



**CATALOG DESCRIPTION:** This course will introduce the student to the purpose, collection/procedural techniques, and recording of diagnostic laboratory procedures commonly performed in the medical office.

**PREREQUISITE(S):** MED 676, MED 677, MED 679, MED 682, MED 685, MED 686, MED 687

**COREQUISITE(S):** MED 678, 681 (above if FT)

**CREDITS:** 3                                   **HOURS:** 3.5 (60 Classroom Hours)

\*Last class session is 4 hours

**REQUIRED TEXT(S):** Lindh, W., Tamparo, C., Dahl, B., Morris, J., & Correa, C. (2018). *Comprehensive medical assisting* (6<sup>th</sup> ed.). Cengage.

**Cengage Course Code:**

**SUPPLEMENTAL MATERIALS:**

**INSTRUCTOR INFORMATION:**

**OFFICE HOURS:**



<b>CORE COMPETENCIES:</b> The following core competencies are embedded in this curriculum: Communicate effectively in both speech and writing; Apply appropriate mathematical and statistical concepts and operations to interpret data to solve problems; Use scientific method of inquiry, through the acquisition of scientific knowledge; Understand ethical issues and situations; Address an information need by locating, evaluating, and effectively using information.	
<b>LEARNING ASSESSMENT</b>	
<b><i>Student Learning Outcomes:</i></b>	<b><i>Suggested Means of Assessment:</i></b>
Demonstrate an understanding of safety, quality assurance, quality control, and the protocols carried out in the medical office laboratory	Written exams, laboratory skill assessments (including work products), graded homework assignments
Collect specimens and perform routine urinalysis, including physical, chemical, and microscopic analysis	Written exams, laboratory skill assessments (including work products), graded homework assignments
Perform venipuncture and phlebotomy procedures and understand the rationale for the collection and processing of blood specimens for hematology, chemistry, immunology, and microbiology	Written exams, laboratory skill assessments (including work products), graded homework assignments
Understand standard precautions and perform procedures for the handling of all a) body fluids, secretions, excretions, b) blood, c) intact skin, and d) mucous membranes	Written exams, laboratory skill assessments (including work products), graded homework assignments
Perform CLIA waived testing, including hematology, chemistry, immunology, and microbiology	Written exams, laboratory skill assessments (including work products), graded homework assignments
Recognize the difference between normal and abnormal laboratory results and the importance of proper documentation and reporting	Written exams, laboratory skill assessments (including work products), graded homework assignments
Recognize the relationship between the Food and Drug Administration (FDA) and CLIA waived laboratory examinations and procedures commonly performed in medical offices that have insignificant risk of erroneous error	Written exams, laboratory skill assessments (including work products), graded homework assignments
<b>GRADING SYSTEM:</b>	C+ = 77 < 80
A = 90 < 100	C = 75 < 77
B+ = 87 < 90	F= Below 75
B = 80 < 87	

**DISABILITY SERVICES STATEMENT:** Warren County Community College is committed to providing all students equal access to learning opportunities. Student Services is the campus



office that works with students who have disabilities to provide and/or arrange reasonable accommodations. Students who have, or think they may have, a disability (e.g. mental health, learning, vision, hearing, physical or systemic), are invited to contact Student Services to arrange a confidential discussion at (908) 835-2300 or by email at [StudentServices@warren.edu](mailto:StudentServices@warren.edu) as soon as possible. Students registered for Disability Services with Student Services, who have requested accommodations for the current semester will be provided with an electronic letter detailing individual accommodations and are encouraged to contact the instructor early in the semester to discuss accommodations outlined in their letter.

**INSTRUCTIONAL SUPPORT CENTER:** The Instructional Support Center (ISC), located in Room 105 across from the library, provides academic support at no cost to WCCC students and is available for courses in which they are currently enrolled. The ISC is staffed with trained professional and peer tutors who are ready to help you understand and succeed. For scheduling or further information, visit the ISC in person, online at <http://www.warren.edu/tutoring/> or by telephone at (908)835-2354.

**STATEMENT AND POLICY ON CHEATING, PLAGIARISM AND ACADEMIC DISHONESTY:** Students are required to perform all the work specified by the instructor and are responsible for the content and integrity of all academic work submitted. A violation of academic integrity will occur if a student: (1) knowingly represents work of others as one's own, (2) uses or obtains unauthorized assistance in any academic work, (3) gives fraudulent assistance to another student, or (4) furnishes false information or other misuse of college documents.

In cases of suspected violation of academic integrity, the incident is to be reported to the Office of Academics. A student found guilty of violating the rule of academic integrity by the Vice President of Academics will be considered to have failed in personal obligation to the College; such failure will be subject to disciplinary action by the College. Unless otherwise notified, the instructor will allow students who are pending disciplinary action to attend class.

**REQUIRED FORMAT FOR RESEARCH PAPERS:** Research papers written for any Warren County Community College class must conform to the required documentation style. Papers written for humanities (and some social science) classes will follow the most recent edition of the Modern Language Association (MLA) in-text citation and bibliographic methods. Social science and science papers will require the use of the most recent edition of the American Psychological Association (APA) in-text citation and bibliographic methods.

Please consult with your instructor regarding the correct documentation style to use in his/her class.

**ATTENDANCE POLICY:** Students are expected to attend all class sessions of courses in which they are enrolled and are responsible for all material presented in class and all homework assignments.



Grades are based on the quality of work completed in meeting the requirements for a particular course, as stated in the course syllabus and catalog description.

Excessive absence may be considered sufficient cause for dismissal from class by an instructor or other appropriate college staff member. Any decision to exclude a student from class or the College due to excessive absence shall be subject to review by the President in accordance with established procedures. Students who have not attended class are not entitled to a refund of tuition.

**WCCC HAYTAIAN & MAIER LIBRARY**

Text: 908-652-4445

Email: [lstoll@warren.edu](mailto:lstoll@warren.edu)

<http://warren.libguides.com>

Please see the library's website above for current semester hours.

The WCCC Library offers a wide range of services to students specific to the information literacy goals of the College which includes suggesting research strategies, facilitating the use of both digital and print resources, as well as assisting students with citations to avoid plagiarism.

The library also serves as the College's computer space, with computers for students to use when the library is open. Students also have free, unlimited printing from the College's computers, as well as space to study.

The library is where students can get their college student ID cards. All students are required to get a student ID card and carry it while on campus for security purposes. To get a student ID card, you must bring another form of ID to the library. You may also be asked to bring a printed copy of your current class schedule. You can get a student ID card any time that the library is open. These cards do not expire and can be used for your duration at WCCC.

Additionally, the library participates in a national inter-library loan program which is available free to all students and faculty. You can submit ILL requests by emailing the librarian or by stopping by the library's circulation desk.

**TOPICAL OUTLINE:**

Safety in the Lab, The Microscope, Quality Assurance and Control, Record Keeping in the Medical Lab, Urine Specimen Collection and Processing, Physical and Chemical Properties of Urine, Microscopic Properties of Urine, Routine and Advanced Venipuncture, Chemical Analyzers and Clinical Application, Hemoglobin and Hematocrit, The Complete Blood Count, Advanced Hematology Studies, Immunology and Microbiology Testing



The following MAERB Core Curriculum Competencies are taught and assessed in this course:

**Cognitive Domain**

- I.C. 9 Identify Clinical Laboratory Improvement Amendments (CLIA) waived tests associated with common diseases
- I.C. 11 Identify quality assurance practices in healthcare
- II.C. 3 Analyze normal and abnormal results as reported in:
  - a. graphs
  - b. tables
- III.C. 6 Identify personal protective equipment (PPE)

**Psychomotor Domain**

- I.P. 2 Perform the following procedures:
  - b. venipuncture
  - c. capillary puncture
- I.P. 10 Perform a quality control measure
- I.P. 11 Collect specimens and perform:
  - a. CLIA waived hematology test
  - b. CLIA waived chemistry test
  - c. CLIA waived urinalysis test
  - d. CLIA waived immunology test
  - e. CLIA waived microbiology test
- II.P. 2 Record laboratory test results into the patient's record
- III.P. 1 Participate in Blood Borne Pathogen training
- III.P. 2 Select appropriate barrier/personal protective equipment (PPE)
- III.P. 10 Demonstrate proper disposal of biohazardous material
  - a. regulated wastes
  - b. b. sharps



**GRADING METHODS:**

**METHODS OF EVALUATION:** Tests, Quizzes, Class Participation, Papers/Projects, Final Examination, and Work Products which assess the cognitive, psychomotor, and affective domains.

**GRADING SYSTEM:**

Tests and Quizzes	50%
Papers/Projects/Work Products	20%
Class Participation	5%
Final Exam	25%

CAAHEP requires that medical assisting students pass 100% of all psychomotor and affective domain objectives and competencies in order to be eligible for program completion. 75% or higher is considered passing for all courses and related competencies. Students may make 3 attempts to successfully complete each work product competency.

**LATE WORK POLICY:**

Late work is unacceptable unless prior arrangements have been made with the appropriate instructor.

**MISSED EXAM POLICY:**

Scheduled exams cannot be cut. Illness and excused absences are the exceptions. Absence for an exam or quiz will result in a 10% grade deduction on that assessment.

Students who miss a scheduled examination must make arrangements with the instructor and/or the ISC department to schedule a time to make up that exam.

Class Participation includes attendance. Students will realize a 10% deduction for each absence. In order to achieve full credit for Participation, students must attend all scheduled sessions, come to class prepared, and participate fully.

\*Please refer to Medical Assisting Program Policy in the Medical Assisting Handbook.



**ITINERARY:**

<b>LESSON</b>	<b>CHAPTER(S)</b>
1	<b>37-Regulatory Guidelines for Safety and Quality in the Medical Laboratory</b>
2	<b>38-Introduction to the Medical Laboratory</b>
3	<b>Test #1 38-Introduction to the Medical Laboratory</b>
4	<b>41-Urinalysis</b>
5	<b>41-Urinalysis</b>
6	<b>41-Urinalysis</b>
7	<b>Test #2 39-Phlebotomy; Venipuncture and Capillary Puncture</b>
8	<b>39-Phlebotomy; Venipuncture and Capillary Puncture</b>
9	<b>39-Phlebotomy; Venipuncture and Capillary Puncture</b>
10	<b>43-Specialty Laboratory Tests Coagulation and Chemistry</b>
11	<b>Test #3 43-Specialty Laboratory Tests Blood Glucose-Measuring and Monitoring</b>
12	<b>40-Hematology Hemoglobin and Hematocrit</b>
13	<b>40-Hematology RBC and WBC Counts: Manual Procedures Differential WBC: Manual Procedures</b>
14	<b>Test #4 40-Hematology ESR</b>
15	<b>42-Basic Microbiology &amp; 43-Specialty Laboratory Tests Immunology Tests and Mono Testing</b>
16	<b>42-Basic Microbiology Other Tests</b>
17	<b>Final Examination</b>