THE UNIVERSITY OF TEXAS RIO GRANDE VALLEY
CLINICAL LABORATORY SCIENCE PROGRAM

COURSE: CLSC 4303 Medical Laboratory Leadership

Summer 2019

INSTRUCTOR: Sandra L. Tijerina

CONTACT INFORMATION: Office HSHW 2.206A Telephone: 665-2296

Email: Contact me through Blackboard using the Mail tool or the Weekly Any Questions Discussions. Students are encouraged to use the Weekly Any Questions Discussions first before using the Mail tool within Blackboard. Response to Weekly Any Questions Discussions or Blackboard emails will be within 24 hours M-TR 8 am to 8 pm. Weekend response time may be longer. The 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 eMail or Blackboard account for all future correspondence with UTRGV faculty and staff.

Office Hours: Online by appointment only or via office telephone during the following times:

Mon & Tues 9-11AM
PREREQUISITES: Acceptance into the Clinical Laboratory Science Program

CREDIT HOURS: 3 Semester Hours

COURSE DESCRIPTION: An introduction to the leadership roles and responsibilities of the clinical laboratory scientist in management, supervision and education as well as the regulatory and legal aspects of laboratory medicine.

TEXTBOOK:


Additional References:


METHODS OF EVALUATION:

<table>
<thead>
<tr>
<th>Evaluation Method</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Interview</td>
<td>4%</td>
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<tr>
<td>Resume and Cover Letter</td>
<td>8%</td>
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<tr>
<td>Education Unit</td>
<td>15%</td>
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<tr>
<td>Memo Assignment</td>
<td>4%</td>
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<tr>
<td>Lab Procedure</td>
<td>10%</td>
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<tr>
<td>Exams</td>
<td>45%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>10%</td>
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<tr>
<td>Affective</td>
<td>4%</td>
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GRADING SCALE: 90 - 100 A  80 – 89 B  70 - 79 C  65 - 70 D*  <65 F*  

*Grades of D or F are not acceptable for graduation in the clinical laboratory science program.
METHODS OF INSTRUCTION:

This is a fully online course. Blackboard Learn tools such as the Discussion Tool, the Assessment Tool, the Assignment tool and Tegrity will be utilized to deliver course content. Students will be expected to participate in class discussions via the discussion tool and submit assignments as attachments using the Assignment tool. The instructor will be available to answer questions via email or via the telephone during office hours. Students may also make an appointment to meet with the instructor when they are on campus.

COURSE REQUIREMENTS:

1. Students are expected to complete all the weekly assignments by the end of the assigned time period. Students will be accessing the Assignment Tool, the Discussion Tool, the Assessment Tool and the Learning Modules as well as lectures on Tegrity. Specific weekly objectives and assignments are contained in the overview for the module for each week. Students are expected to listen to the assigned lectures using the Tegrity Tool, read assigned material in the textbook or supplemental reading, participate in any assigned discussion board topic, submit any practice assignments and complete any assigned quiz or exam for the week. All quizzes are due by midnight on Sunday night. The week runs Monday through Sunday night at midnight. Class participation in the assigned weekly discussions will be evaluated as part of the affective grade. Students should see the affective objectives for further information regarding class expectations.

2. Students are expected to carefully review the objectives for each module and use them as an aid in studying. Online courses require student active participation and as such the student is expected to display self directed learning behaviors. The student is responsible for regularly checking email and making sure that all assignments are completed by the expected due date. Assignments are due on the designated day. A penalty of 10 points per week or portion thereof will be subtracted for any assignment turned in late.

Assignment Overview:

Students will have several written assignments representative of leadership activities of clinical laboratory scientists. These assignments are listed below along with the expected due date:

<table>
<thead>
<tr>
<th>Assignments</th>
<th>Due Date</th>
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</thead>
<tbody>
<tr>
<td>Memo Assignment</td>
<td>June 24</td>
</tr>
<tr>
<td>Manager or Supervisor Interview</td>
<td>July 8</td>
</tr>
<tr>
<td>Resume and Cover Letter</td>
<td>July 22</td>
</tr>
<tr>
<td>Lab Procedure following CLIA guidelines</td>
<td>July 29</td>
</tr>
<tr>
<td>Education Unit of Instruction</td>
<td>Aug 5</td>
</tr>
</tbody>
</table>
Written materials should be typed and professional in appearance. Only word documents will be accepted. All assignments should follow the grading rubric provided and use proper grammar, spelling and punctuation. Submit all assignments as an attachment in assignment dropbox. After the scheduled due date grades will be available within one week. All grades will be listed in the My Grades area for students.

