

COURSE DESCRIPTIONS

PSY 107 Psychology of Success

Students will learn to balance home, work, and college using human relations skills, enabling them to contribute more to organizational productivity, and in general, have more successful careers.

Prerequisites: None

MAP 110 Medical Terminology

The student who successfully completes this course will be able to understand and build an extensive medical vocabulary including medical abbreviations. The student should also be able to use the word-building system to further define new medical terms as necessary.

Prerequisites: None

ENG 121 English Communications

Fundamentals of communication theory and practice are reviewed and practiced. Topics include the study of vocabulary, spelling, mechanics, parts of speech, and sentence analysis.

Prerequisites: None

MLT 140 General Chemistry

This course is designed to give the student fundamental basic knowledge of chemistry in preparation for utilization in the clinical laboratory. This course will cover basic principles, vocabulary, molecular structures, methods of measurement, quantum theory, acids, bases, and salts.

Prerequisites: None

MLT 100 Introduction to the Medical Lab

This course is designed to introduce students to OSHA standards, personal protective equipment, the care and use of laboratory equipment including microscopes and proper techniques for handling of glassware. In addition, students will learn basic skills in hematology, urinalysis, microbiology, chemistry, and parasitology. Quality control documentation requirements and techniques used in lab reporting will also be presented.

Corequisites: MAP 110 Medical Terminology

CIS 110 Fundamental Computer Skills

Students learn basic computer skills for the business and medical office. Hands-on experience with PC applications and typing technique will be the focus.

Prerequisites: None

MAP 123 Anatomy & Physiology: Circulation & Life

The student who successfully completes this course will be able to identify the first systems of the body and their major functions, describe the relationship of anatomy and physiology to the medical terminology used in transcribing medical records, and identify gross anatomical features on selected diagrams of the body systems.

Corequisites: MAP 110 Medical Terminology

MAP 122 Anatomy & Physiology: Control & Metabolism

The student who successfully completes this course should be able to identify the remaining systems of the body and their major functions, describe the relationships of anatomy and physiology to the medical terminology used in transcribing medical records, and identify gross anatomical features on selected diagrams of the body systems.

Prerequisites: MAP 110 Medical Terminology

MLT 105 Instrumentation & Quality Control

Students will be introduced to laboratory instrumentation including the spectrophotometer, perform linearity studies, and incorporate all aspects of quality control required in the laboratory.

Corequisites: MLT 100 Introduction to the Medical Lab; MLT 110 Math for Medical Specialties

MLT 115 Molecular Biology

Students who are enrolled in this course will learn the fundamentals of molecular biology. Students will have an understanding of cellular biology, genetics, metabolism, mitosis, and meiosis and how they relate to medical laboratory testing.

Prerequisites: None

MLT 110 Math for Medical Specialties

Upon completion of this course, students will have an understanding of mathematical concepts used in general chemistry, clinical chemistry, hematology, and basic physics needed for proper calculation in a medical setting.

Prerequisites: None

MLT 160 Microbiology

Upon completion of this course students will have an understanding of the theories and principles applicable to clinical microbiology. The student will recognize and learn the clinical significance of unusual pathogens. Students will be exposed to techniques for cultivation of anaerobes and identification schemes for less common pathogens. Students will become familiar with virology terminology.

Prerequisites: MLT 100 Introduction to the Medical Lab

Corequisites: MLT 115 Molecular Biology

COURSE DESCRIPTIONS

PSY 134 General Psychology

An introduction to psychological issues and disorders present in public interaction, including psychosocial factors in physical disorders. Basic relationship issues emphasizing boundaries, roles, limits, and methods are covered.

Prerequisites: None

MLT 120 Phlebotomy & Specimen Collection

Students who successfully complete this course will have the ability to perform proper collection, handling, and processing of blood using various collection methods. In addition, they will have an understanding of other specimen collection techniques, proper labeling, and required documentation in a medical laboratory.

Prerequisites: MLT 100 Introduction to Medical Lab

MLT 145 Clinical Chemistry

Upon completion of this course students will have an understanding of the theory and clinical interpretation of carbohydrates, lipids, and proteins needed for clinical laboratory testing. The student will have the ability to perform both manual and automated laboratory determinations and spectrophotometer methods. In addition, students will have an understanding of the standard operating procedures as well as quality assurance standards for all chemistry tests performed. Theory and clinical interpretation of enzymes, electrolytes, and toxic substances will be presented. The student will perform both manual and automated laboratory determinations corresponding to theoretical study.

