



**BIOL 2117: Introductory Microbiology  
COURSE SYLLABUS**  
**Laboratory–Wednesday (Dental Hygiene)**  
**Summer Semester 2015**

Semester: Summer 2015  
Course Title: Introductory Microbiology  
Course Number: BIOL 2117  
Credit Hours/ Minutes: 1 / 2250  
Class Location: Lab 729 RMTC Bldg.  
Class Meets: 8:30 AM – 1:15 Wednesday  
CRN: **60114**

Instructor: Sadia Ajohda  
Office Hours: M 7-12:30; TWR 7-8:30  
Office Location: 723 RMTC Bldg.  
Email Address: [sajohda@southeasterntech.edu](mailto:sajohda@southeasterntech.edu)  
Phone: 912-538-3216  
Fax Number: 912-538-3156  
**Tutoring Hours:** By Appointment

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**REQUIRED TEXT:**

**Burton's Microbiology For the Health Sciences**; Tenth Edition; Engelkirk and Burton:  
Copyright 2011. Lippincott, Williams and Wilkins. ISBN#978-1-4511-8632-1  
**Introductory Microbiology Laboratory Work Book**; First Edition; Southeastern Technical  
College 2012.

**REQUIRED SUPPLIES & SOFTWARE:**

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

**COURSE DESCRIPTION:**

Selected laboratory exercises paralleling the topics in BIOL 2117. The laboratory exercises for this course include microbial diversity, microbial cell biology, microbial genetics, interactions and impact of microorganisms and humans, and microorganisms and human disease.

***Pre-requisite:*** BIOL 2113 & BIOL 2114 Lab and Lecture – Anatomy and Physiology I & II

***Co-requisites:*** BIOL 2117 – Introductory to Microbiology (Lecture)

**MAJOR COURSE COMPETENCIES**

1. Lab Safety
2. Microscope Use
3. Aseptic Technique
4. Microbial Growth
5. Microbial Diversity
6. Microbial Cell Biology
7. Microbial Genetics
8. Interactions and Impact of Microorganisms and Humans

**GENERAL EDUCATION CORE 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.

All students pursuing a degree, a diploma, or a Technical Certificate of Credit with a General Education component will be required to pass the General Education Competency Exams prior to graduation.

### **LEARNING OUTCOMES**

1. Discuss and apply laboratory exercises encompassing the appropriate practice of laboratory precautions and laboratory safety
2. Discuss and use laboratory exercises encompassing proper care and use of the microscope
3. Discuss and use laboratory exercises encompassing the practice and utilization of aseptic technique
4. Discuss and use laboratory exercises encompassing control of microbial growth
5. Perform and apply laboratory exercises encompassing microbial diversity
6. Perform and apply laboratory exercises encompassing microbial cell biology
7. Perform and apply laboratory exercises encompassing microbial genetics
8. Perform and apply laboratory exercises encompassing interactions and impact of microorganisms and humans
9. Perform and apply laboratory exercises encompassing microorganism and human disease.

### **STUDENT REQUIREMENTS:**

Students are responsible for the policies and procedures in the STC E-Catalog. During an examination, students are required to place all textbooks and personal property on the floor or counter located in the back or to the side of the classroom. Students are to be seated with an empty seat between each student. No talking is allowed once the test begins. **Students found with cell phone or any other personal communication device during a test will be considered cheating and given a grade zero. This also applies to students who have completed/submitted test to instructor and using cell phone in classroom while testing is still in progress or others are still testing.**

### **NO EATING/DRINKING IS ALLOWED IN LAB OR CLASSROOMS.**

Students are expected to exhibit professional behavior at all times. 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 enacted. No cell phones or pagers are allowed to be turned on in the classroom. Personal phone calls must be handled after class. Watches with alarms should not be programmed to sound during class.

**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 and Cosmetology 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.

**For this class, which meets 1 day a week for 9 weeks, the maximum number of days a student may miss is 1 day during the semester.**

**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 1208 Swainsboro Campus, 478-289-2274, or Helen Thomas, Room 108 Vidalia Campus, 912-538-3126, to coordinate reasonable accommodations.