**DISCUSSION OVERVIEW**

Weekly Discussions

- For the Weekly Discussion Topics, students will need to post an initial post by Wednesday at midnight following the discussion assignment guidelines. After reading the postings of other class members, each student should ask a question or pose a substantive comment to at least one other course member by Friday at midnight.
- Students should continue to read responses by others and respond to questions posed to you by your classmate(s) by Sunday at midnight.
- Participation in the Weekly Discussions will be evaluated as part of the affective grade.
- Use proper grammar, punctuation, and sentence structure.

Any Questions Discussion

- Each Module (1-10) will have a 'Weekly Any Questions Discussion' forum.
- This is non-gradable.
- Any questions regarding that particular module or assigned readings should be posted here.
- Students are encouraged to use the Weekly Any Questions Discussions first before using the Mail tool within Blackboard.

**ASSESSMENT OVERVIEW**

There will be a total of three major exams and seven weekly quizzes. Exams & Quizzes will be drawn from a pool of questions. Students are expected to maintain a student code of honor and professional responsibility when taking exams and quizzes. Exam and quiz material may not be shared or discussed with other members of the class. Books and other notes or reference material may not be used during exams or quizzes. Students are expected to take all examinations and quizzes during the scheduled time period.

Make-up examinations will be given only if sufficient cause is demonstrated and if arrangements are made with the instructor prior to the scheduled test. No makeup quizzes are allowed. Students will have 55 minutes to complete each of the three major exams and 10 minutes to complete each 10 question quiz. Quizzes will be available all week but may only be attempted once.

All assigned Quizzes will end on Sunday at midnight. ALL Exams will end on Monday at midnight. After the scheduled availability dates and times for Quizzes and Exams, students will be able to access ALL grades in the My Grades area for students. In order to protect the security of the exams and quizzes, students will receive a report of the number of questions that were
missed via blackboard but will not have access to the exam and quiz questions through blackboard after taking the quizzes and exams.

Major exams are scheduled on the following days: (only one attempt will be allowed)

<table>
<thead>
<tr>
<th>Exam One</th>
<th>June 24 Monday</th>
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<tbody>
<tr>
<td>Exam Two</td>
<td>July 22 Monday</td>
</tr>
<tr>
<td>Exam Three</td>
<td>August 12 Monday</td>
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</tbody>
</table>

Note: Please do not use the computers in the library for exams or quizzes as they tend to freeze or crash. This could cause you to have difficulty completing a scheduled exam or quiz.

Course Evaluation

By UTRGV Policy, the Mandatory Course Evaluation Period is **Aug 1- August 15**. Students are required to complete an ONLINE evaluation of this course accessed through your UTRGV account ([https://my.utrgv.edu/](https://my.utrgv.edu/)); you will be contacted through email with further instructions on the evaluation process. The evaluation window closes at 11:59 pm on August 16, the last day of classes for the 10 week summer session. Students who complete their evaluations by August 15 will have priority access to their grades.

**COMPUTER REQUIREMENTS:**

Blackboard Learn is a web based application that is run through a Web Browser. If your computer can successfully run any of the popular web browsers out there like Internet Explorer or Mozilla Firefox then you will be able to use Blackboard. Keep in mind that your browser must be configured to work properly with Blackboard. This means having Java installed, Pop up Blockers disabled and cookies enabled. To check if your browser is compatible with Blackboard you can do a browser check by visiting the Blackboard Browser Tune-Up page or you can see a list of Blackboard compatible browsers. This is important when using certain features in Blackboard like the Chat Tool, File Uploads, quizzes etc. You will also need to have the Lockdown Browser installed on your computer when taking exams and quizzes. Directions for installing the lockdown browser are shown below:

To download the lockdown browser, go to [http://www.respondus.com/lockdown/information.pl?ID=721834533](http://www.respondus.com/lockdown/information.pl?ID=721834533)

a. Select Windows or Mac
b. Select Your Own Computer
c. Click on Download Installer – Server 1 or Download Installer – Server 2.
d. Run the Software.
e. If you would like help, please contact our COLTT help desk at (956) 665-2979.
For help using blackboard learn, you can contact the help desk at colthlep@utpa.edu or call 665-2979. There is also a list of frequently asked questions which is available at the online learning website:

**Blackboard Help Desk Assistance:**

For the following issues, you should contact the Blackboard Help Desk.

- Server issues (site not available, server is slow)
- Course access (login problems, course not available)
- Technical problems (a function not working properly)

**Contact Information:**

Education Complex EDCC 2.202  956-665-5327  cdlhelp@utpa.edu

**DISABILITY SERVICES NOTICE:**

**Inform Your Instructor of Any Accommodations Needed**

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.

