Clinical Laboratory Science Courses

Courses

CLSC 2111. Molecular Diagnostics Lab.
This laboratory provides the basic skills necessary for performing and applying molecular techniques used in molecular pathology as described in CLSC 2310. The course will focus on the specific applications of molecular techniques within a variety of disciplines such as infectious disease, hematology, immunology, hemostasis, forensic science, and transplantation immunology.
1 Credit Hour
3 Total Contact Hour
3 Lab Hour
0 Lecture Hour
0 Other Hour
Prerequisite(s): (BIOL 1107 w/C or better AND BIOL 1305 w/C or better ) AND (BIOL 3320 w/C or better ) AND (CHEM 1306 w/C or better)

CLSC 2210. Intro to the Clinical Lab.
Introduction to the Clinical Laboratory (2-0) Information on the careers available in the clinical laboratory as well as an overview of each department in clinical pathology will be presented. Tours of hospital, reference labs, and specialized clinical laboratories will be arranged. This course includes the principles and practices of quality control and pre-analytical, analytical, and post analytical components of urine and body fluid analysis.
2 Credit Hours
2 Total Contact Hours
0 Lab Hours
2 Lecture Hours
0 Other Hours
Prerequisite(s): (CHEM 1106 w/C or better AND CHEM 1306 w/C or better ) AND (BIOL 1107 w/C or better AND BIOL 1305 w/C or better)

CLSC 2212. Clinical Laboratory Statistics.
This course encompasses clinical diagnostic computations required in the clinical laboratory setting including clinical chemistry, urinalysis, hematology, immunohematology, microbiology, and molecular techniques. The course also includes fundamental concepts and techniques which underlie applications to the various clinical laboratory disciplines, including statistical concepts, calculations, quality control, instrument and method assessment/verification, and laboratory emphasis on sampling and applications to include pre-analytical, analytical, and post analytical phases of testing.
2 Credit Hours
2 Total Contact Hours
0 Lab Hours
2 Lecture Hours
0 Other Hours
Prerequisite(s): (MATH 1411 w/C or better ) AND (CHEM 1106 w/C or better AND CHEM 1306 w/C or better)

CLSC 2310. Molecular Diagnostics.
This course will encompass diagnostic applications in the clinical laboratory. Areas covered will include genetics, molecular techniques, molecular pathology, principles and practices of quality control and quality assurance including pre- and post-analytical assurance and the application of safety to laboratory practice.
3 Credit Hours
3 Total Contact Hours
0 Lab Hours
3 Lecture Hours
0 Other Hours

CLSC 3150. Medical Terminology.
Medical Terminology (1-0) The course is designed for students to gain a working knowledge of medical terminology, symbols, abbreviations, roots, prefixes, and suffixes. The course may be taken by any interested students in associated majors or programs or health related fields.
1 Credit Hour
1 Total Contact Hour
0 Lab Hour
1 Lecture Hour
0 Other Hour
CLSC 3153. Body Fluids Lab.
Body Fluids Lab (0-3) This laboratory provides the basic laboratory skills necessary for performing urinebody fluids analyses. Several fundamental laboratory methods are performed by the students using common body fluids principles. These laboratory assays provide the basis for most body fluids assays which will be demonstrated in the clinical hospital laboratory rotations. This course includes the principles and practices of quality control and pre-analytical, and post analytical components of microscopy and urinalysis and the application of safety to laboratory practice.
1 Credit Hour
3 Total Contact Hour
3 Lab Hour
0 Lecture Hour
0 Other Hour

CLSC 3155. Clinical Chemistry I Lab.
Clinical Chemistry I Lab (0-3) This laboratory provides the basic skills necessary for performing clinical chemistry laboratory analyses. Several fundamental laboratory methods are performed by the students using common clinical chemistry principles. These laboratory assays provide the basis for most clinical chemistry analyses which will be demonstrated in the clinical hospital laboratory rotations.
1 Credit Hour
3 Total Contact Hour
3 Lab Hour
0 Lecture Hour
0 Other Hour