Prerequisites: MLT 100 Introduction to Medical Lab; MLT 105 Instrumentation and Quality Control; MLT 140 General Chemistry

MLT 102 Human Pathology

Upon successful completion of this course, the student will have an understanding of the most common disease processes involved in all systems of anatomy and physiology.

Prerequisites: MAP 110 Medical Terminology

MLT 150 Pathogenic and Parasitic Organisms

Students will learn about parasites and clinically important protozoans, nematodes, trematodes, cestodes, and the following characteristics: geographical distribution, life cycle, pathology, morphology, and clinical diagnosis. This course provides practical procedures for the preparation, examination, and identification of common pathogenic parasites. Mycology and their reactions to the body and environment will be studied. The student will learn methods of collecting specimens, preparation of media, and microscopic examinations for the identification of common saprophytic and pathogenic fungi. Additional pathogenic microorganisms will be presented.

Prerequisites: MLT 160 Microbiology

MLT 130 Hematology

This course equips the student with the practices and principles explored in the hematology laboratory. Procedures include complete blood counts with white blood cell counts, red blood cell counts, hemoglobin determinations, hematocrit values, blood smear differential, red cell indices, sedimentation rates, and reticulocyte counts and gene mutation.

Prerequisites: MLT 105 Instrumentation and Quality Control; MLT 115 Molecular Biology

Corequisites: MLT 120 Phlebotomy and Specimen Collection

MLT 155 Immunology & Serology

This course will introduce the students to immunology, the immune response, and antigen/antibody testing, which will include various serology tests used in the laboratory. Students will become familiar with virology terminology and understand the classifications of various viruses and the clinical manifestations of viruses.

Prerequisites: MLT 105 Instrumentation and Quality Control

MLT 170 Immunohematology & Bloodbanking

This course is designed to give the student a basic understanding of the immune system and bloodbanking and their relationship to clinical testing. The student will have a basic knowledge of antigen-antibody testing methods and be able to perform the necessary pipetting skills for these tests. In addition, the student will understand and be capable of performing ABO grouping, RH typing, compatibility testing, antibody identification, and component therapy. Donor screening, blood processing, and appropriate quality assurance procedures are also treated.

Prerequisites: MLT 155 Immunology & Serology; MLT 130 Hematology

MLT 125 Urinalysis & Body Fluids

During this course students will learn the physical, chemical, and microscopic examination of urine and its importance to a physician in the diagnosis of disease. Students will also learn proper processing and handling of other bodily fluids for laboratory testing.

Prerequisites: MLT 100 Introduction to the Medical Lab; MLT 115 Molecular Biology

MLT 135 Hemostasis & Specialty Testing

This course will prepare students with knowledge of procedures in coagulation and handling of samples. Studies include clotting mechanisms, platelet structure and function, and the maintenance of vascular integrity including both intrinsic and extrinsic systems. All areas of study will be substantiated with lab procedures and methods used to monitor these conditions. In addition, the students will examine abnormal blood smears to include leukemias and myeloproliferative disorders.

Prerequisites: MLT 130 Hematology

COURSE DESCRIPTIONS

MAP 185 Medical Law & Ethics

Students will be able to state major legal concerns of being a member of the health profession, formulate self-awareness of ethics as it applies to the medical field, identify risk management issues, and state the importance of confidentiality.

Prerequisites: MAP 110 Medical Terminology

CMS 111 Career Marketing Strategies

Students create a portfolio including résumés, references, cover letters, and thank-you letters. Mock interviews will be conducted. Students learn how to evaluate job offers and skills.

Prerequisites: None

MLT 200 Medical Laboratory Review

Upon completion of this course the student will be prepared for the application process and testing procedures needed for completion of their certification exam. This course will provide review of all laboratory materials, competencies, and guidelines necessary for completion of the exam.

Prerequisites: MAP 110 Medical Terminology

EMG 101 Basic CPR & First Aid Certification

This course will be a combination of lecture, simulation, demonstration, and student participation. Lab time will allow hands-on experiences, small group discussions, simulations, and return demonstration of newly acquired skills.

Prerequisites: None

MLT 210 Externship

An externship consists of 400-hour field experience in an appropriate location. It provides an opportunity for students to practice the skills they have learned under direct supervision in an actual work environment.

Prerequisites: Semesters I, II, III, IV, and V courses