**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 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.

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

Students who are dropped from courses due to attendance (see your course syllabus for attendance policy) after drop/add until the 65% point of the semester will receive a “W” for the course. Abandoning a course(s) instead of following official withdrawal procedures may result in a grade of 'F' being assigned.

After the 65% portion of the semester, the student will receive a grade for the course. (Please note: A zero will be given for all missed assignments.)

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 accessed due to the withdrawal. All grades, including grades 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**

**In order to sit for the final exam, a student must maintain a Lecture Test and Lab Test Average of 70 or above prior to the date of the scheduled final. Grades of 69.9 will not be rounded up. If the student has below a 70 average, the student will be given a letter grade based on tests average.**

A comprehensive final examination will be given at the end of the semester. **There will be no make-up exam for lab examinations. Failure to take lab examinations on specified date will result in a grade of zero.**

**Students found with their cell phone or any other personal communication device during the test will be considered cheating and given a zero for the test.**

**Lab Assignments/ Lab Report:** A laboratory report will be created by each student using a clear front cover report (see required supplies pg. 1 on syllabus). The lab report will include all completed lab worksheets, assignments, Learning Objectives for lecture, drawings of microscopic slide observations (using color pencils), etc. Lab reports are due at the end of each lab session and all lab work should be submitted bound in “clear front” report cover. Lab reports will not be taken home, all assignments completed in the lab must be turned in on the day assigned. Lab reports will remain in the lab. The first page on the report will include in typewritten format: Student's full name, course name, course number, semester and year in the above mentioned order. Points will be deducted for any missing assignment.

**NO EATING/DRINKING IS ALLOWED IN LAB OR CLASSROOMS.**

**DENTAL HYGIENE – Skills Evaluation/Lab check offs:** All Dental Hygiene students will report to the Dental Hygiene Clinic for Skills Evaluation/Lab check off procedure on dates delineated on the Lesson Plan below. Each check off will have a maximum of three attempts. 100% competency must be achieved within three attempts. Failure to do so will result in dismissal from the program. Attempt 1=100, Attempt 2= 80, Attempt 3=70. **All laboratory assignments averaged together account for 10% of the final course grade.** Check offs are located on M Drive. You will be held responsible to print and bring check offs to Dental Hygiene Clinic Sessions (dates are listed on Lesson Plan attached).

**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).

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

**ACCESS TO TECHNOLOGY:** Students can now access Angel, 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 at [www.southeasterntech.edu](http://www.southeasterntech.edu).

**GRADING SCALE:**

Grading Scale:		
A	Excellent	100 - 90
B	Good	89 - 80
C	Satisfactory	79 - 70
D	Poor	69 - 60
F	Failing	59 - 0

**GRADING COMPONENTS:**

Lab Exams	50%
Lab Assignments/report	5%
Dental Hygiene/Nursing Lab Check Offs	10%
Final Exam	35%

**Each Students final grade for the course will be calculated in the following manner...**

(Lab Exams.).....	x 0.50 = +	_____
(Lab Assignments.).....	x 0.05 = +	_____
(Dental Hyg/Nursing Check offs).....	x 0.10 = +	_____
(Final Exam Score).....	x 0.35 = +	_____
<b>Numerical Course Grade.....</b>	<b>=</b>	<b>_____</b>

**TCSG GUARANTEE/WARRANTY STATEMENT:**

The Technical College System of Georgia guarantees employer 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.