CLSC 3161. Serology Lab.
Serology Lab (0-3) Serological techniques commonly used in the clinical laboratory will be encompassed with emphasis on direct application to the clinical laboratory. Serological testing and interpretation for disease such as: syphilis, mononucleosis, streptococcal infections and others.
1 Credit Hour
3 Total Contact Hour
3 Lab Hour
0 Lecture Hour
0 Other Hour

CLSC 3163. Clinical Chemistry II Lab.
Clinical Chemistry Lab II (0-2) This laboratory provides the basic skills necessary for performing clinical chemistry laboratory analyses. Several fundamental laboratory methods are performed by the students using common clinical chemistry principles. These laboratory assays provide the basis for most clinical chemistry analyses which will be demonstrated in the clinical hospital laboratory rotations.
1 Credit Hour
2 Total Contact Hour
2 Lab Hour
0 Lecture Hour
0 Other Hour

Prerequisite(s): (CHEM 1305 w/C or better ) AND (CHEM 1105 w/C or better ) AND (CHEM 1306 w/C or better ) AND (CHEM 1106 w/C or better ) AND (CHEM 3324 w/C or better )

CLSC 3164. Clinical Chemistry II Lab.
Clinical Chemistry II Lab (0-3) A continuation of CLSC 3155 with an emphasis in therapeutic and abused-drug monitoring, pharmacokinetics, toxicology, hormones, and methods.
1 Credit Hour
3 Total Contact Hour
3 Lab Hour
0 Lecture Hour
0 Other Hour
Infectious Dis Lab: Pre-Anal Op  This lab presents the essential and applied pre-analytical operations required in the field of clinical bacteriology. This course presents an overview of laboratory procedures used in pre-analytical bacteriology such as, but not limited to, specimen collection and processing, media selection, specimen inoculation and direct microscopic smears including evaluation and interpretation. Students will learn and understand the importance of communication with health professionals to ensure quality patient specimens for submission and recognize potential errors and resolve according to predetermined criteria. This course is presented as a co-requisite course with CLSC 3168 and CLSC 3366.

1 Credit Hour
3 Total Contact Hour
3 Lab Hour
0 Lecture Hour
0 Other Hour

Major Restrictions:
Restricted to majors of CLIN, CLLD

Prerequisite(s): (CLSC 3357 w/C or better) AND (CLSC 3351 w/C or better) AND (MICR 2440 w/C or better) AND (CHEM 1106 w/C or better) AND (CHEM 3324 w/C or better)

Corequisite(s): CLSC3366

Infectious Dis Lab: Anal/Post-Anal Op  This lab presents the essential and applied pre-analytical operations required in the field of clinical bacteriology. This course presents an overview of laboratory procedures used in pre-analytical bacteriology such as, but not limited to, specimen collection and processing, media selection, specimen inoculation and direct microscopic smears including evaluation and interpretation. Students will learn and understand the importance of communication with health professionals to ensure quality patient specimens for submission and recognize potential errors and resolve according to predetermined criteria. This course is presented as a co-requisite course with CLSC 3168 and CLSC 3366.

1 Credit Hour
3 Total Contact Hour
3 Lab Hour
0 Lecture Hour
0 Other Hour

Major Restrictions:
Restricted to majors of CLIN, CLLD

Prerequisite(s): (CLSC 3357 w/C or better) AND (CLSC 3351 w/C or better) AND (MICR 2440 w/C or better) AND (CHEM 1106 w/C or better) AND (CHEM 3324 w/C or better)

Corequisite(s): CLSC3366

CLSC 3252. Body Fluids.
Body Fluids (2-0) This course will cover the chemical, serological, and hematological procedures performed on body fluids.

2 Credit Hours
2 Total Contact Hours
0 Lab Hours
2 Lecture Hours
0 Other Hours

Major Restrictions:
Restricted to majors of CLIN

Corequisite(s): CLSC3153
CLSC 3255. Clinical Chemistry I Lab.
Clinical Chemistry I Lab (0-4) This laboratory provides the basic laboratory skills necessary for performing clinical chemistry laboratory analyses. Several fundamental laboratory methods are performed by the students using common clinical chemistry principles. These laboratory assays provide the basis for most clinical chemistry assays which will be demonstrated in the clinical hospital laboratory rotations.

