

**AHS 1883 INTRODUCTION TO CLINICAL LABORATORY SCIENCES  
Fall 2008**

**T, TR 8:00 AM - 9:15 AM**

**Classroom No: RWC 1.806**

**Course Director:**

M. Douglas Bearden, MA, CLS (NCA), MT (ASCP)  
Assistant Professor/Education Coordinator  
Department of Clinical Laboratory Sciences  
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<u>Office:</u>	UTSA (pending)	UTHSCSA (new Allied Health Sciences Building, Rm. 4.204)
<u>Office Hours:</u>	9:15 – 10:15 AM T&R or by appointment	By appointment
<u>Phone:</u>	Cell phone – 885-1657	567-8860

**DEPARTMENT OF CLINICAL LABORATORY SCIENCES MISSION:** To graduate outstanding clinical laboratory science professionals capable of performing as members of the health care team in a diverse, expanding health care environment, to provide service and leadership to the clinical laboratory community, especially in South Texas, and to contribute to the knowledge base of the professions through scholarly activities.

**DEPARTMENT OF CLINICAL LABORATORY SCIENCES GOAL:** To maintain curriculums that will provide graduates with the technical skills, knowledge and problem solving ability characteristic of a health care professional. This goal encompasses:

- Integration of theoretical concepts into practice.
- Development of research and management skills
- Development of ethical and professional values.
- Recognition of the need for continuous professional and personal growth.
- Recognition of a personal responsibility to participate as a member of the health care team.

**COURSE GOALS:**

The instructor as well as guest instructors will introduce and provide information about the profession of clinical laboratory sciences. The students will gain valuable background information in medical terminology and laboratory mathematics necessary for advancement to other clinical laboratory science courses.

**COURSE OVERVIEW:**

This course is designed to give the entering clinical laboratory science student information on the profession of clinical laboratory science including history, career opportunities, job characteristics, professional organizations. The student will be introduced to medical terminology through a study of the body systems. Relationships between abnormal human physiology and laboratory testing will be emphasized. Basic laboratory mathematics will also be taught.

**COURSE OBJECTIVES:**

At completion of this course, the student will be able to:

1. Define medical roots, prefixes and suffixes and interpret related medical terms.
2. Identify the anatomy and the functions of selected body systems.
3. Describe the significance of laboratory testing in relation to normal and abnormal body functions.
4. Solve laboratory math problems.
5. Describe the history of laboratory medicine including education, accreditation, organization and integration in the health care system.
6. List the different settings for clinical laboratories; define each area of the clinical laboratory and determine its function in clinical medicine.
7. Identify the career paths available for CLS and provide the advantages and disadvantages and education level of each.
8. Identify the educational levels in clinical laboratory science and describe the differences in responsibilities/tasks of each.
9. Chart the organization of a hospital and give the function of each unit.
10. Analyze an ethical dilemma and give the general ethical principles used in this analysis

11. Interview a practicing health professional and write a paper describing your findings.
12. Analyze a medical case history and determine patient's condition by interpreting medical terms.

**TEXTBOOKS**

**Required:** *An Introduction to Clinical Laboratory Science*  
 Mahon, Smith, Burns. Philadelphia: W.B. Saunders, 1998

**Recommended:** Medical Dictionary: Taber's Cyclopedic Medical Dictionary,  
 18<sup>th</sup> edition  
 F. A. Davis Company - Publishers

**GRADES AND POLICIES:**

Your grade for this course will be a combination of your performance on four examinations, three unit examinations and the final comprehensive examination, and a writing project. Each examination will cover material presented in class and in assigned reading materials. Your grade will be calculated as follows:

Exam #1	=	20%
Exam #2	=	20%
Exam #3	=	20%
Final Exam	=	20%
Career Panel		
Attendance	=	10%
Writing Project	=	<u>10%</u>
		100%

Writing Project Directions/Guidelines: Select a health professional or administrator to interview. Ask permission to interview them and set an appointment. Be sure to be on time and dress as for a job interview. Take notes. The purpose of the interview is to gather information on their career field including: education required, continuing education required, licensure or certification requirements, job description, pay range from entering professional to supervisor/manager, challenges (especially those associated with managed care), opportunities for employment and advancement, future directions for the career field and any other information you are interested in.

