Surgery

Chair
  • Ronald Weigel

Interim Director, Perfusion Technology
  • Shahna L. Helmick

Undergraduate certificate: perfusion technology
Faculty: https://medicine.uiowa.edu/surgery/people/primary-appointments
Website: https://medicine.uiowa.edu/surgery/

Courses
  • Surgery Courses [p. 1]
  • Cardiotoracic Surgery Courses [p. 1]
  • Perfusion Technology Courses [p. 1]

Surgery Courses

SURG:8301 Clinical Surgery 6 s.h.
Experience as active member of surgical team; work on inpatient units, in clinics and operating room; assist in elective and emergency patient care.

SURG:8401 Advanced General Surgery 4 s.h.
Opportunity to strengthen clinical skills through experiences in the operating rooms, clinics, wards, and intensive care units of University of Iowa Hospitals & Clinics.

SURG:8402 Advanced Inpatient Subinternship in General Surgery 4 s.h.
Responsibility for management of selected surgical inpatients, on a surgical service. Prerequisites: SURG:8301.

SURG:8406 General Surgery, Des Moines, IA 4 s.h.
Care of general surgery patients in private hospital setting. Prerequisites: SURG:8301.

SURG:8407 Intensive Care Unit - Trauma, Iowa Methodist 4 s.h.
Subinternship on trauma service team; evaluation and management of critically ill patients in the emergency room, operating room, intensive care unit. Prerequisites: SURG:8301. Requirements: fourth-year M.D. enrollment.

SURG:8409 General Surgery, Davenport, IA 4 s.h.
Participation in diagnosis and management of general surgical patients under supervision of attending surgeons from Davenport Surgical Group, Genesis Medical Center. Prerequisites: SURG:8301. Requirements: fourth-year M.D. enrollment.

SURG:8411 Multidisciplinary Breast Elective 2,4 s.h.
Evaluation and management of benign and malignant breast diseases; focus on multidisciplinary nature of treatment of breast disease; for students who plan to pursue residency in general surgery, obstetrics and gynecology, family practice, or other field with focus on women's health. Requirements: M.D. enrollment.

SURG:8497 Research in Surgery  arr.
Medical research, clinical or laboratory projects; individual study.

SURG:8498 Surgery On Campus  arr.
Surgery on campus; individually arranged. Prerequisites: SURG:8301.

Cardiotoracic Surgery Courses

CTS:8401 Advanced Inpatient Subinternship in Cardiotoracic Surgery arr.
Participation in diagnosis, preoperative, operative, and postoperative care of thoracic and cardiac patients; attendance at division conferences; students assume responsibility and act as an intern; may concentrate interest in cardic surgery or thoracic surgery; diagnosis and management of patients on an inpatient service under close supervision by an upper-level resident/fellow and faculty member.

CTS:8407 Cardiothoracic Surgery 4 s.h.
Clinical clerkship individually arranged by student with department approval.

CTS:8409 Cardiothoracic Surgery Off Campus 4 s.h.
Individually arranged by student with approval of department to rotate outside of University of Iowa Hospitals & Clinics. Requirements: M.D. enrollment.

Perfusion Technology Courses

PERF:4161 Instrumentation in Perfusion Technology 3 s.h.
Electrical circuitry, filters, pressure transducers, thermistors, cardiac output computers, fluid dynamics, intra-aortic balloon pumps, blood gas analyzers. Requirements: Perfusion Technology Program enrollment.

PERF:4162 Pathophysiology of Perfusion Technology 5 s.h.
Hemostasis, acid base physiology, gas transfer, heart anatomy, heart embryology, congenital cardiac defects. Requirements: Perfusion Technology Program enrollment.

PERF:4163 Clinical Experience I 2 s.h.
Perfusion in operating room: patient workup, observation, and reporting on extracorporeal setup, surgical procedure. Requirements: Perfusion Technology Program enrollment.

PERF:4164 Clinical Experience II 3 s.h.
Continuation of PERF:4163; setup of extracorporeal circuit; ancillary duties of perfusionist. Requirements: Perfusion Technology Program enrollment.

PERF:4165 Clinical Experience III 12 s.h.
Continuation of PERF:4164; management of cardiopulmonary bypass system. Requirements: Perfusion Technology Program enrollment.

PERF:4166 Clinical Experience IV 12 s.h.
Continuation of PERF:4165; emphasis on supply maintenance, perfusion department management. Requirements: Perfusion Technology Program enrollment.

PERF:4167 Perfusion Seminar 1 s.h.
Ethics in perfusion. Requirements: Perfusion Technology Program enrollment.

PERF:4168 Research in Perfusion 1 s.h.
From topic selection to manuscript. Requirements: Perfusion Technology Program enrollment.
PERF:4169 Clinical Experience V  12 s.h.
Continuation of PERF:4166. Requirements: Perfusion Technology Program enrollment.

PERF:4170 Principle and Practice of Perfusion Technology  6 s.h.
Hypothermia, hemodilution, left heart bypass, dialysis, ultrafiltration, membrane and bubbler oxygenation.
Requirements: Perfusion Technology Program enrollment.

PERF:4171 Devices in Perfusion Technology  3 s.h.