2 Credit Hours
4 Total Contact Hours
4 Lab Hours
0 Lecture Hours
0 Other Hours

Prerequisite(s): (CHEM 1305 w/C or better ) AND (CHEM 1105 w/C or better ) AND (CHEM 1306 w/C or better ) AND (CHEM 1106 w/C or better ) AND (CHEM 3324 w/C or better)

CLSC 3257. Hematology I Lab.
Hematology I Lab (0-6) This course is designed to develop the skills and techniques necessary to recognize and identify normal and abnormal components of the hematopoietic system.

2 Credit Hours
6 Total Contact Hours
6 Lab Hours
0 Lecture Hours
0 Other Hours

CLSC 3260. Serology.
Serology (2-0) This course emphasizes the detection of disease by the use of serological techniques.

2 Credit Hours
2 Total Contact Hours
0 Lab Hours
2 Lecture Hours
0 Other Hours

Major Restrictions:
Restricted to majors of CLIN

CLSC 3262. Clinical Chemistry II.
Clinical Chemistry II (2-0) A continuation of CLSC 3354 with an emphasis of therapeutic drugs of abuse, toxicology, pharmacokinetics, hormones, and methods.

2 Credit Hours
2 Total Contact Hours
0 Lab Hours
2 Lecture Hours
0 Other Hours

Major Restrictions:
Restricted to majors of CLIN

Prerequisite(s): (CLSC 3155 w/C or better ) AND (CLSC 3354 w/C or better)

Corequisite(s): CLSC3164

CLSC 3268. Infectious Diseases Lab.
Infectious Diseases Lab (0-6) This laboratory courses develops the basic skills and techniques necessary for the isolation, identification, and antimicrobial susceptibility for a variety of pathogens causing diseases. This course includes the principles and practices of quality control and pre-analytical, analytical, and post analytical components of clinical microbiology and the application of safety to laboratory practice.

2 Credit Hours
6 Total Contact Hours
6 Lab Hours
0 Lecture Hours
0 Other Hours
CLSC 3269. Immunohematology Lab.
Immunohematology Lab (0-6) This laboratory course is designed to develop and refine skills in performing antigen and antibody identification techniques, compatibility testing and blood component preparation. Laboratory procedures for processing and selecting blood products, identification of blood group antigens and antibodies, blood storage procedures, quality control and pre-analytical, analytical, and post analytical components of immunohematology and the application of safety to laboratory practice.

2 Credit Hours
6 Total Contact Hours
0 Lecture Hours
6 Lab Hours
0 Other Hours

CLSC 3351. Concepts in Immunodiagnosics.
Concepts in Immunodiagnosics (3-0) This course covers basic clinical immunology and applications in laboratory medicine. Interactions among immune cells and their secretions are examined. The role of the immune system in tumor growth, transplantation and rejection, and autoimmune diseases is covered. Various methods utilized in the clinical laboratory are demonstrated and discussed. This course includes the principles and practices of quality control and pre-analytical, analytical, and post analytical components of clinical immunology.

3 Credit Hours
3 Total Contact Hours
0 Lab Hours
3 Lecture Hours
0 Other Hours

Prerequisite(s): (MICR 2440 w/C or better ) OR (MICR 2141 w/C or better AND MICR 2340 w/C or better)

CLSC 3352. Body Fluids.
Body Fluids (3-0) This course will cover the chemical, serological and coagulation procedures performed on body fluids.