**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](http://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.
VAQUERO HONOR CODE

Honesty, Integrity, & Respect
As members of a community dedicated to honesty, integrity, and mutual respect in all interactions and relationships, the students, faculty and administration of our university pledge to abide by the principles in the Vaquero Honor Code.

- **WE ARE HONEST**
  We do our own work and are honest with one another in all matters. We understand how any act of dishonesty, including cheating, plagiarizing, falsifying data, and giving or receiving unauthorized assistance, conflicts as much with academic achievement as with the values of honesty and integrity.

- **WE HAVE INTEGRITY**
  We do not lie, cheat, steal, or tolerate those who do. We will make personal and academic integrity fundamental in all of our endeavors.

- **WE ARE RESPECTFUL**
  We act civilly and cooperate with one another for the common good. We will strive to create an environment and a culture in which people respect and listen to one another. We recognize a university is, above all, a place for the exchange of ideas, popular and unpopular. It is the one institution in society that encourages challenges to conventional wisdom. Consequently, we pledge to encourage the exchange of ideas and to allow others to participate and express their views openly.

The Vaquero Student Honor Statement:
I pledge I will not cheat, plagiarize, falsify data or give or receive unauthorized assistance on academic work in accordance with the Vaquero Honor Code. I further pledge to support a culture of academic integrity.

Student Guidelines
The student is responsible for seeking a better understanding of any of the concepts discussed above by consulting with a faculty member; visit the library website, and/or calling the Dean of Students Office at 956-665-2260.
Violations of the Vaquero Honor Code should be reported to the faculty in charge of the course or Student Rights and Responsibilities.
The identity of the student reporting violations of the Vaquero Honor Code will be confidential until such time as the student chooses to have their identity revealed.
The Student Hearing Process and Appeal Procedures outlined in section STU 02–100 of the Handbook of Operating Procedures outlines the rights afforded to students who are accused of violating the Student Conduct and Discipline and the Vaquero Honor Code.

The Vaquero Faculty Honor Statement

I recognize students' rights and pledge to uphold the principles of honesty, integrity, and mutual respect in all interactions and relationships at UTRGV. I pledge to follow the Faculty Guidelines (see below) in treating student academic misconduct.
Faculty Guidelines

The Faculty Senate requests that faculty include the principle statement found above in their course syllabi and refer students to the Student Conduct and Discipline Code for more information.

To preempt violations, instructors shall make an effort to explain to students at the outset of a course or the start of an examination the behavior expected of them when taking examinations or when preparing and submitting other course work. Further, faculty should actively monitor examinations and consider using a plagiarism detection utility or other appropriate software. In all cases of alleged violations of academic integrity, faculty members must maintain confidentiality.

To process violation cases, faculty should follow the procedures outlined in the Academic Dishonesty Sanction Guidelines and HOP/STU 02–100.

Faculty must collect accurate records of an academic integrity violation and submit those records to Student Rights and Responsibilities.

Faculty should encourage students who have been accused of an academic integrity violation to contact Student Rights and Responsibilities, which can serve as a resource.

OVERALL PROGRAM LEARNING OUTCOMES

Upon completion of the clinical laboratory science program, students will be able to:

1. Demonstrate entry level knowledge and skills in hematology.
2. Demonstrate entry level knowledge and skills in clinical chemistry.
3. Demonstrate entry level knowledge and skills in immunohematology.
4. Demonstrate entry level knowledge and skills in 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.

COURSE OBJECTIVES:

Upon completion of this course and without the aid of notes or textbook, the student should be able to achieve the following. Achievement will be met when a minimum score of 70% percent is earned as detailed in the methods of evaluation section of this syllabus.

Affective Objectives

1. Demonstrate dependability by participating in all online class discussions and activities according to the established course outline.
2. Follow instructions in developing class assignments.
3. Exhibit a respectful, courteous and friendly attitude when participating in class
discussions.
4. Listens to Tegrity lectures according to established guidelines.

Cognitive and Psychomotor Objectives

I. INTRODUCTION TO EDUCATION

1. Given an instructional situation, develop appropriate educational materials or programs
2. Develop strategies and policies which can be used to promote participation in continuing
   education programs.
3. Calculate appropriate C.E.U. values for an educational program using standard criteria.
4. Identify the education responsibilities of CLS/MLS professionals.
5. Describe the opportunities for obtaining continuing education.
6. Defend the necessity for lifelong learning in clinical laboratory science.
7. Describe the continuing education responsibilities of managers and supervisors.
8. Identify the requirements for a successful educational program.
9. Differentiate between a goal and an objective.
10. Identify possible sources for subject guidance when preparing an educational unit.
11. Describe the four phases of the planning processes when preparing an educational unit.
12. Discuss the relevant factors when determining the audience for an educational unit.