**MAJOR COURSE COMPETENCIES**

1. Lab Safety
2. Microscope Use
3. Aseptic Technique
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## LESSON PLAN BIO 2117 – LAB **(Wednesday) Dental Hygiene**

**Subject to change at the discretion of the instructor**

Date	Chapters/Lab Exercises	Assignments	Comp Areas
5/20	<b>Intro:</b> Syllabus, lesson plan, Lab safety etc. Chapter 1: Microbiology – The Science Chapter 2: Viewing the Microbial World Chapter 3: Cell Structure & Taxonomy Chapter 4: Acellular & Procaryotic Microbes	Ch. 1 Lab Ex. 1 quest. 1 – 8 Ch. 2 Lab Ex. 2 quest. 1 & 2 review #3 tables Ch. 3 Lab Ex. 3 quest. 1-7. Read pgs. 9-11 Ch. 4 Lab Ex. 4 quest. 1-9 Review key points at end of each chapter.	CC a-c GC 1-5
5/27	Chapter 5: Microbial Diversity Chapter 6: Biochemistry: The Chemistry of Life Chapter 7: Microbial Physiology & Genetics Chapter 8: Controlling Microb. Growth in Vitro	<b>Complete &amp; submit the following:</b> <i>*Student Pkt. STC website, Library home pg.</i> <i>*Instructor's Acknowledgment: M Drive</i> Ch. 5 Lab Ex. 5 quest. 1 – 6 Ch. 6 Lab Ex. 6 quest. 1 - 9 Ch. 7 Lab Ex. 7 quest. 1-4 Ch. 8 Lab Ex. 8 quest. 1-4 Read pgs. 8-9 Review key points at end of each chapter.	CC a-c GC 4-7
6/3	Chapter 9: Controlling Microb. Growth in Vivo Chapter 10: Microb. Ecology & Microb. Biotech. Chapter 11: Epidemiology & Public Health Chapter 12: Healthcare Epidemiology	Ch. 9 Lab Ex. 9 quest. 1 - 6 Ch. 10 Lab Ex. 10 quest. 1-4 Read pgs. 6-7 Ch. 11 Lab Ex. 11 quest. 1-9 Read pg. 8 Ch. 12 Lab Ex. 12 quest. 1 – 9 Read pgs. 8-10 Review key points at end of each chapter.	CC a-d GC 1-7
6/10	Chapter 13: Diagnosing Infectious Diseases Chapter 14: Pathogenesis of Infectious Disease Chapter 15: Nonspecific Host Defense Mech. Chapter 16: Specific Host Defense Mech.	Ch. 13 Lab Ex. 13 quest. 1-5 Read pgs. 5-6 Ch. 14 Lab Ex. 14 quest. 1-9 Ch. 15 Lab Ex. 15 quest. 1-7 Ch. 16 Lab Ex. 16 quest. 1 - 8 Review key points at end of each chapter.	CC c-d GC 5-7
6/17	Chapter 17: Overview of Infectious Diseases Chapter 18: Viral Infections Chapter 19: Bacterial Infections Chapter 20: Fungal Infections Chapter 21: Parasitic Infections	Ch. 17 Lab Ex. 17 quest. 1-10 Ch. 18 Lab Ex. 18 quest. 1-7 Read pgs. 4-6 Ch. 19 Lab Ex. 19 quest. 1 – 9 Pgs. 8,9 Ch. 20 Lab Ex. 20 quest. 1-8 Pg. 4 Ch. 21 Lab Ex. 21 quest. 1-12 Pgs. 8-13 Review key points at end of each chapter.	CC a-d GC 1-8
6/24	<b>Case Study Presentations</b> <ul style="list-style-type: none"> <li>• Lab Reports (all chapters due)</li> <li>• Lab Report Check Offs</li> <li>• Lecture make up exam</li> </ul>	15-20 minutes. Visual aid required. Discussion of case study questions. Print and place power point presentation in lab report. Include answers to case study questions.	CC a-d GC 1-8
7/1	<b>Holiday</b>	<b>Summer Break – No Class</b>	
7/8	<b>Dental Hygiene Students: Report to Mrs. Jennifer Gramiak in Dental Hygiene Building</b>	<b>Dental Hygiene Skills Evaluation with Mrs. Gramiak. Please Print all check offs (5) from M Drive and bring with you to clinic sessions/check offs.</b>	CC a-d GC 1-8
7/15			
7/22			

PLEASE BRING LECTURE TEXT AND LAB MANUAL TO ALL LAB MEETINGS