

**MA 164 Course Outline as of Fall 2013****CATALOG INFORMATION**

Dept and Nbr: MA 164 Title: CLINICAL LAB THEORIES

Full Title: Theories of the Clinical Laboratory

Last Reviewed: 1/27/2020

| Units   | Course Hours per Week |                   | Nbr of Weeks |      | Course Hours Total |       |
|---------|-----------------------|-------------------|--------------|------|--------------------|-------|
| Maximum | 2.00                  | Lecture Scheduled | 2.00         | 17.5 | Lecture Scheduled  | 35.00 |
| Minimum | 2.00                  | Lab Scheduled     | 0            | 8    | Lab Scheduled      | 0     |
|         |                       | Contact DHR       | 0            |      | Contact DHR        | 0     |
|         |                       | Contact Total     | 2.00         |      | Contact Total      | 35.00 |
|         |                       | Non-contact DHR   | 0            |      | Non-contact DHR    | 0     |

Total Out of Class Hours: 70.00

Total Student Learning Hours: 105.00

Title 5 Category: AA Degree Applicable

Grading: Grade Only

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly:

**Catalog Description:**

Introduction to the clinical laboratory. Urinalysis, hematology, blood chemistry, serology testing, and normal ranges are studied. .

**Prerequisites/Corequisites:**

Course Completion of MA 165 and Concurrent Enrollment in MA 163B and MA 163BL and MA 166.4 ( or MA 66.4)

**Recommended Preparation:**

Eligibility for ENGL 1A or equivalent

**Limits on Enrollment:****Schedule of Classes Information:**

Description: Introduction to the clinical laboratory. Urinalysis, hematology, blood chemistry, serology testing, and normal ranges are studied. Students will perform low complexity tests and use microscopes to examine lab slides. (Grade Only)

Prerequisites/Corequisites: Course Completion of MA 165 and Concurrent Enrollment in MA 163B and MA 163BL and MA 166.4 ( or MA 66.4)

Recommended: Eligibility for ENGL 1A or equivalent

Limits on Enrollment:

Transfer Credit:

Repeatability: Two Repeats if Grade was D, F, NC, or NP

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

**AS Degree:**      **Area**      Effective:      Inactive:

**CSU GE:**      **Transfer Area**      Effective:      Inactive:

**IGETC:**      **Transfer Area**      Effective:      Inactive:

**CSU Transfer:**      Effective:      Inactive:

**UC Transfer:**      Effective:      Inactive:

**CID:**

**Certificate/Major Applicable:**

Both Certificate and Major Applicable

## **COURSE CONTENT**

**Outcomes and Objectives:**

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

1. Demonstrate understanding of laboratory testing.
2. Identify a variety of laboratory tests utilized in the outpatient setting.
3. Identify guidelines applicable to medical assisting students using Clinical Laboratory Improvement Amendments (CLIA) criteria.
4. Read and comprehend a computerized laboratory request/report.
5. Instruct a patient in the preparation necessary for specific laboratory tests.
6. List the Occupational Safety and Health Administration (OSHA) blood borne pathogen standards for biologic specimen collection.
7. Describe the proper handling and transportation of laboratory specimens per agency.
8. Define patient education for the signs, symptoms, and transmission of infectious diseases.
9. Perform rudimentary urinalysis.
10. Identify the normal ranges for common laboratory tests.
11. Recognize and report abnormal laboratory findings to appropriate medical staff.

**Topics and Scope:**

I. Introduction to the clinical laboratory and outpatient specimen collection and testing in medical assisting:

A. The clinical lab - documentation

1. Purpose
2. Lab request form
3. Using lab directories
4. Relationship (of agency lab) to the medical office
5. CLIA criteria
6. Testing categories

B. Quality control and safety methods - specimens

1. Collecting

2. Handling
3. Transport
4. Preparing slides for physician review

C. Outpatient tests: types

1. Urinalysis
2. Microbiologic
3. Papanicolaou (PAP)

II. Structure, function and terms related to urine composition and analysis - under microscopic view:

1. Identifying sediment
2. Effects of pregnancy
3. Normal ranges

III. Purpose of hematology, blood chemistry and serology tests

1. Process of obtaining a specimen
2. Normal ranges
3. Abnormal values' reporting
4. Transport

IV. Educating patients: guidelines for specimen collection.

**Assignment:**

1. Complete (15-20 pages) of reading assignments, per week.
2. Homework problems:
  - a. Critical thinking skills (5-10) applications per week
  - b. Vocabulary assessment (10-20 words) per week
3. Review (10-15) lab reports/data interpretation.
4. Successful completion of( 5-7) unit exams and 1 final exam.

**Methods of Evaluation/Basis of Grade:**

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Written homework, critical thinking skills; vocabulary assessment

Writing  
20 - 40%

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Lab reports, data interpretation

Problem solving  
20 - 40%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

None

Skill Demonstrations  
0 - 0%

**Exams:** All forms of formal testing, other than skill performance exams.

Completion of unit exams and one final exam

Exams  
20 - 40%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

None

Other Category  
0 - 0%

**Representative Textbooks and Materials:**

Clinical Procedures for Medical Assistants, K. Bonewit-West, 8th Ed., Saunders, 2012  
Student Mastery Manuel, K. Bonewit-West, 9th Ed., Saunders, 2009