II. OBJECTIVES

1. Identify the major components of a properly stated behavioral objective.
2. Given a behavioral objective, evaluate whether or not it is properly stated and make any
   necessary corrections.
3. Differentiate between the three learning domains.
4. Classify objectives into appropriate taxonomy levels and domains.
5. Given an educational situation, construct objectives in appropriate taxonomy levels and
   domains.
6. Differentiate between acceptable and unacceptable verbs in a behavioral objective.

III. PLANNING AND DEVELOPING INSTRUCTION

1. Identify the major factors which should be considered when selecting an instructional
   method.
2. Compare the advantages and disadvantages of common instructional methods.
3. Given an instructional goal, identify the best instructional method.
4. Identify the major parts of an instructional lesson plan.
5. Differentiate between the various forms of instructional media and compare the
   advantages and disadvantages.
6. Discuss the advantages of using multiple instructional modalities.
7. Differentiate between the three types of questioning techniques discussed in the course.
V. EVALUATION

1. Given an instructional objective and a specific level of learning, develop an evaluation item which will provide a valid measure of the objective.
2. Identify the major purposes of evaluation
3. Differentiate between formative and summative evaluation.
4. Differentiate between criterion and norm referenced evaluation.
5. Compare and contrast the different methods of evaluation.
6. Compare the advantages and disadvantages of major types of written exam items.
7. Classify exam questions according to Bloom's taxonomy level.
8. Given a behavioral objective, determine if an exam question is appropriate.
9. Discuss the problems associated with the evaluation of clinical instruction
10. Suggest appropriate methods to increase the objectivity and minimize problems during the evaluation of students in clinical evaluation.
11. Differentiate between academic and nonacademic dismissals.
12. Identify appropriate methods of evaluating instructional effectiveness.
13. Given a behavioral objective, develop appropriate evaluation items which match the objective.

VI. CLINICAL INSTRUCTION

1. Identify problems associated with clinical instruction.
2. Differentiate between the three phases of clinical instruction.
3. Discuss affective qualities for a good clinical instructor.
4. Develop appropriate strategies to maximize learning in the clinical environment.

VII. TERMINAL OBJECTIVE FOR EDUCATION SECTION

1. Design a unit of instruction demonstrating the following behaviors:
   a. Prepare appropriate behavioral objectives
   b. Select appropriate methods of instruction
   c. Develop a lesson plan
   d. Prepare appropriate instructional aids.
   e. Develop evaluation items which match the instructional objectives.

VIII. NATURE OF MANAGEMENT

1. Define management and the conditions necessary for its success.
2. Identify the major roles and functions associated with effective laboratory management.
3. Differentiate between the following terms: a. Director b. Administrator c. Manager d. Supervisor
4. Discuss the following terms: a. planning b. organizing c. implementing and controlling
5. Apply key management principles in response to a problem based case study.

IX. ORGANIZATIONAL SYSTEMS
1. Identify the characteristics of open systems.
2. Apply the open systems model to the healthcare setting.
3. Compare and contrast open and closed systems.
4. Identify the factors which influence the design and structure of organizations.
5. Prepare an organizational chart reflecting the structure and chain of command for a health care facility or organization.
6. Explain the following terms: a. departmentalization b. specialization c. decentralization d. unity of command e. span of control
7. Differentiate between the bureaucratic and situation modules of organizational structure.
8. Compare and contrast formal and informal work groups.
9. Identify the key components of an organizational system.
10. Describe the factors which should be considered when designing an organizational system.
11. Discuss the possible consequences of lack of fit between the key components of an organization.
12. Differentiate between authority and accountability.
13. Describe each of the following structural interventions and their impact on laboratory organizations:
   a. self managed teams b. MBO c. Quality Circles d. Total Quality Management e. Reengineering-LEAN
14. Describe the various forms of organizational communication discussed in the course.
15. Compare and contrast verbal and nonverbal communication.
16. Differentiate between business email etiquette and social email.
17. Prepare a business letter and memo using appropriate format, structure and grammar.

X. MANAGING CONFLICT AND CHANGE

1. Describe the change process.
2. Identify sources of change.
3. Develop strategies for dealing with change.
4. Describe factors which often cause resistance to change.
5. Identify sources of conflict during a change.
6. Develop appropriate methods for dealing with conflict and change.