3 Credit Hours
3 Total Contact Hours
0 Lab Hours
3 Lecture Hours
0 Other Hours

Major Restrictions:
Restricted to majors of CLIN

Classification Restrictions:
Restricted to class of JR,SR

CLSC 3354. Clinical Chemistry I.
Clinical Chemistry I (3-0) This course includes the principles and practices of quality control and pre-analytical, analytical, and post analytical components of clinical chemistry. Basic concepts of laboratory mathematics, colorimetry, spectrophotometry, fluorometry, electrophoreses, chromatography are discussed. Chemical laboratory fundamentals and procedures are presented and related to normal and abnormal human physiology and biochemistry. Restricted to major: CLIN.

3 Credit Hours
3 Total Contact Hours
0 Lab Hours
3 Lecture Hours
0 Other Hours

Major Restrictions:
Restricted to majors of CLIN

Prerequisite(s): (CHEM 1305 w/C or better ) AND (CHEM 1105 w/C or better ) AND (CHEM 1306 w/C or better ) AND (CHEM 1106 w/C or better ) AND (CHEM 3324 w/C or better ) OR (CHEM 2324 w/C or better)

Corequisite(s): CLSC3155
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CLSC 3356. Hematology I.
Hematology I (3-0) This course is a comprehensive study of the process of blood formation. It includes morphological and biochemical relationships of red blood cell formation in healthy vs. disease states, as well as the performance and application of current methods in hematologic analysis and technology. This course includes the principles and practices of quality control and pre-analytical, analytical, and post-analytical components of hematology.

3 Credit Hours
3 Total Contact Hours
0 Lab Hours
3 Lecture Hours
0 Other Hours

Major Restrictions:
Restricted to majors of CLIN

Prerequisite(s): (BIOL 2313 w/C or better)

Corequisite(s): CLSC 3257

CLSC 3357. Opportunist & Parasitic Infect.
This course covers the pathogenesis and the epidemiology of opportunistic microorganisms. The isolation, concentration, and identification of mycological and parasitological specimens is reviewed and discussed. This course includes the principles and practices of quality control, the pre-analytical and post-analytical components of clinical microbiology, and the application of safety to laboratory practice.

3 Credit Hours
3 Total Contact Hours
0 Lab Hours
3 Lecture Hours
0 Other Hours

Major Restrictions:
Restricted to majors of CLLD

Prerequisite(s): (MICR 2440 w/C or better) OR (MICR 2141 w/C or better AND MICR 2340 w/C or better)

CLSC 3358. Clinical Microbiology I.
Clinical Microbiology I (2-2) This course will cover the concentration, isolation and identification of infectious mycological and parasitological specimens.

3 Credit Hours
4 Total Contact Hours
2 Lab Hours
2 Lecture Hours
0 Other Hours

Prerequisite(s): (MICR 2440 w/C or better) OR (MICR 2141 w/C or better AND MICR 2340 w/C or better)

CLSC 3362. Clinical Chemistry.
Clinical Chemistry (3-0) A continuation of CLSC 3413 with an emphasis on therapeutic and abused drug monitoring, pharmokinetics, toxicology, hormones and methods.

3 Credit Hours
3 Total Contact Hours
0 Lab Hours
3 Lecture Hours
0 Other Hours

Prerequisite(s): (CLSC 3454 w/C or better)
CLSC 3364. Hematology II.
This course emphasizes white-cell formation and function. The etiology and treatment of white blood cell disorders are discussed. It also encompasses hemostasis and laboratory determination of hemostatic disorders, including the study of the interaction of blood vessels and platelets with both the coagulation and fibrinolytic systems.

3 Credit Hours
3 Total Contact Hours
0 Lab Hours
3 Lecture Hours
0 Other Hours

Major Restrictions:
Restricted to majors of CLIN

Prerequisite(s): (CLSC 3356 w/C or better ) AND (CLSC 3257 w/C or better)

CLSC 3365. Clinical Chemistry II.
Clinical Chemistry II This class is a continuation of Clinical Chemistry I (CLSC 3354) with an emphasis on therapeutic drugs of abuse, toxicology, pharmacokinetics, endocrinology, and the application of clinical methods for assessing physiological markers of disease in multiple organ systems. Pathophysiology of body systems including aspects of pre-analytical, analytical and post analytical analysis.