Write a paper describing the profession and your findings. The paper should be double-spaced and type written. Keep the length to between 1.5 - 3 pages. The paper is **due by November 13** but may be turned in earlier.

You will be graded on grammar, spelling, accuracy (deductions for typos), and completeness of content.

Letter grades are based on the following scale:

A	=	90-100
B	=	80-89
C	=	70-79
D	=	60-69
F	=	Below 60%

**No make-up tests will be given. If for some serious reason you must be absent on the day a test will be given, you must notify your instructor prior to the exam** so that arrangements may be made. Otherwise, your grade for that exam will be 0%.

**You are expected to attend class on a regular basis and to arrive in a timely manner.**

**Late entrances disrupt the class.**

If you have need of special accommodations in this class, let the course director know as soon as possible.

The course director reserves the right to make changes in the schedule.

**INTRODUCTION TO CLINICAL LABORATORY SCIENCES  
LECTURE SCHEDULE  
FALL 2008**

**T, TR 8:00am-9:15am**

**Room: RWC 1.806**

**(Building 21 - Recreation/Wellness Center)**

<b>Date</b>	<b>Topic</b>	<b>Instructor</b>
<b>Aug</b> 28	Course Introduction, schedule, policies, Description of UTSA/UTHSC CLS Program	Bearden
<b>Sep</b> 2	CLS as a Profession, history, Education, professional organization	Bearden
4	Medical terminology	Bearden
9	Clinical Laboratory Structure and Departments	Bearden
11	Dilutions and Phlebotomy	Bearden
16	Endocrine System	Burns
18	Basic Statistics	Bearden
23	Blood and Lymph System	Burns
25	Molarity, Normality, Molality	Bearden
30	Hydrates, Specific Gravity	Bearden
<b>Oct</b> 2	<b>EXAM # 1</b>	
7	Digestive System/Hepatic System	Bearden
9	Cardiovascular System	Bearden
14	Respiratory System	Bearden
16	Nervous System/Spinal Fluid Analysis	Bearden
21	Urinary System	Bearden
23	Female Reproductive System	Bearden

	28	Male Reproductive System	Bearden
<b>Oct</b>	<b>30</b>	<b>EXAM #2</b>	
<b>Nov</b>	4	Professional Ethics	Bearden
	6	Quality Assurance	Bearden
	11	Microbiology	Bearden
	13	Cytogenetics	Dunn
	18	Blood Bank	Bearden
	20	Clinical Chemistry	Bearden
	25	Hematology	Bearden
	<b>27</b>	<b>THANKSGIVING DAY HOLIDAY</b>	
<b>Dec</b>	<b>2</b>	<b>EXAM #3</b>	
<b>Dec</b>	<b>4</b>	<b>Career Opportunity Panel (10% of your grade)</b>	

**FINAL EXAM DECEMBER 11, 2008 Thursday, 7:30 am - 10:00 am**

**AHS 1883 INTRODUCTION TO CLINICAL LABORATORY SCIENCES  
READING ASSIGNMENTS  
Fall 2008**

<u>Date</u>	<u>Assignment</u>
Aug. 28	Ch 1, Handout
Sep 2	Ch 1, Handout
Sep 4	Ch 2, Handout
Sep 9	Ch 3, Handout
Sep 11	Ch 4, Handout
Sep 16	Ch 12, Handout
Sep 18	Ch 4, Handout
Sep 23	Ch 11, Handout
Sep 25	Ch 4, Handout
Sep 30	Ch 4, Handout
Oct. 7	Ch 8,9, Handout
Oct. 9	Ch 6, Handout
Oct 14	Ch 6, Handout
Oct. 16	Ch 10, Handout
Oct. 21	Ch 7, Handout
Oct. 23	Ch 13, Handout
Oct. 28	Ch 13, Handout
Nov 4	Handout
Nov 6	Handout

Nov 11	Ch 3, handout
Nov. 13	handout
Nov. 18	Ch 3, handout
Nov. 20	Ch 3, handout
Nov. 25	Ch 3, handout
Dec 4***	Career Panel-attendance is mandatory and will count as 10% of Final Grade.