XI. DECISION MAKING AND PROBLEM SOLVING

1. Differentiate between problem solving and decision making
2. Identify traps which may lead to poor decision making.
3. Identify the critical steps in the problem solving process.
4. Apply the problem solving process to a relevant laboratory management issue.
5. Identify tools that may aid in decision making and problem solving.
6. Identify appropriate tools/techniques which can be used in problem solving.
7. Differentiate between the following types of decision making approaches:
8. Discuss each of the following quality improvement strategies: a. Shewhart Cycle b. Six Sigma
XII. LEADERSHIP STYLES AND MOTIVATION

1. Identify key attributes and competencies for effective leadership.
2. Describe the five basic needs in Maslow’s need hierarchy.
3. Compare and contrast theory X and theory Y styles of management.
4. Relate motivational theories to workplace situations.
5. Relate leadership style to work environment.
6. Differentiate between the different types of power and their relative importance.
7. Classify motivational theories as to content or process models.
8. Discuss the concept of management by objectives.
9. Compare and contrast the concepts and advantages/disadvantages of major leadership models discussed in class.
10. Identify three key functions of a formal leader.
11. Compare and contrast leadership versus management.
12. Define four competencies for effective leadership.
13. Assess one's own leadership style according to leadership styles presented.

XIII. HUMAN RESOURCE MANAGEMENT

1. Identify appropriate methods of communicating vacancies in recruitment efforts.
2. Identify the laws which impact the employee selection process.
3. Differentiate between appropriate and inappropriate inquiries on the application form and during the interview.
4. Explain the importance and limitations of reference checks.
5. Conduct an appropriate interview for the selection of a new employee.
6. Identify the elements of the total compensation package for an employee.
7. Describe appropriate methods for determining compensation for various positions.

XIV. EFFECTIVE RESUME WRITING and INTERVIEWING SKILLS

1. Develop a resume and cover letter according to the guidelines discussed in class.
2. Identify appropriate items and formats for inclusion in a professional resume.
3. Utilize appropriate strategies to prepare for a job interview.
4. Identify the common stages and topics included in an interview for a professional position.
5. Develop appropriate questions to ask a potential employer.
6. Discuss possible strategies that might be used to handle difficult or hard to answer questions.

XV. JOB ANALYSIS AND JOB DESIGN
1. Identify factors which are appropriate to be considered in a job analysis.
2. Develop job descriptions incorporating the required areas.
3. Identify the requirements for a good job description.
4. Identify possible methods for performing job analysis.
5. Differentiate between the organizational and employee objectives for a job description.

XVI. PERFORMANCE APPRAISAL

1. Conduct a performance appraisal appropriately.
2. Describe the parts of a good performance appraisal.
3. Differentiate between criteria based and competency based performance evaluations.
4. Identify appropriate procedures when counseling, disciplining and dismissing employees.
5. Identify possible problems in conducting a performance appraisal.

XVII. STAFFING AND SCHEDULING

1. Distinguish between the staffing and scheduling process.
2. Identify factors which influence staffing and scheduling decisions.
3. Compare and contrast the advantages of traditional and alternative work schedules.
4. Differentiate between fulltime, part time, salaried, hourly, FLEX, PRN and Per Diem employees.
5. Compare the 8/80 and 40 hour workweek rules.
6. Discuss the major considerations when developing a work schedule.
7. Develop a work schedule that meets the needs of a department without violating any regulatory rules.
8. Identify potential problems in staffing and scheduling.

XVIII. WAGE AND SALARY ADMINISTRATION

1. Identify legislation governing wage compensation.
2. Differentiate between the various types of employee benefits and services.
3. Differentiate between paid productivity, worked productivity and specified productivity.
4. Given the number of hours worked and the number of employees, calculate the number of FTE needed.
5. Identify appropriate peer groups for benchmarking.
6. Explain the reason why benchmarking is important.

XIX. MATERIALS MANAGEMENT

1. Differentiate between purchase order and a requisition.
2. Discuss the role of the materials management department.
3. Discuss the importance of making good purchasing decisions.
4. Define purchasing.
5. Identify appropriate factors to consider when evaluating a capital purchase.
6. Name the major purchasing categories.
7. Identify the factors which should be considered when determining the frequency and size for orders.
8. Explain the difference between a contract agreement and a time and material arrangement.
9. Describe appropriate goals for inventory control.
10. Explain the following terms: a. standing order b. buying power c. buying consortium

XX. LABORATORY POLICIES AND PROCEDURES

1. Explain the needs and purposes of laboratory procedures and policies.
2. Prepare a technical procedure according to the recommended guidelines.
3. Differentiate between a policy and a procedure.
4. Differentiate between preanalytical, analytical and postanalytical processes.