3 Credit Hours
3 Total Contact Hours
0 Lab Hours
3 Lecture Hours
0 Other Hours

Major Restrictions:
Restricted to majors of CLIN

Prerequisite(s): (CLSC 3155 w/C or better ) AND (CLSC 3354 w/C or better)
Corequisite(s): CLSC3164

CLSC 3366. Infectious Diseases.
Infectious Diseases (3-0) This course covers the pathogenesis and the epidemiology of pathogenic microorganisms. The diagnosis of infectious diseases by various cultivation isolation and identification techniques is discussed. This course includes the principles and practices of quality control and pre-analytical, analytical, and post analytical components of clinical microbiology and the application of safety to laboratory practice.

3 Credit Hours
3 Total Contact Hours
0 Lab Hours
3 Lecture Hours
0 Other Hours

Major Restrictions:
Restricted to majors of CLIN

Prerequisite(s): (MICR 2440 w/C or better ) OR (MICR 2141 w/C or better AND MICR 2340 w/C or better)
Corequisite(s): CLSC3267

CLSC 3368. Immunohematology.
Immunohematology (3-0) This immuno-chemical reactivity of blood antigens and antibodies, blood grouping, compatibility testing, and hemolytic disease of the newborn are presented.

3 Credit Hours
3 Total Contact Hours
0 Lab Hours
3 Lecture Hours
0 Other Hours

Major Restrictions:
Restricted to majors of CLIN

Prerequisite(s): (CLSC 3351 w/C or better AND CLSC 3356 w/C or better)
Corequisite(s): CLSC3269
CLSC 3454. Clinical Chemistry.
Clinical Chemistry (4-0) Basic concepts of quality control, laboratory mathematics, colorimetry and spectrophotometry, fluorometry and radioimmunoassay are discussed. Chemical laboratory fundamentals and procedures are presented and related to normal and abnormal human physiology and biochemistry.

4 Credit Hours
4 Total Contact Hours
0 Lab Hours
4 Lecture Hours
0 Other Hours

Prerequisite(s): (CHEM 3324 w/C or better)

CLSC 4100. Ethics.
Ethics (1-0) A study of legal and ethical principles in health care and laboratory medicine.

1 Credit Hour
1 Total Contact Hour
0 Lab Hour
1 Lecture Hour
0 Other Hour

Classification Restrictions:
Restricted to class of JR,SR

CLSC 4111. Molecular Diagnosis Laboratory.
Molecular Diagnosis Laboratory This laboratory provides the basic skills necessary for performing and applying molecular techniques and used in molecular pathology as described in CLSC 4210. The course will focus on the specific applications of molecular techniques within a variety of disciplines such as infectious disease, hematology, immunology, hemostasis, forensic science, and transplantation immunology.

1 Credit Hour
3 Total Contact Hour
3 Lab Hour
0 Lecture Hour
0 Other Hour

Major Restrictions:
Restricted to majors of CLIN

Prerequisite(s): (CLSC 3364 w/C or better) AND (CLSC 3365 w/C or better) AND (CLSC 3366 w/C or better) AND (CLSC 3368 w/C or better) AND (Biol 3320 w/C or better) AND (MICR 2340 w/C or better) AND (MICR 2141 w/C or better)

Corequisite(s): CLSC4210

CLSC 4180. Seminar.
Seminar (1-0) The student will be given the opportunity to develop a broader understanding of the clinical laboratory scientist's role as a health professional in a variety of learning experiences, including seminars, lectures, and panel discussions. Principles and application of professionalism will be addressed as well as ongoing professional career development. Included in this course are review and practice examination.

1 Credit Hour
1 Total Contact Hour
0 Lab Hour
1 Lecture Hour
0 Other Hour

Major Restrictions:
Restricted to majors of CLIN

CLSC 4190. Special Problems.
Special Problems (0-0-1) Independent study in clinical laboratory research. Limit six credits.

