RARITAN VALLEY COMMUNITY COLLEGE ACADEMIC COURSE OUTLINE

MLTC 290 Clinical Experience: Urinalysis & Body Fluids

I. Basic Course Information

A. Course Number and Title: MLTC 290 Clinical Experience: Urinalysis & Body Fluids

B. New or Modified Course: Modified

C. Date of Proposal: Semester: Fall Year: 2024

D. Effective Term: Fall 2025

E. Sponsoring Department: Science & Engineering

F. Semester Credit Hours: 1

G. Weekly Contact Hours: Clinical: 45 total hours

Out of class student work per week: 0

H. Prerequisites/Corequisites: MLTC 120 with a grade C or higher or with instructor's permission

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I. Laboratory Fees: None

II. Catalog Description

Prerequisite – MLTC 120 with a grade C or higher or with instructor's permission This course provides entry-level clinical laboratory experience in the areas of Urinalysis and Body Fluids. Emphasis is placed on technique, accuracy, and precision. Upon completion, students should be able to demonstrate entry-level competence on final clinical evaluations.

III. Statement of Course Need

- **A.** Urinalysis and Body Fluid testing and analysis are necessary skills needed for competent MLTs. This course is required for the Medical Laboratory Technology program.
- **B.** This course is completed at the clinical site.

C. This course generally transfers as a Free Elective, but dependent on the transfer institution it may transfer as a Program Elective to schools that offer a B.S. degree in Clinical Laboratory Science.

IV. Place of Course in College Curriculum

- A. Free Elective
- B. This course meets a program requirement for the Associate of Applied Science degree program in Medical Laboratory Technology
- C. To see course transferability: a) for New Jersey schools, go to the NJ Transfer website, www.njtransfer.org; b) for all other colleges and universities, go to the individual websites.

V. Outline of Course Content

- 1. Quality Control in urinalysis
- 2. Specimen collection and special precautions
- 3. Physical and Chemical exam of body fluids
- 4. Qualitative and quantitative urinalysis tests on samples.
- 5. Microscopic examination of urinary sediments
- 6. Manual WBC and RBC counts of body fluids
- 7. Principle and performance of the Acetest, Ictotest, Clinitest and SSA procedures.

VI. A. Course Learning Outcomes:

At the completion of the course, students will be able to:

- 1. Explain the principles and significance of urinalysis and body fluid tests and results (GE-1).
- 2. Use appropriate mathematical applications to interpret data (GE-2*).
- 3. Explain the principles of and demonstrate correct use of urinalysis and body fluids instrumentation and technology (GE-1, 3, 4).

(*Embedded critical thinking)

- 4. Perform the appropriate manual and automated analyses in the urinalysis and body fluid lab with accuracy and precision
- 5. Evaluate and apply quality control measurements in all phases of analysis in the chemistry labs.
- 6. Handle specimens for assay procedures following standard precautions and safety
- 7. Identify the abnormal patient results and correlate those results with the patient's condition, and accurately report them.
- 8. Develop professionalism, communication skills, and interpersonal relationships by working cooperatively with instructors, preceptors and fellow students

A. Assessment Instruments

Students in this course are evaluated by the following methods.

- 1- Observation by clinical site instructors
- 2- Weekly Journal
- 3- Presentation

VII. Grade Determinants

- 1- Observation by Clinical Instructors
- 2- Weekly Journal

Students are expected to maintain a weekly journal and are graded based on completion.

3- Presentation

Students are graded based on the rubric provided to them.

VIII. Texts and Materials

Students must maintain the weekly lab journal during their clinical rotation.

FUNDAMENTALS OF URINE AND BODY FLUIDS, 4TH EDITION (ELSEVIER)

ISBN: 9780323374798

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The course outline is intended only as a guide to course content and resources. Do not purchase textbooks based on this outline. The RVCC Bookstore is the sole resource for the most up-to-date information about textbooks.

IX. Resources

- A. Clinical site laboratory
- B. RVCC library database

X. Honors Options

An Honors Option is not available for this course.