XXI. REGULATORY AND PROFESSIONAL OVERSIGHT

1. Analyze laboratory practices for compliance with CLIA requirements.
2. Define the following CLIA terms: a. laboratory b. authorized person c. certificate of registration d. deemed status e. test complexity categories
3. Relate test complexity to personnel regulations
5. Differentiate between accreditation, certification, credentialing and licensure.
6. Compare and contrast the agencies which accredit laboratories and health care institutions.
7. Identify management responsibilities under accreditation programs.
8. Describe typical steps in the accreditation process.
9. Identify the major areas of quality requirements for the preanalytical, analytical and postanalytical areas of the laboratory as described in class.
10. Explain the importance and role of proficiency testing under CLIA.
11. Formulate strategies for meeting the regulations that are applicable to his or her healthcare organization.
12. Compare and contrast a phase one and phase two deficiency under CAP.
13. Describe the jurisdiction and regulatory content covered by each of the following organizations or laws: a. FDA b. CDC c. OSHA d. HIPPA e. CMS
14. Develop appropriate procedures to ensure laboratory compliance with OSHA and HIPPA regulations.
15. Identify the following concepts: a. QC b. QA c. TQM/CQI d. QA&I/CPI e. Quality Indicators
16. Differentiate between preanalytical, analytical and postanalytical phases of testing
17. Defend the importance of medical laboratory scientists involvement in all phases of laboratory testing.
18. Discuss the importance of critical analysis of all phases of the laboratory testing process.

XXII. DYNAMICS OF HEALTHCARE DELIVERY SYSTEMS
1. Compare the percentage of healthcare costs in the GDP in 1965 to the approximate percentage today.
2. Identify factors which have influenced changes in the cost of healthcare.
3. Differentiate between Medicare and Medicaid.
4. List the different parts of Medicare and relate them to payment for healthcare services.
5. Compare fee for service to DRG reimbursement.
6. Define CPT and ICD-9/10 codes.
7. Compare and contrast managed care, PPO and HMO.
8. Compare the following types of reimbursement: a. capitation b. per diem c. per case
9. Discuss competitive bidding and its potential effects on the laboratory.
10. Evaluate the impact of changes in how CMS views hospital acquired conditions.
11. Discuss the purpose and concept of critical care pathways and utilization review.
12. Explain the current emphasis on patient safety.
13. Identify appropriate strategies in the laboratory to improve patient safety.
15. Identify the impact of the ABN on laboratory practice.
16. Identify the purpose of a compliance program.
17. List the common elements of a compliance plan.
18. Discuss the role and responsibilities of the lab manager regarding compliance.
19. Critique a laboratory compliance plan.
20. Given a case study, analyze the information and propose a solution for the problem.

XXIII. FUNDAMENTALS OF FINANCIAL MANAGEMENT AND REVENUE AND COST ACCOUNTING

1. Compare for profit and not for profit healthcare organizations.
2. Identify the purpose and use of financial accounting.
3. Define the following terms: a. balance sheet b. assets c. liabilities d. owner's equity e. income statement f. revenues g. expenses
4. Identify the information contained on each of the following documents: a. Balance sheet b. statement of income and retained earnings c. statement of flow of funds
5. Differentiate between the cash basis and accrual basis for recording financial activity.
6. Utilize a budget to guide expenditures.
7. Interpret a budget performance report.
8. Differentiate between direct and indirect costs.
9. Differentiate between fixed, variable and semivariable costs.
10. Calculate cost per billable test.
11. Differentiate between billable and nonbillable tests.
12. Identify the following: a. Chargemaster b. Accounting codes
13. Perform a breakeven analysis and calculate a breakeven point.

XXIV. BUDGETS

1. Compare the following: a. operating budget b. capital budget c. appropriations type budget d. private sector budgets
2. Differentiate between the following types of budgeting methods:
   a. forecast or projection methods
   b. flexible
   c. zero based budgeting
3. Identify factors which should be considered when preparing a budget request.
4. Differentiate between personnel expenses, operating expenses, minor equipment and capital expenses.
5. Relate fiscal year to budget cycle.
6. Prepare a budget justification.

