Instructor: Sandra L. Tijerina, MS, MLS(ASCP)\textsuperscript{cm}SBB, SH(ASCP)\textsuperscript{cm}  
Telephone #: (956) 665-2296  UTRGV email address: Sandra.tijerina@UTRGV.edu  
Meeting times and location: 8:00AM-10:45AM M- EHABW 1.138  
Office location & hours: EHABW 2.206A Mon 12:15-1:15pm Wed/Thur 12:30-2:30pm  

Textbook and/or Resource Material:  
A Concise Review of Clinical Laboratory Science Second Edition. Joel D. Hubbard, 2010, Lippincot Williams & Wilkins, Philadelphia. (REQUIRED) Students will also be expected to use clinical laboratory science textbooks, literature, software, internet resources, and clinical rotation experience in this course.  

INTERNET RESOURCES:  
http://www.ascls.org  
http://www.ascp.org/boc  
https://www.medialabinc.net/  
http://www.medtechnet.com/state_ce/  

Course Description and Prerequisites:  
This course is designed to prepare the student for the professional role of the medical laboratory scientist. Topics include professionalism and professional ethics, licensure and certification issues, laboratory utilization, critical pathways, principles of interpersonal and interdisciplinary communication, and practice. Also included in this course are review activities for the national certification exam as well as a comprehensive exam encompassing the major areas of the clinical laboratory science field.  

Prerequisites: Admission into the CLS Program and completion of CLSC 4340 and CLSC 4341.  

METHODS OF EVALUATION:  
The final grade for this course will be the sum of all grades obtained in the following sections:  
a. Two Clinical Laboratory Science Mock registry exams @ 10% each .........................20%  
b. Ethics Presentation ..................................................................................................................10%  
c. Case Study Write-up .............................................................................................................10%  
d. Algorithm for Corrective action QC ....................................................................................10%  
e. Medialab certificates (3-5 CEUs) ..........................................................................................13%  
f. Professional Activity .............................................................................................................5%  
g. Affective behavior ............................................................................................................... 2%  
g. Final Clinical Laboratory Science Mock registry exam ..................................................30%  
Total ......................................................................................................................................100%  

Grades are as follows: A=90-100%; B=80-89.9%; C=70-79.9%; D=65-69.9%; F=<64.9%.  
Grades will NOT be rounded up.
All lecture exams will cover material presented in lecture and assigned reading material. They will be administered on line during class time. Students are required to bring a laptop or IPad to access BB. Students must obtain a final grade of “C” or above to successfully complete this course.

COURSE REQUIREMENTS:
1. Students are expected to attend each class session and to follow the attendance policies as described in the Student Standards and Expectations.
2. Students are responsible for being present for all exams. All exams will be announced at least one class meeting prior to examinations.
3. Students are expected to participate actively in each learning activity.
4. This is a web augmented course. Blackboard tools such as the Assignment tool and Tegrity will be utilized at various times throughout the course. Lectures may be prerecorded via Tegrity or other assignments made online. Students will be expected to listen to the lectures and complete any assignments prior to attending class. It is critical that students complete these assignments prior to attending class as class time will use active learning strategies to develop higher order thinking skills.
5. Students are expected to participate actively in each learning activity in class sessions.
6. Lecture outlines and lab exercises will be available on Blackboard and students should print the appropriate outlines for class use prior to each scheduled lecture.
7. Case studies and presentations will be completed individually. Students should not collaborate with others.
8. Medialab assignments will be due prior to review sessions.
9. Participate in a service learning project by helping junior class in hosting a blood drive for the UTRGV community.

Calendar of Activities
Fall 2019 Term (August 26 – December 12)
Aug. 21 (Wed.) Payment Due Last day to join a waitlist
Aug. 23 (Fri.) Last day to withdraw (drop all classes) and receive a 100% refund
Aug. 26 (Mon.) Fall classes begin
Aug. 29 (Thurs.) Last day to add a class or register for Fall classes
Aug. 30 (Fri.) Last day to withdraw (drop all classes) and receive an 80% refund
Sep. 2 (Mon.) Labor Day Holiday. No classes.
Sep. 9 (Mon.) Last day to withdraw (drop all classes) and receive a 70% refund
Sep. 11 (Wed.) Census Day (last day to drop without it appearing on the transcript)
Sep. 16 (Mon.) Last day to withdraw (drop all classes) and receive a 50% refund
Sep. 23 (Mon.) Last day to withdraw (drop all classes) and receive a 25% refund
Nov. 13 (Wed.) Last day to drop a class (grade of DR) or withdraw (grade of W)
Nov. 28-29 (Thurs.-Fri.) Thanksgiving Holiday. No classes.
Dec. 5 (Thurs.) Study Day. No classes.
Dec. 6-12 (Fri.-Thurs.) Final Exams
Dec. 12 (Thurs.) Fall classes end; Official last day of the term
Dec. 13-14 (Fri.-Sat.) Commencement Exercises
Dec. 16 (Mon.) Grades Due at 3 p.m.
PROGRAM LEARNING OUTCOMES:
1. Demonstrate entry level knowledge and skills in the area of hematology.
2. Demonstrate entry level knowledge and skills in the area of clinical chemistry.
3. Demonstrate entry level knowledge and skills in the area of immunohematology.
4. Demonstrate entry level knowledge and skills in the area of clinical microbiology.
5. Demonstrate entry level knowledge and skills in the area of immunology.
6. Demonstrate entry level knowledge and skills in the area of urinalysis and body fluids.

AFFECTIVE OBJECTIVES:
Upon completion of this course, the student should be able to do the following with a minimum score of 70%:
1. Show preparedness in oral presentations.
2. Demonstrate dependability by attending all lecture and laboratory sessions and arriving promptly at the designated time.
3. Follow instructions on procedures and use of materials.
4. Demonstrate an acceptance of responsibility for his/her own learning by consistently preparing for class and laboratory sessions, voluntarily seeking information; asking pertinent questions and setting personal priorities to allow for academic success.
5. Show initiative by completing assigned tasks without reminders and seeking additional tasks as appropriate.
6. Listen attentively during class activities.

LECTURE OBJECTIVES:
Upon completion of this course and without the aid of notes or textbook, the student should be able to achieve the following objectives. Achievement will be met when a minimum score of 70% is earned as detailed in the methods of evaluation section of this syllabus.
1. Demonstrate entry-level competency formulation of clinical pathologic correlations, so as to provide appropriate and effective consultation in the context of a clinical laboratory scientist.
2. Demonstrate knowledge about established and evolving biomedical and medical laboratory science and apply this knowledge to the understanding of clinical laboratory diagnosis in both individual patients and the general patient population.
3. Apply concepts of investigational and analytical thinking to the interpretation of laboratory data.
4. Discuss interpersonal and interdisciplinary communication skills that result in the effective exchange of information and expertise with other health care providers, patients, and patients’ families.
5. Discuss how medical laboratory professionals can contribute to improvement of patient care practices.
6. Justify why clinical laboratory scientists should be committed to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse population of patients and health care providers.
7. Demonstrate through the preparation of informal presentations, effective communication skills and proficiency in utilizing library and internet resources.
8. Justify the inclusion of the laboratory in the development of critical/clinical pathways.
9. Explain how critical/clinical pathways are used in patient care.
10. Compare the pros and cons of developing clinical pathways.
11. Describe how to use the algorithmic format for determining a laboratory testing pathway for a suspected or given clinical condition.
12. Discuss at least 5 possible roles for the medical technologist in addition to traditional bench testing.
13. Identify the abilities and skills which are most likely to enable an entry level technologist to move into different roles in the health care team.
14. Given a case study and laboratory data, evaluate the results and determine the most likely cause of the findings.
15. Identify problems in pre-analytic, analytic and post-analytic testing and determine appropriate corrective action.

**LEARNING ACTIVITIES:**
Students will be given the opportunity to learn from:
A. Formal lectures and notes taken during lectures
B. Participation in online learning activities offered via Blackboard
C. Demonstrations and observations
D. Audio-visual materials
E. Student textbook and other reference materials
F. Home and assigned reading materials
G. Computer assisted instruction units

**Electronic Communications:**
University policy requires all electronic communication between the University and students be conducted through the official University supplied systems; namely UTRGV Mail for email or Blackboard for course specific correspondence. Therefore, please use your UTRGV assigned Mail or Blackboard account for all future correspondence with UTRGV faculty and staff.

**STUDENTS WITH DISABILITIES:**
If you have a documented disability (physical, psychological, learning, or other disability which affects your academic performance) and would like to receive academic accommodations, please inform your instructor and contact Student Accessibility Services to schedule an appointment to initiate services. It is recommended that you schedule an appointment with Student Accessibility Services before classes start. However, accommodations can be provided at any time. **Brownsville Campus:** Student Accessibility Services is located in Cortez Hall Room 129 and can be contacted by phone at (956) 882-7374 (Voice) or via email at accessibility@utrgv.edu. **Edinburg Campus:** Student Accessibility Services is located in 108 University Center and can be contacted by phone at (956) 665-7005 (Voice), (956) 665-3840 (Fax), or via email at accessibility@utrgv.edu.
MANDATORY COURSE EVALUATION PERIOD:
Students are required to complete an ONLINE evaluation of this course, accessed through your UTRGV account (http://my.utrgv.edu); you will be contacted through email with further instructions. Online evaluations will be available Nov. 13 – Dec. 4, 2019.

ATTENDANCE:
Students are expected to attend all scheduled classes and may be dropped from the course for excessive absences. UTRGV’s attendance policy excuses students from attending class if they are participating in officially sponsored university activities, such as athletics; for observance of religious holy days; or for military service. Students should contact the instructor in advance of the excused absence and arrange to make up missed work or examinations.

SCHOLASTIC INTEGRITY:
As members of a community dedicated to Honesty, Integrity and Respect, students are reminded that those who engage in scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and expulsion from the University. Scholastic dishonesty includes but is not limited to: cheating, plagiarism, and collusion; submission for credit of any work or materials that are attributable in whole or in part to another person; taking an examination for another person; any act designed to give unfair advantage to a student; or the attempt to commit such acts. Since scholastic dishonesty harms the individual, all students and the integrity of the University, policies on scholastic dishonesty will be strictly enforced (Board of Regents Rules and Regulations and UTRGV Academic Integrity Guidelines). All scholastic dishonesty incidents will be reported to the Dean of Students.

SEXUAL HARASSMENT, DISCRIMINATION, and VIOLENCE:
In accordance with UT System regulations, your instructor is a “responsible employee” for reporting purposes under Title IX regulations and so must report any instance, occurring during a student’s time in college, of sexual assault, stalking, dating violence, domestic violence, or sexual harassment about which she/he becomes aware during this course through writing, discussion, or personal disclosure. More information can be found at www.utrgv.edu/equity, including confidential resources available on campus. The faculty and staff of UTRGV actively strive to provide a learning, working, and living environment that promotes personal integrity, civility, and mutual respect in an environment free from sexual misconduct and discrimination.

COURSE DROPS:
According to UTRGV policy, students may drop any class without penalty earning a grade of DR until the official drop date. Following that date, students must be assigned a letter grade and can no longer drop the class. Students considering dropping the class should be aware of the “3-peat rule” and the “6-drop” rule so they can recognize how dropped classes may affect their academic success. The 6-drop rule refers to Texas law that dictates that undergraduate students may not drop more than six courses during their undergraduate career. Courses dropped at other Texas public higher education institutions will count toward the six-course drop limit. The 3-peat rule refers to additional fees charged to students who take the same class for the third time. vi
## SEMINAR (CLSC 4200)
### TENTATIVE LECTURE SCHEDULE
#### FALL 2019

<table>
<thead>
<tr>
<th>DATE</th>
<th>Topics/ Lectures/Assignments</th>
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<tbody>
<tr>
<td><strong>August 26</strong></td>
<td>Introduction/Overview/Syllabus</td>
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<tr>
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<td>Lecture 1 History</td>
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<td>Lecture 2 Organizational Structures</td>
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<td>Lecture 3 Hospitals &amp; the Healthcare Team</td>
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<td><strong>September 2</strong></td>
<td>Labor Day Holiday – no classes</td>
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<td><strong>September 9</strong></td>
<td>Communication/Who are you?</td>
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<td>Lecture 4 Communication/</td>
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<td>Lecture 5 What Color is your world?</td>
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<td>Lecture 6 Cultural Competency</td>
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<td>Communication exercise</td>
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<td><strong>September 16</strong></td>
<td>Ethics and Critical Pathways/Assign ethics case study</td>
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<td>Lecture 7 Ethics Black Board Tegrity</td>
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<td>Lecture 8 CPWs Black Board Tegrity</td>
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<td>Assign Ethics case study thru Black Board</td>
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<td><strong>September 23</strong></td>
<td>Maintaining CEU’s for certification. ASCP v/s ASCLS. Licensure.</td>
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<td>Lecture 9 ASCP vs ASCLS Tegrity</td>
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<td>Lecture 10 Professionalism Issues Tegrity</td>
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<td>Assign Media Lab thru Black Board</td>
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<td>Assign attendance at District meeting thru Black Board</td>
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<td><strong>September 30</strong></td>
<td>Comprehensive Clinical Lab Science Exam I</td>
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<td>On line Black Board In class room</td>
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<td><strong>October 7</strong></td>
<td>Identification of problems in pre-analytic, analytic and post-analytic testing.</td>
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<td>Lecture 11 Problems in Testing</td>
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<td>Lecture 12 Lab Operations Review</td>
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<td><strong>October 14</strong></td>
<td>Student presentations of assigned Ethics Case Studies</td>
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<td>Assign Algorithm for Corrective action/critical pathway</td>
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October 21  The leadership role of the CLS/The future of CLS
The role of today’s clinical Laboratory in multidisciplinary patient care teams
and its potential future role.
Lecture 13  Leadership
Lecture 14  CLS and the Future
Lecture 15  How to write a patient Case Study
Assignment: Develop a patient case study. Make sure to include all sections.
Use rubric and attach assignment in Blackboard.

October 28  Media Lab Assignment: Complete 5 modules (5 contact hours) and turn in proof
of assigned CEs
Review of BB

November 4  Review of Hemo
November 11  Comprehensive Clinical Lab Science Exam II
November 18  Review of Micro
November 25  Review of Chem
December 2  Review of Serology/UA/Phlebotomy
December 12  Comprehensive Clinical Lab Science Mock Registry Exam