

**RARITAN VALLEY COMMUNITY COLLEGE
ACADEMIC COURSE OUTLINE**

MLTC 140 Histology Techniques

I. Basic Course Information

- A. Course Number and Title: MLTC 140 Histology Techniques
- B. New or Modified Course: New
- C. Date of Proposal: Semester: Spring Year: 2020
- D. Effective Term: Fall 2021
- E. Sponsoring Department: Science & Engineering
- F. Semester Credit Hours: 1 credit
- G. Weekly Contact Hours:
 - Lecture: 0
 - Laboratory: 2
 - Clinical: 15 hours per semester
 - Out of class student work per week: 1
- H. Prerequisites: MLTC 100 with a grade of C or higher and BIOL 125 with a grade of C or higher; or permission of the instructor
- I. Laboratory Fees: Yes
- J. Name and Telephone Number or E-Mail Address of Department Chair and Divisional Dean at time of approval:
 - Department Chair: Marianne Baricevic, Marianne.baricevic@raritanval.edu
 - Divisional Dean: Sarah Imbriglio, sarah.imbriglio@raritanval.edu

II. Catalog Description

Prerequisites: MLTC 100 with a grade of C or higher and BIOL 125 with a grade of C or higher; or permission of the instructor. This course is an introduction to histological techniques used in the clinical laboratory setting. Topics include tissue preparation, fixation, embedding, sectioning, mounting and staining to facilitate microscopic observation. Students will be required to identify common cellular and tissue structures and will be required to follow all laboratory and safety protocols.

III. Statement of Course Need

- A. Histology techniques is a specialized skill needed for competent MLTs. This course is required for the Medical Laboratory Technology program.
- B. This is a lab only course so that the specialized histology techniques can be practiced.
- C. This course generally transfers as a Free Elective, but 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

- A. Safety
- B. Fixation
- C. Processing
- D. Instrumentation
- E. Embedding
- F. Staining

VI. General Education and Course Learning Outcomes

A. General Education Learning Outcomes:

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

1. Describe the role of a clinical histology laboratory in the health care system (NJ-GE 1).
2. Perform proper laboratory techniques and demonstrate the correct use of equipment and instruments required in histology (NJ-GE 3).
3. Describe quality assessment practices for histology (NJ-GE 1).

B. Course Learning Outcomes:

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

1. Describe the four main tissue types in humans.
2. Describe common histology laboratory procedures used to prepare stained slides from tissue samples.
3. Select an appropriate stain for specific tissues and pathogens.
4. Demonstrate common histology procedures such as embedding tissue in paraffin, tissue sectioning and mounting, or routine staining of tissue sections.
5. Identify cellular structures within a prepared tissue slide using the most appropriate magnification for the structure.

C. Assessment Instruments

1. Exams
2. Assignments
3. laboratory products
4. laboratory reports
5. demonstrations

VII. Grade Determinants

- A. Exams
- B. Assignments
- C. laboratory products
- D. laboratory reports
- E. demonstrations

The primary formats, modes, and methods for teaching and learning that may be used in the course:

- A. demonstration
- B. small-group work
- C. computer-assisted instruction
- D. guest speakers
- E. laboratory

VIII. Texts and Materials

- A. Textbooks

Sample of specific text which may be featured:

- Histotechnology: A Self-Instructional text, Frieda Carson and Christa Hladik, ASCP Press.

(Please Note: 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

What specific or unusual resources (such as library, computer, or laboratory resources) does the College presently have that will be necessary for the course? What additional resources will be needed? List the resources.

A. Laboratory

X. Honors Options

An Honors Option is not available for this course.