1 Credit Hour
1 Total Contact Hour
0 Lab Hour
0 Lecture Hour
1 Other Hour

Classification Restrictions:
Restricted to class of JR,SR
CLSC 4210. Molecular Diagnostics.
Molecular Diagnostics This course will encompass diagnostic applications in the clinical laboratory. Areas covered will include genetics, molecular techniques, molecular pathology, principles and practices of quality control and quality assurance including pre-and post-analytical assurance and the application of safety to laboratory practice. The course will focus on applications of molecular diagnostics within a variety of disciplines such as infectious disease, hematology, immunology, hemostasis, forensic science, and transplantation immunology.

2 Credit Hours
2 Total Contact Hours
0 Lab Hours
2 Lecture Hours
0 Other Hours

Major Restrictions:
Restricted to majors of CLIN

Prerequisite(s):
(CLSC 3364 w/C or better ) AND (CLSC 3365 w/C or better ) AND (CLSC 3366 w/C or better ) AND (CLSC 3368 w/C or better ) AND (BIOL 3320 w/C or better ) AND (MICR 2340 w/C or better ) AND (MICR 2141 w/C or better)

CLSC 4273. Clinical Education.
Clinical Education (2-0) This course will cover basic education techniques and terminology to train/educate users and providers of laboratory services, including the development of continuing education programs, curriculum design, program and student assessments, and test development.

2 Credit Hours
2 Total Contact Hours
0 Lab Hours
2 Lecture Hours
0 Other Hours

Major Restrictions:
Restricted to majors of CLIN

CLSC 4274. Clinical Investigation.
Clinical Investigation (2-0) This course will cover research in medical/clinical settings with a focus on research planning, design, data collection and dissemination, and evaluation of published studies. Students will design and perform research to include proposal writing. Correlation of disease states and changes in laboratory values will also be included as case studies.

2 Credit Hours
2 Total Contact Hours
0 Lab Hours
2 Lecture Hours
0 Other Hours

CLSC 4275. Clinical Lab Mgmt/Supervision.
Clinical Laboratory Management and Supervision (2-0) Introductory course in the principles and techniques used in the supervision and management of the clinical laboratory in the health professions. The course includes human resource management, management and motivational theories, communication skills, interviewing, performance appraisals, accreditation agencies, federal and state regulations, budget and strategic planning, evaluation instruments, and the implementation of a laboratory quality improvement program. Financial management is covered including profit and loss, cost/benefit reimbursement requirements, and materials/inventory management.

2 Credit Hours
2 Total Contact Hours
0 Lab Hours
2 Lecture Hours
0 Other Hours

Major Restrictions:
Restricted to majors of CLIN

CLSC 4290. Special Problems.
Special Problems (0-0-2) Independent study in clinical laboratory research. Limit six credits.

2 Credit Hours
2 Total Contact Hours
0 Lab Hours
0 Lecture Hours
2 Other Hours
CLSC 4343. Clinical Mgmt./Supervision.
Clinical Laboratory Management and Supervision (3-0) This course will cover scheduling, workload recording, cost accounting, and instrument and method evaluation.
3 Credit Hours
3 Total Contact Hours
0 Lab Hours
3 Lecture Hours
0 Other Hours

CLSC 4373. Clinical Lab/Mgmt/Supervision.
Clinical Laboratory Management and Supervision (3-0) This course will cover scheduling, workload recording cost accounting, and instrument and method evaluation.
3 Credit Hours
3 Total Contact Hours
0 Lab Hours
3 Lecture Hours
0 Other Hours

CLSC 4377. Clinical Education/Research.
Clinical Education and Research (3-0) Course will cover basic teaching techniques, development of continuing education programs, and proposal writing.
3 Credit Hours
3 Total Contact Hours
0 Lab Hours
3 Lecture Hours
0 Other Hours

CLSC 4390. Special Problems.
Special Problems (0-0-3) Independent study in clinical laboratory research. Limit six credits.
3 Credit Hours
3 Total Contact Hours
0 Lab Hours
0 Lecture Hours
3 Other Hours

