE COMPETENCIES:

1. Specimen Inoculations
2. Stains
3. Culture Work-Ups
4. Bacterial Identification
5. Anti-Microbial Sensitivity
6. Media Preparation
7. Special Areas
8. Safety
9. Documentation/Quality Control
10. Process Improvement

General Core Educational Competencies: STC has identified the following general education core competencies that graduates will attain:

- 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.

Clinical Rotation Evaluation for CLBT 2120 Microbiology

Name: _____ Hospital _____

Dates: From _____ To _____

Please evaluate the performance of this student based on the following criteria:

5– meets criteria 90-100% of the time; 4 –meets criteria 80 – 89% of the time; 3 – meets criteria 70-79% of the time; 2 – meets criteria 60-69% of the time; 1- meets criteria less than 60% of the time. Procedures for each test protocol are located in the Policy and Procedure Manual located in each department at each clinical facility. Students must pass the clinical skills check off sheet with **70 or greater(C) to pass the course.**

1. Skill	5=A	4=B	3=C	2=D	1=F
The student successfully performs the following:					
1. Perform and interpret staining of specimens for GS					
2. Aseptic technique when handling specimens					
3. Culture set-up including routine, fungal, anaerobic, AFB					
4. Correctly identify organism using appropriate techniques					
5. Perform and read sensitivities					
6. Perform kit test for bacterial/parasitic ID					
7. Proper procedures for positive blood cultures					
8. Proper procedures for collection of blood culture					
9. Daily quality control procedures (catalase, coagulase, oxidase, gram stain...)					
10. QC Microscan/Vitec.					
11. QC media					
12. Adhere to rules and regulations concerning culture workups. Report any handling discrepancies to supervisor.					
13. Maintenance of Microscan/ Vitec, Bactec, CO2 tanks...					
14. Record Temperatures of incubators, refrigerators...					
II Knowledge					
The student successfully:					
1. Evaluates specimens for suitability for processing					
2. Differentiates gram-negative from gram- positive organisms					
3. Follows appropriate specimen handling procedures					
4. Correlates results with disease					
5. Recognizes critical results and makes appropriate report and documentation to RN or MD.					
6. Follows appropriate hospital protocol. (Procedures, biohazard, HIPAA, safety, PPE..)					

Comments: _____

Areas that the student could improve: _____

Thank you for training this student from Southeastern Technical College. The clinical setting is a vital part of the student's education. It helps the student understand and put in to use the concepts learned in the classroom.

 Preceptor signature

 Date

Please enclose in a sealed envelope, SIGNED ACROSS the seal.

Microbiology Comparison of clinical sites by test: Students record total test performed Test	Total number performed per rotation
A disc	
Anaerobe ID	
AFB culture	
Betalactamase	
Blood culture	
Body fluid culture	
C. diff kit	
Campy kit	
Catalase (micro)	
Coagulase	
CSF culture	
C&S (all workups)	
D-test	
E-test	
Eye culture	
Fungal culture	
Giardia kit	
Gram Stain	
Group B Strep Culture (Vaginal)	
Helicobacter pylori test	
India Ink	
Influenza A&B kit	
Manual sensitivities: Strep/ H.flu/S pneumo	
Media QC	
Microscan ID/Vitec ID and sensitivities	
Micro maint. Microscan/Vitec	
Microbiology QC Microscan/Vitec	
MRSA plate	
O&P	
Occult blood	
Oxidase (micro)	
P disc	
B. pertussis slide to state	
Rotavirus kit	
RSV kit	
Shigatoxin/Ecoli 0157	
Sputum culture	
Stool culture	
Stool for WBC	
Strep kit ID	

Strep Group A test kit	
Throat culture	
Urine culture	
Wound culture	

List other procedures performed:

List "send out test" not performed in this lab: