

ITT Technical Institute

ME2531

Medical Office Laboratory Procedures

Onsite and Online Course

SYLLABUS

Credit hours: 4.5


Contact/Instructional hours: 56 (34 Theory Hours, 22 Lab Hours)

Prerequisite(s) and/or Corequisite(s):

Prerequisite: MA1210 College Mathematics I or equivalent, ME1431 Clinical Medical Assisting or equivalent

Course Description:

This course explores medical office laboratory procedures. Topics include: laboratory safety, the Clinical Laboratory Improvement Amendments (“CLIA”), quality control testing, laboratory equipment, and the medical assistant’s scope of practice in the medical laboratory; proper collection and handling techniques, waived laboratory procedures; and patient preparation, capillary and venipuncture techniques, and processing specimens.



COURSE SUMMARY

COURSE DESCRIPTION

This course explores medical office laboratory procedures. Topics include laboratory safety, the Clinical Laboratory Improvement Amendments (CLIA), quality control testing, laboratory equipment and the medical assistant's scope of practice in the medical laboratory, proper collection and handling techniques, waived laboratory procedures, and patient preparation, capillary and venipuncture techniques and processing specimens.

MAJOR INSTRUCTIONAL AREAS

1. Medical Asepsis
2. Physical Assessment
3. Minor Office Surgeries
4. Radiology and Diagnostic Imaging
5. Clinical Laboratory Tests
6. Emergency Medical Procedures

COURSE LEARNING OBJECTIVES

By the end of this course, you should be able to:

1. Apply knowledge of medical terminology.
2. Review basic anatomy and physiology.
3. Apply medical law and ethics to medical assisting activities and procedures.
4. Utilize patient psychology and communications to provide patient care.
5. Obtain vital signs, including pulse, temperature, blood pressure, pulse oximetry, and height and weight.
6. Perform physical exams.
7. Perform various medical office procedures.
8. Demonstrate basic clinical diagnostic examinations.
9. Perform basic testing and treatment procedures.

MODULE 1: INTRODUCTION TO THE CLINICAL LABORATORY

COURSE LEARNING OBJECTIVES COVERED

- Apply knowledge of medical terminology.
- Apply medical law and ethics to medical assisting activities and procedures.
- Perform various medical office procedures.

TOPICS COVERED

- The Medical Record
- Medical Asepsis and OSHA Standard
- Sterilization and Disinfection
- Introduction to the Clinical Laboratory

MODULE LEARNING ACTIVITIES	GRADE D	Out-Of-Class Time
Reading: Bonewit-West, K., Chapters 1, 2, 3, and 15	No	7 hrs
Lesson: Study the lesson for this module.	No	1 hr
Discussion: Participate in the discussion titled "Medical Charts."	Yes	NA
Lab: Complete the lab titled "Medical Record, Infection Control, Sterilization of Instruments, and Collecting Specimens for Transporting to an Outside Laboratory."	Yes	NA
Quiz: Prepare for Quiz 1.	No	2 hrs

Total Out-Of-Class Activities: 10 Hours

MODULE 2: VITAL SIGNS AND PHYSICAL EXAMINATION

COURSE LEARNING OBJECTIVES COVERED

- Apply knowledge of medical terminology.
- Review basic anatomy and physiology.
- Apply medical law and ethics to medical assisting activities and procedures.
- Utilize patient psychology and communications to provide patient care.
- Obtain vital signs, including pulse, temperature, blood pressure, pulse oximetry, and height and weight.
- Perform physical exams.
- Perform various medical office procedures.
- Demonstrate basic clinical diagnostic examinations.
- Perform basic testing and treatment procedures.

TOPICS COVERED

- Vital Signs
- The Physical Exam
- Eye and Ear Assessment and Procedures
- The Pediatric Examination

MODULE LEARNING ACTIVITIES	GRADE D	Out-Of-Class Time
Reading: Bonewit-West, K., Chapters 4, 5, 6, and 9	No	13 hrs
Lesson: Study the lesson for this module.	No	2 hrs
Discussion: Participate in the discussion titled "Low Oxygen Saturation."	Yes	NA
Exercise: Submit the exercise titled "Poster."	Yes	2 hrs
Lab: Complete the lab titled "Vital Signs and Physical Examination."	Yes	NA
Quiz: Take Quiz 1.	Yes	NA
Quiz: Prepare for Quiz 2.	No	2 hrs

Total Out-Of-Class Activities: 19 Hours

MODULE 3: MEDICAL OFFICE PROCEDURES

COURSE LEARNING OBJECTIVES COVERED

- Apply knowledge of medical terminology.
- Review basic anatomy and physiology.
- Apply medical law and ethics to medical assisting activities and procedures.
- Utilize patient psychology and communications to provide patient care.
- Perform various medical office procedures.
- Demonstrate basic clinical diagnostic examinations.
- Perform basic testing and treatment procedures.

TOPICS COVERED

- Minor Office Surgery
- Cardiopulmonary Procedures
- Phlebotomy
- Hematology

MODULE LEARNING ACTIVITIES	GRADE D	Out-Of-Class Time
Reading: Bonewit-West, K., Chapters 10, 12, 17, and 18	No	17 hrs
Lesson: Study the lesson for this module.	No	2 hrs
Discussion: Participate in the discussion titled "Minor Office Surgery."	Yes	NA
Exercise: Submit the exercise titled "Cheat Sheet."	Yes	2 hrs
Lab: Complete the lab titled "Medical Office Procedures."	Yes	NA
Quiz: Take Quiz 2.	Yes	NA

Total Out-Of-Class Activities: 21 Hours

MODULE 4: BLOOD CHEMISTRY

COURSE LEARNING OBJECTIVES COVERED

- Apply knowledge of medical terminology.
- Review basic anatomy and physiology.
- Apply medical law and ethics to medical assisting activities and procedures.
- Utilize patient psychology and communications to provide patient care.
- Perform various medical office procedures.
- Demonstrate basic clinical diagnostic examinations.
- Perform basic testing and treatment procedures.

TOPICS COVERED

- Blood Chemistry and Immunology
- Medical Microbiology

MODULE LEARNING ACTIVITIES	GRADE D	Out-Of- Class Time
Reading: Bonewit-West, K., Chapters 19 and 20	No	4.5 hrs
Reading: ITT Tech Virtual Library> Basic Search> <i>Blood typing 101</i>	No	1.5 hrs
Reading: ITT Tech Virtual Library> School of Study> Breckinridge School of Nursing and Health Sciences> Databases> Britannica Online> blood analysis	No	1.5 hrs
Lesson: Study the lesson for this module.	No	2 hrs
Discussion: Participate in the discussion titled "Specimen Collection and Fasting Blood Glucose."	Yes	NA
Exercise: Submit the exercise titled "Information Sheet."	Yes	3.5 hrs
Lab: Complete the lab titled "Blood Chemistry."	Yes	NA
Quiz: Prepare for Quiz 3.	No	2 hrs

Total Out-Of-Class Activities: 15 Hours

MODULE 5: WOMEN/MEN'S HEALTH AND RADIOLOGY

COURSE LEARNING OBJECTIVES COVERED

- Apply knowledge of medical terminology.
- Review basic anatomy and physiology.
- Apply medical law and ethics to medical assisting activities and procedures.
- Utilize patient psychology and communications to provide patient care.
- Perform various medical office procedures.
- Demonstrate basic clinical diagnostic examinations.
- Perform basic testing and treatment procedures.

TOPICS COVERED

- Gynecologic Examination and Prenatal Care
- Colon Procedures and Male Reproductive Health
- Urinalysis
- Radiology and Diagnostic Imaging

MODULE LEARNING ACTIVITIES	GRADE D	Out-Of- Class Time
Reading: Bonewit-West, K., Chapters 8, 13, 14, and 16	No	11 hrs
Lesson: Study the lesson for this module.	No	2 hrs
Discussion: Participate in a discussion titled "Obstetric Patient Workup and Patient Preparation for Radiologic Exam."	Yes	NA
Exercise: Submit the exercise titled "Concept Mapping."	Yes	1.5 hrs
Lab: Complete the lab titled "Reproductive Exams, Urinalysis, and Imaging."	Yes	NA
Quiz: Take Quiz 3.	Yes	NA
Final Exam: Prepare for the final exam.	No	5 hrs

Total Out-Of-Class Activities: 19.5 Hours

MODULE 6: EMERGENCY MEDICAL PROCEDURES

COURSE LEARNING OBJECTIVES COVERED

- Apply knowledge of medical terminology.
- Review basic anatomy and physiology.
- Apply medical law and ethics to medical assisting activities and procedures.
- Utilize patient psychology and communications to provide patient care.
- Obtain vital signs, including pulse, temperature, blood pressure, pulse oximetry, and height and weight.
- Perform physical exams.
- Perform various medical office procedures.
- Demonstrate basic clinical diagnostic examinations.
- Perform basic testing and treatment procedures.

TOPICS COVERED

- Emergency Medical Procedures

MODULE LEARNING ACTIVITIES	GRADE D	Out-Of-Class Time
Reading: Bonewit-West, K., Chapter 21	No	2 hrs
Lesson: Study the lesson for this module.	No	2 hrs
Lab: Complete the lab titled "Final Procedure Demos."	Yes	NA
Final Exam: Take the final exam.	Yes	NA

Total Out-Of-Class Activities: 4 Hours

EVALUATION AND GRADING

EVALUATION CRITERIA

The graded assignments will be evaluated using the following weighted categories:

CATEGORY	WEIGHT
Discussion	10%
Exercise	10%
Lab	10%
Quiz	35%
Final Exam	35%
TOTAL	100%

GRADE CONVERSION

The final grades will be calculated from the percentages earned in the course, as follows:

GRADE	PERCENTAGE
A (4.0)	90-100%
B+ (3.5)	85-89%
B (3.0)	80-84%
C+ (2.5)	75-79%
C (2.0)	70-74%
D+ (1.5)	65-69%
D (1.0)	60-64%
F (0.0)	<60%

LEARNING MATERIALS AND REFERENCES

REQUIRED RESOURCES

COMPLETE TEXTBOOK PACKAGE

- Bonewit-West, K. (2014). *Clinical procedures for medical assistants (9th ed.)*. St. Louis, MO: Saunders Elsevier.

RECOMMENDED RESOURCES

- Professional Associations
 - American Association of Medical Assistants (AAMA)
<http://www.aama-ntl.org/>
 - The American Registry of Medical Assistants (ARMA)
<http://arma-cert.org/aboutarma>
 - Clinical Medical Assistant Certification (CCMA)
<http://www.nhanow.com/clinical-medical-assistant.aspx>
- ITT Tech Virtual Library (accessed via Student Portal | <https://studentportal.itt-tech.edu>)
 - Basic Search
 - Boyd, C. (2013). *Calculation skills for nurses*. Chichester, West Sussex, UK: John Wiley & Sons, Ltd.
 - Brassington, C., & Goretti, C. (2011). *MA notes: Medical assistant's pocket guide (2nd ed.)*. Philadelphia, PA: F. A. Davis Co.
 - Balaban, N., & Bobick, J. (2008). *The handy anatomy answer book*. Detroit, MI: Visible Ink Press.
 - Eagle, S. (2009). *The professional medical assistant: An integrated, teamwork-based approach*. Philadelphia, PA: F.A. Davis Co.
 - Fuqua, T., & Zonderman, J. (2009). *Medical assisting PDQ*. Edinburgh, UK: Elsevier Saunders.
 - Hardy, K. (2011). *Medical assistant exam success: A Q & A review applying critical thinking to test taking*. Philadelphia, PA: F.A. Davis Co.
 - Hull, M. (2013). *Medical language: Terminology in context*. Philadelphia, PA: F. A. Davis Co.

- Culp, J. (2014). *Jump-starting careers as medical assistants & certified nursing assistants*. New York, NY: Rosen Publishing Group, Inc.
- Jones & Bartlett, L. (2012). *2012 Nurse's drug handbook*. Burlington, MA: Jones & Bartlett Learning.
- Moses, K. P. (2013). *Atlas of clinical gross anatomy*. Philadelphia, PA: Elsevier/Saunders.
- Rogers, K. A., & Scott, W. N. (2011). *Nurses! Test yourself in anatomy and physiology*. Berkshire, England: Open University Press.
- Scanlon, V., & Sanders, T. (2007). *Essentials of anatomy and physiology (5th ed.)*. Philadelphia, PA: F.A. Davis Co.
- Venes, D. (2013). *Taber's cyclopedic medical dictionary (22nd ed.)*. Philadelphia, PA: F.A. Davis Co.
- AMT Events
- Modern Healthcare

- Evolve Student Resources

Free study materials accompany many Elsevier textbooks. Your instructor may have set up a course on Evolve that contains these free materials. If your instructor has provided you with a course id and you need to enroll into this course, [Click Here](#).

You can also register for your textbook's resources. To locate and gain access to these materials follow the steps below.

1. Go to <http://evolve.elsevier.com> and click **Student View**.
2. On the **Catalog** tab, click the green **Evolve Resources** box.
3. Search by author or title keyword in the search box and click the search button.
4. Click the desired title to review additional information.
5. Click the **REGISTER For this now** button.
6. Request additional products by using the search box at the top right. Once you are finished, click the **Redeem/Checkout** button to continue.
7. If you are a returning user, enter your Evolve username and password and click **Login**. If you are new to Evolve, enter your name, email, desired password, and institution information, and click the **Continue** button.

8. Click the **Registered User Agreement** link located at the bottom right. Once you have read this information, check the **Yes, I accept the Registered User Agreement** box if you agree.
9. Click the **Submit** button.
10. You now have access to the Evolve Resources. Click the **Get Started** link to access the Resources immediately.
11. Existing content is available by clicking the **My Evolve** tab.

For downloadable resources:

Once the electronic resources are available, you will see links to download them directly or to go to a separate location within the Elsevier site. If you are linked to a separate Elsevier product page, select the Resources tab and then click on Instructor Resources on that page to see all available resources, both print and electronic. You can download electronic resources from this page; follow the prompts.

If you have questions about the ITT Instructor Resource site, contact Instructor.ITT@Elsevier.com.

INSTRUCTIONAL METHODS AND TEACHING STRATEGIES

The curriculum employs a variety of instructional methods that support the course objectives while fostering higher cognitive skills. These methods are designed to encourage and engage you in the learning process in order to maximize learning opportunities. The instructional methods include but are not limited to lectures, collaborative learning options, use of technology, and hands-on activities.

To implement the above-mentioned instructional methods, this course uses several teaching strategies, such as opinion-based discussions that enable you to analyze different topics related to medical office laboratory procedures. You can also use this discussion to share best practices, tips, and solutions with your classmates. The lessons focus on viewing, demonstrating, and practicing various medical laboratory procedures. Your progress will be regularly assessed through a variety of assessment tools including discussions, exercises, labs, quizzes, and final exam.

OUT-OF-CLASS WORK

For purposes of defining an academic credit hour for Title IV funding purposes, ITT Technical Institute considers a quarter credit hour to be the equivalent of: (a) at least 10 clock hours of classroom activities and at least 20 clock hours of outside preparation; (b) at least 20 clock hours of laboratory activities; or (c) at least 30 clock hours of externship, practicum or clinical activities. ITT Technical Institute utilizes a “time-based option” for establishing out-of-class activities which would equate to two hours of out-of-class activities for every one hour of classroom time. The procedure for determining credit hours for Title IV funding purposes is to divide the total number of classroom, laboratory, externship, practicum, and clinical hours by the conversion ratios specified above. A clock hour is 50 minutes.

A credit hour is an artificial measurement of the amount of learning that can occur in a program course based on a specified amount of time spent on class activities and student preparation during the program course. In conformity with commonly accepted practice in higher education, ITT Technical Institute has institutionally established and determined that credit hours awarded for coursework in this program course (including out-of-class assignments and learning activities

described in the “Course Outline” section of this syllabus) are in accordance with the time-based option for awarding academic credit described in the immediately preceding paragraph.

ACADEMIC INTEGRITY

All students must comply with the policies that regulate all forms of academic dishonesty or academic misconduct. For more information on the academic honesty policies, refer to the Student Handbook and the Course Catalog.

INSTRUCTOR DETAILS

Instructor Name	
Office Hours	
Contact Details	

(End of Syllabus)