Major Restrictions:
Restricted to majors of CLIN

CLSC 4471. Preceptorship I.
Instruction and practice of techniques and their applications in the clinical laboratory setting (practicum) in hematology, immunohematology, clinical chemistry, clinical microbiology, coagulation, body fluid analysis, and serology. This course includes the principles and practices of quality control and pre-analytical, analytical, and post-analytical components of laboratory science and the application of safety to laboratory practice.
4 Credit Hours
32 Total Contact Hours
0 Lab Hours
0 Lecture Hours
32 Other Hours

CLSC 4472. Preceptorship II.
Instruction and practice of techniques and their applications in the clinical laboratory setting (practicum) in hematology, immunohematology, clinical chemistry, clinical microbiology, coagulation, body-fluid analysis, and serology. This course includes the principles and practices of quality control and pre-analytical, analytical, and post-analytical components of laboratory science and the application of safety to laboratory practice.
4 Credit Hours
32 Total Contact Hours
0 Lab Hours
0 Lecture Hours
32 Other Hours
CLSC 4476. Preceptorship III.
A continuation of CLSC 4471 and 4472. The student will also be given the opportunity to demonstrate (1) the ability to apply knowledge, attitudes, and skills to the clinical laboratory practices and procedures; (2) the ability to integrate previous knowledge and skills with more sophisticated instrumentation and advanced methodology; (3) an attitude of cooperation and concern in interpersonal relationships and interdisciplinary communication and team building with patients and healthcare workers; and (4) an appreciation of the ethical foundations of clinical laboratory sciences. This course includes the principles and practices of quality control and pre-analytical, analytical, and post-analytical components of laboratory science and the application of safety to laboratory practice.
4 Credit Hours
32 Total Contact Hours
0 Lab Hours
0 Lecture Hours
32 Other Hours

Major Restrictions:
Restricted to majors of CLIN

Classification Restrictions:
Restricted to class of SR

Prerequisite(s): (CLSC 4471 w/C or better ) AND (CLSC 4472 w/C or better)

Corequisite(s): CLSC4478

CLSC 4478. Preceptorship IV.
A continuation of CLSC 4471 and 4472. The student will also be given the opportunity to demonstrate (1) the ability to apply knowledge, attitudes, and skills to the clinical laboratory practices and procedures; (2) the ability to integrate previous knowledge and skills with more sophisticated instrumentation and advanced methodology; (3) an attitude of cooperation and concern in interpersonal relationships and interdisciplinary communication and team building with patients and healthcare workers; and (4) an appreciation of the ethical foundations of clinical laboratory sciences. This course includes the principles and practices of quality control and pre-analytical, analytical, and post-analytical components of laboratory science and the application of safety to laboratory practice.
4 Credit Hours
32 Total Contact Hours
0 Lab Hours
0 Lecture Hours
32 Other Hours

Major Restrictions:
Restricted to majors of CLIN

Classification Restrictions:
Restricted to class of SR

Prerequisite(s): (CLSC 4471 w/C or better ) AND (CLSC 4472 w/C or better)

Corequisite(s): CLSC4476

CLSC 4872. Preceptorship II.
Preceptorship II (0-0-21) Procedures in clinical chemistry, immunohematology, and serological applications in the clinical laboratory. Includes practicum.
8 Credit Hours
21 Total Contact Hours
0 Lab Hours
0 Lecture Hours
21 Other Hours

Major Restrictions:
Restricted to majors of CLIN

Prerequisite(s): (CLSC 4471 w/C or better)
CLSC 4876. Preceptorship III.
Preceptorship III (0-0-32) The preceptorship courses (I, II, III) are designed to encompass rotations in seven different clinical sites. Procedures in clinical chemistry, immunohematology, microbiology, serology, coagulation, and hematology. Includes practicum.

**8 Credit Hours**
**32 Total Contact Hours**
0 Lab Hours
0 Lecture Hours
32 Other Hours

**Major Restrictions:**
Restricted to majors of CLIN

**Classification Restrictions:**
Restricted to class of SR

**Prerequisite(s):** (CLSC 4471 w/C or better ) AND (CLSC 4872 w/C or better)