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
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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.

Cardiothoracic Surgery Courses

CTS:8499 Surgery Off Campus arr.
Prerequisites: SURG:8301.

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.