XXV. INFORMATICS

1. Describe the significance of LIS validation
2. Compare the advantages and disadvantages of the following types of systems:
   a. custom designed
   b. software packages only
   c. turnkey systems
3. Describe the desirable attributes for an LIS system as described by Lincoln and Aller.
4. Identify the important functions of an LIS system
5. Determine appropriate strategies to maintain system security for an LIS system.
6. Identify the steps involved in the selection and acquisition of laboratory information systems.
7. Evaluate a LIS for possible purchase and installation in a laboratory setting.
8. Define the following terms:
   a. Needs analysis
   b. Cost Justification
   c. System evaluation
   d. RFP
   e. Cumulative file
   f. Archive File
   g. Back Up
9. Discuss the use of the web to report lab results.
10. Discuss the importance of information security in a healthcare setting.
11. Discuss the components of a request for proposal or RFP.
12. Identify groups of individuals that could provide valuable input into the selection process

XXVI. INSTRUMENT SELECTION

1. List the major factors that must be considered when purchasing an instrument for a laboratory.
2. Discuss the various types of individuals who should be involved in the instrument selection process and the type of input they are likely to provide.
3. Identify major cost considerations related to instrument acquisition.
4. Given a case study, analyze the important factors and propose an appropriate solution for the problem.

WEEKLY SCHEDULE

MODULE ONE

<table>
<thead>
<tr>
<th>Dates</th>
<th>June 3-9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topics</td>
<td>Orientation to Blackboard</td>
</tr>
<tr>
<td></td>
<td>Read Syllabus</td>
</tr>
<tr>
<td></td>
<td>Read and Review Bronc Honor Code</td>
</tr>
<tr>
<td></td>
<td>Lecture One-Intoduction to Ed Aspects of CLS</td>
</tr>
<tr>
<td>Students will be expected to complete the assigned reading and listen to the lectures on the listed topics using the Tegrity tool. Students will also be expected to complete the self assessment, participate in the discussion board and take the weekly quiz by midnight on June 10.</td>
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<tr>
<td><strong>MODULE TWO</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Dates</strong></td>
<td>June 10-16</td>
</tr>
</tbody>
</table>
| **Topics** | Lecture Three-Planning and Developing Instruction  
Lecture Four -Evaluation |
| **Reading** | Chapter 9- Textbook  
Web Resources |

<table>
<thead>
<tr>
<th>Students will be expected to complete the assigned reading and listen to the lectures on the listed topics using the Tegrity tool. Students will also be expected to complete the self assessment, participate in the discussion board and take the weekly quiz by midnight on June 16.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MODULE THREE</strong></td>
</tr>
<tr>
<td><strong>Dates</strong></td>
</tr>
</tbody>
</table>
| **Topics** | Lecture Five -Clinical Instruction  
Lecture Six- Nature of Management  
Lecture Seven -Organizational Structure  
**Memo Assignment Due June 24th**  
**Manager/Supervisor interview assignment due July 8th**  
**Resume Due July 22**  
**Lab Procedure Due July 29**  
**Unit of Instruction Due-August 5th** |
| **Reading** | Chapter 2 and 4- Textbook  
Supplemental Web Resources |

Students will be expected to complete the assigned reading and listen to the lectures on the listed topics using the Tegrity tool.
Students will also be expected to complete the self assessment, participate in the discussion board and take the weekly quiz by midnight on June 23.

**MODULE FOUR**

<table>
<thead>
<tr>
<th>Dates</th>
<th>June 24-June 30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topics</td>
<td></td>
</tr>
<tr>
<td>Exam One- June 24</td>
<td></td>
</tr>
<tr>
<td>Lecture Eight - Managing Conflict and Change</td>
<td></td>
</tr>
<tr>
<td>Lecture Nine - Problem Solving and Decision Making</td>
<td></td>
</tr>
<tr>
<td>Memo Assignment Due June 24th</td>
<td></td>
</tr>
<tr>
<td>Manager or Supervisor interview assignment due July 8th</td>
<td></td>
</tr>
<tr>
<td>Resume Due July 22</td>
<td></td>
</tr>
<tr>
<td>Lab Procedure Due July 29</td>
<td></td>
</tr>
<tr>
<td>Unit of Instruction Due August 5th</td>
<td></td>
</tr>
<tr>
<td>Reading Assignment</td>
<td>Chapter 5-Textbook</td>
</tr>
</tbody>
</table>

The exam will cover modules one, two and three and is scheduled for June 24. The exam will be on campus from 1-2PM. You must use Respondus. Students will be expected to complete the assigned reading and listen to the lectures on the listed topics using the Tegrity tool. Students will also be expected to complete the self assessment and participate in the discussion board on the new material in this module by June 29. There will be no weekly quiz since a major exam has been scheduled for this week.

