MKTG 494 Selected Topics in Marketing

As needed; 1-3

A current advanced topic in marketing will be explored.

MKTG 495 Independent Study in Marketing

Spring, odd years; 1-3

Study on an independent basis in collaboration with the instructor on a topic in marketing at the upper division level.

MKTG 676 Marketing Management

3

Students examine value creation, marketing decision support, and strategic management of public relations as well as marketing. Proven analytical techniques from related business disciplines will be used to assess market positioning and strategic planning. Topics include advertising; buyer behavior; distribution of goods and services; e-commerce; market segmentation; pricing; marketing policy; and targeting. Clear and careful oral and written communication is emphasized.

Medical Laboratory Science

When offered: credit hours

MLSC 210 Fundamentals of Hematology and Hemostasis

Summer; 2

Introduces the production, maturation, function of normal blood cells and hemostasis. Selected routine manual hematology and hemostasis procedures are performed. Weekly: Three lectures and one lab.

MLSC 230 Fundamentals of Clinical Microbiology

Summer; 3

Orientation to clinical microbiology; specimen selection, collection, and transport; microscopic evaluation; stains and sterilization techniques; media and incubation selections; identification of routine and non-routine microorganisms; susceptibility testing; automation and quality assurance. Weekly: Two lectures and two labs.

MLSC 240 Fundamentals of Immunohematology

Summer; 1

Introduces blood group antigen systems, antibody screening, antibody identification, and compatibility testing. Selected routine procedures are performed. Weekly: Three lectures and one lab.

MLSC 350 Fundamentals of Clinical Chemistry

Summer: 3

Prerequisites: Completed or currently enrolled in CHEM131 or permission of instructor. Clinical lab procedures, safety, application of statistical procedures in quality control, and principles of clinical laboratory instrumentation. Topics include carbohydrates, lipids, electrolytes, and hepatic function with selected pathologies. Weekly: Three lectures and one lab.

MLSC 400 Specimen Procurement and Processing

Spring; 1

Clinical specimen collection and processing; point-of-care testing, professional ethics; phlebotomy practicum. Prerequisite: permission of the instructor.

MLSC 401, 402 Clinical Year Seminar I, II

Fall; Spring 0

Prerequisite: Permission of program director. Introduction to educational methodology, team building, multicultural communication, service outreach, professionalism, clinical laboratory sciences literature and research design and practice. Preparation and delivery of written and oral presentations on current topics. Attendance to all sessions is required. A pass/fail grade is assigned.

MLSC 411 Hematology

Fall; 3

Prerequisites: MLSC210 and permission of program director. Cellular elements of the blood, their maturation, functions, and morphologies; abnormal and disease state hematologies; principles and procedures of routine and special hematology assay methodologies; correlation of patient conditions with results of hematology assay results.

MLSC 412 Hemostasis

Spring; 1

Prerequisites: MLSC411 and permission of program director. Hemostasis systems, their function, interaction, and monitoring; correlation of hemostasis assay results with various disorders; thrombosis and anticoagulant therapy; principles and procedures of routine and special hemostasis assays.

MLSC 413 Clinical Hematology & Hemostasis Practicum

Summer; 4

Prerequisites: MLSC411, 412 and permission of program director. Professional health-care laboratory practicum; emphasis in patient-care application of hematology and hemostasis procedures.

MLSC 421 Clinical Immunology and Molecular Diagnostics

Fall; 2

Prerequisites: MLSC320 and permission of program director. Emphasis on detection, analyses, etiology, epidemiology, immunologic manifestations and correlation with infectious diseases. Theory and application of immunologic/serologic and basic molecular techniques including specimen collection and quality control.

MLSC 423 Clinical Immunology Practicum

Summer; 1

Prerequisites: MLSC421 and permission of program director. Professional health-care laboratory practicum: emphasizes patient-care applications of immunologic, serologic and molecular techniques.

MLSC 431 Clinical Bacteriology and Virology

Fall; 4

Prerequisites: MLSC230 and permission of program director. Emphasis on specimen collection, culture, identification and clinical significance of bacterial pathogens and human-associated viruses. Simulated clinical practice for the separation of normal flora from pathogenic microorganisms encountered in various body sites including the study of antimicrobial susceptibility testing.

MLSC 432 Clinical Mycology and Parasitology

Spring; 2

Prerequisites: MLSC431 and permission of program director. Study of fungi and parasites associated in human infections. Emphasis on specimen collection and preservation, culture and identification procedures.

MLSC 433 Clinical Microbiology Practicum

Summer; 5

Prerequisites: MLSC431, MLSC432 and permission of program director. Professional health-care laboratory practicum; emphasis in patient-care applications of bacteriology, mycology, parasitology, and virology.

MLSC 441 Immunohematology

Fall; 3

Prerequisites: MLSC240, MLSC320 and permission of program director. Blood grouping and typing; blood group antigen systems; compatibility testing; antibody identification; quality control and quality assurance; donor recruitment and selection; component preparation; blood-banking records; grouping and compatibility problem solving; patient clinical state correlations.

MLSC 442 Transfusion Medicine

Spring; 1

Prerequisites: MLSC441 and permission of program director. In-depth study of immunohematology testing results, clinical patient manifestations, blood component therapy and blood product requirements.

MLSC 443 Clinical Immunohematology Practicum

Summer; 4

Prerequisites: MLSC441, 442 and permission of program director. Professional health-care laboratory practicum; emphasis in patient-care applications of immunohematology.

MLSC 451 Clinical Chemistry I

Fall; 4

Prerequisites: MLSC350 and permission of Program director. Carbohydrate, lipid, enzyme, electrolyte, acid-base balance, trace element, protein systems, and gastric functions. Correlations with normal physiology and selected pathological conditions. Analysis of relevant blood and body fluids constituents.

MLSC 452 Clinical Chemistry II

Spring; 2

Prerequisites: MLSC451 and permission of program director. Liver function, renal function, endocrinology, toxicology, and therapeutic drug monitoring. Correlations with normal physiology and selected pathological conditions.

MLSC 453 Clinical Chemistry Practicum

Summer; 4

Professional health-care laboratory practicum. Emphasis on patient-care applications in clinical chemistry. Prerequisites: MLSC451, 452 and permission of program director.

MLSC 461 Body Fluids

Spring; 1

Prerequisites: MLSC451 and permission of the program director. Analysis of various body fluids such as serous fluids, synovial fluids, amniotic fluid, and urine. Correlations with normal physiology and selected pathological conditions.

MLSC 463 Body Fluids Practicum

Summer; 1

Prerequisites: MLSC461 and permission of program director. Professional health-care laboratory practicum. Emphasis in patient-care applications of body fluids.

MLSC 470 Laboratory Information Systems

Spring; 1

Prerequisite: Permission of the program director. Survey of current Laboratory Information Systems (LIS) including database design and maintenance, test requesting, result entry, result reporting, quality control application, peripheral devices and regulatory systems.

MLSC 475 Medical Laboratory Management Concepts

Spring; 2

Prerequisite: Permission of the program director. Discussion in selected areas that include health-care delivery systems; problem solving in the clinical laboratory; human resource management; supply and equipment acquisition; financial management' performance standards and assessment; ethics; and regulatory processes.

MLSC 493 Practicum Project

Summer; 1

Designed to be an integral component of the clinical year practica experience. Introduces students to the principles, practices, and performance of clinical laboratory projects expected of practicing professional clinical laboratory scientists.