



CLBT 1030 Urinalysis and Body Fluids
Course syllabus
Fall Semester 2015

Semester: Fall 2015
Course Title: Urinalysis and Body Fluids
Course Number: CLBT 1030
Credit Hours/ Minutes: 2/3000
Class Location: Room #739 Gillis Building
Class Meets: MTW 11:10-12:30
CRN: 20284

Instructor: Cynthia Williams, MS, MT(AMT)(HHS)
Office Hours: Monday-Wednesday 7-8 am,
4-5pm; Thursday 9-5
Office Location: 716 Gillis Building
Email Address: cwilliams@southeasterntech.edu
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Fax Number: 912-538-3106

REQUIRED TEXT: *Fundamentals of Urine and Body Fluid Analysis*, Nancy A. Brunzel 3rd ed.

REQUIRED SUPPLIES & SOFTWARE: Ink pens, pencil, highlighter, permanent marker, paper and any other supplies deemed necessary by instructor.

METHODS OF INSTRUCTION: May include, but not limited to, lectures, discussions, videos, laboratory, and handouts.

COURSE DESCRIPTION: Provides theory and techniques required to conduct tests on urine and various body fluids. Theory and tests are related to disease states and diagnosis. Topics include: fundamental theory of urinalysis; basic urinalysis tests; correlation of urinalysis to disease states; related lab math; body fluid tests; special urinalysis and related testing; and safety and quality control.

MAJOR COURSE COMPETENCIES:

- 1- Fundamental theory of Urinalysis
- 2- Basic Urinalysis tests
- 3- Correlation of urinalysis to disease states
- 4- Related Lab Math
- 5- Body Fluids Tests
- 6- Special Urinalysis and Related Testing
- 7- Safety and Quality Control

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.

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.

PRE/COREQUISITE(S): BIOL 2113, CLBT 1010
COURSE OUTLINE:

Learning Outcomes

Fundamental theory of urinalysis

Order	Description	Learning Domain	Level of Learning
1	Discuss kidney physiology in the formation of urine.	Cognitive	Comprehension

Basic urinalysis tests

Order	Description	Learning Domain	Level of Learning
1	Describe the anatomy and physiology of the urinary system.	Cognitive	Comprehension
2	Describe various methods and applications of urine collection.	Cognitive	Comprehension
3	Perform clarity, color, and specific gravity.	Psychomotor	Guided Response
4	Perform routine chemical urinalysis including pH, protein, glucose, ketones, bilirubin, blood, nitrite, urobilinogen, and leukocyte esterase.	Psychomotor	Guided Response
5	Explain clinical significance of routine biochemical tests.	Cognitive	Comprehension
6	Discuss principles of routine biochemical tests.	Cognitive	Comprehension
7	Give normal values for routine biochemical tests.	Cognitive	Application
8	Perform confirmatory tests as indicated.	Psychomotor	Guided Response
9	Explain principles of confirmatory tests.	Cognitive	Comprehension
10	Discuss clinical significance of confirmatory tests.	Cognitive	Comprehension
11	Perform microscopic urinalysis including significant element identification in urinary sediment.	Cognitive	Synthesis
12	Explain the significance of the microscopic exam.	Cognitive	Comprehension
13	Give normal values of the microscopic urinalysis exam.	Cognitive	Application

Correlation of urinalysis to disease states

Order	Description	Learning Domain	Level of Learning
1	Correlate selected normal macroscopic and microscopic characteristics of urine examination including crystals, microorganisms, and artifacts.	Cognitive	Analysis
2	Correlate selected pathological macroscopic and microscopic	Cognitive	Analysis

	characteristics of urine examination including crystals, microorganisms, and artifacts.		
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Related lab math

Order	Description	Learning Domain	Level of Learning
1	Perform related math calculations for metric system, correction of specific gravity, calculation of dilutions, calculation of body fluid cell counts, calculation of % motile and % abnormal morphology in semen analysis.	Cognitive	Synthesis

Body fluids tests

Order	Description	Learning Domain	Level of Learning
1	Perform routine analysis tests on related body fluids.	Psychomotor	Guided Response
2	Determine the clinical significance of various body fluid analyses including gastrics, seminal fluids, CSF, feces, transudates, and exudates.	Cognitive	Application

Special urinalysis and related testing

Order	Description	Learning Domain	Level of Learning
1	Explain the clinical significance of osmolality, renal function tests, quantitative tests, aminoaciduria, porphyrins, melanin, indican, haptoglobin, hemosiderin, myoglobin, and Bence-Jones protein.	Cognitive	Comprehension

Safety and quality control

Order	Description	Learning Domain	Level of Learning
1	Set up and perform selected quality control and safety procedures for urinalysis.	Psychomotor	Guided Response
2	Discuss possible sources of error in biochemical testing.	Cognitive	Comprehension

STUDENT REQUIREMENTS: Students are required to wear name badges. Students are expected to complete all tests, assignments, and Laboratory Reports by the due dates. A ten point penalty will be assessed for each day an assignment or Laboratory Report is late. Students are required to pass all laboratory skills in three attempts. A student may not progress until skills are mastered. Students are responsible for policies, procedures, and requirements (drug screen, background check, immunizations, Fit test, CPR...) included in the STC Catalog/CLT handbook. Students are required to read the chapter prior to class. Test will be timed.