**MODULE FIVE**

<table>
<thead>
<tr>
<th>Dates</th>
<th>July 1 - July 7th</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topics</td>
<td></td>
</tr>
<tr>
<td>Lecture Ten - Leadership Styles and Motivation</td>
<td></td>
</tr>
<tr>
<td>Lecture Eleven - Human Resource Guidelines, Laws</td>
<td></td>
</tr>
<tr>
<td>Manager or Supervisor interview assignment due July 8th</td>
<td></td>
</tr>
<tr>
<td>Resume Due July 22</td>
<td></td>
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<tr>
<td>Lab Procedure Due July 29</td>
<td></td>
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<tr>
<td>Unit of Instruction Due August 5th</td>
<td></td>
</tr>
<tr>
<td>Reading Assignments</td>
<td>Chapter 3 and 6 - Textbook</td>
</tr>
<tr>
<td>Web Resources</td>
<td></td>
</tr>
</tbody>
</table>

Students will be expected to complete the assigned reading and listen to the lectures on the listed topics using the Tegrity tool. Students will also be expected to complete the self assessment, participate in the discussion board and take the weekly quiz by midnight on July 7th.

**MODULE SIX**
<table>
<thead>
<tr>
<th>Dates</th>
<th>July 8 - July 14th</th>
</tr>
</thead>
</table>
| Topics      | Lecture Twelve - Resumes  
|             | Lecture Thirteen - Job Design, Job Descriptions and Appraisal of Job Performance  
|             | Manager or Supervisor interview assignment due July 8  
|             | Resume Due July 22  
|             | Lab Procedure Due July 29  
|             | Unit of Instruction Due August 5th |
| Reading Assignment | Chapter 7 and 8 Textbook  
|             | Chapter 3 supplemental reading in Hudson on blackboard |

Students will be expected to complete the assigned reading and listen to the lectures on the listed topics using the Tegrity tool. Students will also be expected to complete the self assessment, participate in the discussion board and take the weekly quiz by midnight on July 14.

**MODULE SEVEN**

<table>
<thead>
<tr>
<th>Dates</th>
<th>July 15 - July 21</th>
</tr>
</thead>
</table>
| Topics      | **Exam II - July 16 Monday**  
|             | Lecture Fourteen - Policy and Procedure Manuals  
|             | Lecture Fifteen - Staffing, Scheduling, Wage and Salary Administration and Materials Management  
|             | Resume Due July 22  
|             | Lab Procedure Due July 29  
|             | Unit of Instruction Due - August 5 |
| Reading Assignment | Chapter 16 in textbook  
|             | Chapters 21 and 25 supplemental reading in Hudson |

The exam will cover modules four, five and six and is scheduled for **July 16 Monday**. The exam will be on campus from 1-2PM. Students will be expected to complete the assigned reading and listen to the lectures on the listed topics using the Tegrity tool. Students will also be expected to complete the self assessment, and participate in the discussion board on the new material in the module by July 22. No quiz is scheduled for this week since there is a major exam scheduled.

**MODULE EIGHT**

<table>
<thead>
<tr>
<th>Dates</th>
<th>July 22 - July 28</th>
</tr>
</thead>
</table>
### MODULE NINE

<table>
<thead>
<tr>
<th>Dates</th>
<th>July 29-Aug 4</th>
</tr>
</thead>
</table>
| Topics         | Lecture Eighteen - Principles of Financial Management  
                 Lecture Nineteen - Revenue and Cost Accounting  
                 **Lab Procedure Due July 29**  
                 **Unit of Instruction Due-August 5** |
| Reading Assignment | Chapter 10 and 11 -Textbook |

Students will be expected to complete the assigned reading and listen to the lectures on the listed topics using the Tegrity tool.  
Students will also be expected to complete the self assessment, participate in the discussion board and take the weekly quiz by midnight on August 4.

### MODULE TEN

<table>
<thead>
<tr>
<th>Dates</th>
<th>August 5-11</th>
</tr>
</thead>
</table>
| Topics         | Lecture Twenty - Budgets  
                 Lecture Twenty One - Informatics and Selection of Laboratory Instruments  
                 **Unit of Instruction Due-August 5** |
| Reading Assignment | Chapter 12-Textbook  
                               Chapter 17-Textbook |
Chapter 32- Supplemental Reading in Hudson on Blackboard

Students will be expected to complete the assigned reading and listen to the lectures on the listed topics using the Tegrity tool. Students will also be expected to complete the self assessment, participate in the discussion board and take the weekly quiz by midnight on August 11.

**MODULE 11**

<table>
<thead>
<tr>
<th>Date</th>
<th>August 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignment</td>
<td>Exam III</td>
</tr>
</tbody>
</table>

Exam three will cover modules seven, eight, nine and ten. **Exam three is scheduled for August 12.** The exam will be on campus from 1-2PM. There is no discussion or quiz for this week.