Points will be deducted for spelling due to Medical Liability in the work place. Laboratory results are legal documents.

No cell phones allowed. 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 involved.) If you are 30 minutes late to class, you will receive an absence for the day.

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. If you are 30 minutes late to class, you are considered absent for the day.

For this class, which meets 3 days a week for 15 weeks, the maximum number of days a student may miss is 5 days during the semester.

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 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 assessed 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.

Withdrawing from Learning Support and/or College Success and Survival Skills courses are not permitted unless the student intends to withdraw totally from the College.

TRADITIONAL ATTENDANCE ADDENDUM: For this class, which meets 3 days a week for 15 weeks, the maximum number of days a student may miss is 5 days during the semester. . I urge you NOT to miss days! You miss valuable information if you are not in attendance! (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.

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 documented special needs may be provided with an individualized Instructional Plan with specifications for scheduled instructional time. It is the student's responsibility to inform the Special Needs Specialist as students and instructors are required to have documented evidence prior to receiving or allowing special accommodations. See the STC Catalog and Student Handbook, Student Affairs section for further information regarding special needs.

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.

SPECIAL NEEDS ADDENDUM: 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.

MAKEUP GUIDELINES: Exams or labs missed for any reason will be made up at the discretion of the instructor. A maximum of one exam can be made up. If more than one exam is missed the student will only be allowed to make up the first exam missed and a grade of "0" will be awarded for any other missed exams. **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.

GRADING: Chapter test average of 70 or higher is required to sit for the final exam (grades of 69.9 will not be rounded up: Chapter tests will determine your final grade (no lab grades will be included). Only one makeup exam will be given for chapter test. If you miss a second exam you will receive a zero for the second exam missed. 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.

GRADING POLICY

Chapter test =60%
Lab Reports = 5%
Final Exam =25%
Lab Final =10%

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 1030 Urinalysis and Body Fluids
FALL SEMESTER 2015 LESSON PLAN**

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

Week	Chap / Less	Content	Assignments & Tests Due	Comp Area
Week 1 Aug 17-21				
1	1 & 2	Chapter 1 Microscope Chapter 2 QA/ Safety	Syllabus Safety/MSDS LAB #1	Course 2,6 Core A,B,C
Week 2 Aug 24-28				
2	3	Chapter 3 UA specimen types, collection/ preservation	Study Stack tables Polanski cards Clinical Lab Review handout-Ua	Course 1,2,4 Core A,B,C
Week 3 Aug. 31-4				
3	4	Chapter 4 Kidney	TEST 1-3	Course 1,2,3,4 Core A,B,C
Week 4 Sept. 7 Holiday!- 11				
4	4,5	Cont. Chp 4, Chapter 5 Renal function	LAB #1 Refractometer & Sp gravity	Course 1,2,3,4 Core A,B,C
Week 5 Sept. 14-18				
5	6	Chapter 6 Physical exam of Ua	Test 4 & 5 LAB #2 Macroscopic exam	Course 1,2,3,4 Core A,B,C
Week 6 Sept. 21-25				
6	7	Chapter 7 Chemical exam of Ua	LAB #3 Chemical dipstick, Confirmatory test, QC/normal values LAB#4 Fecal analysis, Occult blood, Stool for WBC, & Reducing substance	Course 1,2,3,4 Core A,B,C

Week 7 Sept. 28-Oct. 2				
7	8	Chapter 8 Microscopic exam of Urine sediment	Ua microscopic; drawings & special screening LAB #5 Student sample UA's	Course 1,2,3,4 Core A,B,C
Week 8 Oct. 5-9				
8	9	Chapter 9 Renal and metabolic diseases	TEST 6,7,8 Hospital samples UA	Course 2,4,5,6 Core A,B,C
Week 9 Oct. 12-16				
9	9	Chapter 9 continued; Renal and metabolic diseases		Course 4,5,7 Core A,B,C
Week 10 Oct. 19-23				
10	10	Chapter 10 Fecal analysis	TEST 9	Course 4,5,7 Core A,B,C
Week 11 Oct. 26-30				
11	11 & 12	Chapter 11 Seminal Fluid analysis Chapter 12 Amniotic Fluid analysis		Course 4,5,7 Core A,B,C
Week 12 Nov. 2-6				
12	13 & 14	Chapter 13 CSF analysis Chapter 14 Synovial Fluid analysis	TEST 10,11,12 LAB#7 CSF hemacytometer	Course 4,5,7 Core A,B,C
Week 13 Nov. 9-13				
13	15 & 16	Chapter 15 Pleural, pericardial, peritoneal fluid analysis Chapter 16 Vaginal fluid analysis	LAB #8 KOH & wet prep	Course 4,5,7 Core A,B,C
Week 14 Nov. 16-20				
14		Review for final	TEST 13,14,15,16 Review calculations	Course 1-7

			Review dipstick methodology Review UA pictures AAB practice test	Core A,B,C
Week 15 Nov. 23-24 (25-27 Holidays!)				
15		Review	TCSG standards due	Course 1-7 Core A,B,C
Week 16 Nov. 30- Dec. 3				
		Finals!	Final Lab Final	Course 1-7 Core A,B,C

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