Fall 2020 Course Descriptions as of 04/05/2020 08:14 PM

Information in Browse Course Catalog is subject to change. Information is term specific. Please refer to the appropriate term when searching for course content. Key to Course Descriptions may be found at: http://rcs.registrar.arizona.edu/course_descriptions_key.

Surgery (SURG)

SURG 499: Independent Study (1 - 6 units)

Description: Students will learn about interdisciplinary research topics and techniques spanning the behavioral and health sciences. The research is aimed at improving the quality of healthcare by better understanding the processes of clinical judgment and decision-making and their effects on patient outcomes. They will accomplish this by administering questionnaires, chart review, database management, data analysis, and other research procedures. Grading will be based on successful completion of tasks above and the ethical treatment of human subjects.

Grading basis: Alternative Grading: S, P, F

Career: Undergraduate

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 99 times.

Course typically offered:

Main Campus: Fall, Spring, Summer

SURG 499H: Honors Independent Study (1 - 9 units)

Description: Students will learn about interdisciplinary research topics and techniques spanning the behavioral and health sciences. The research is aimed at improving the quality of healthcare by better understanding the processes of clinical judgment and decision-making and their effects on patient outcomes. They will accomplish this by administering questionnaires, chart review, database management, data analysis, and other research procedures. Grading will be based on successful completion of tasks above and the ethical treatment of human subjects.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Independent Study Required **Repeatable:** Course can be repeated for a maximum of 27 units.

Course typically offered:

Main Campus: Fall, Spring, Summer

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

SURG 595A: Oncogenes and Signal Transduction (1 unit)

Description: The exchange of scholarly information and/or secondary research, usually in a small group setting. Instruction often includes lectures by several different persons. Research

projects may or may not be required of course registrants.

Grading basis: Regular Grades

Career: Graduate

Course Components: Colloquium Required **Repeatable:** Course can be repeated for a maximum of 5 units.

Equivalent to: BIOC 595A, SURG 595A **Also offered as:** BIOC 595A, CBIO 595A

Recommendations and additional information: Open to graduate students in biological

discipline, exceptionally qualified undergraduates. **Home department:** Committee on Cancer Biology

SURG 599: Independent Study (1 - 9 units)

Description: Qualified students working on an individual basis with professors who have agreed to supervise such work. Graduate students doing independent work which cannot be classified as actual research will register for credit under course number 599, 699, or 799.

Grading basis: Alternative Grading: S, P, F

Career: Graduate

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 99 times.

Course typically offered: Main Campus: Fall, Spring

SURG 670: Principles of Perfusion Techniques I (5 units)

Description: An introduction to basic extracorporeal techniques through discussion of blood propelling devices, heat transfer, gas transfer, bio-materials, and perfusion pharmacology.

Grading basis: Regular Grades

Career: Graduate

Course Components: Lecture Required

Equivalent to: PCOL 670, PCOL 670, PHCL 670, SURG 670, SURG 670

Also offered as: PCOL 670, PHCL 670

Course typically offered:

Main Campus: Fall

Recommendations and additional information: PHCL 671. Open to majors only.

Home department: Pharmacology

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

SURG 670A: Principles of Perfusion Sciences I (1 unit)

Description: This course is to provide the student with a thorough understanding of the physiological, pharmacological and pathophysiological principles and perfusion techniques related to heart disease, and cardiopulmonary bypass support. Examinations will cover lectures, text readings and lecture notes.

Grading basis: Regular Grades

Career: Graduate

Course Components: Lecture Required

Also offered as: PCOL 670A, PHCL 670A

Course typically offered:

Main Campus: Summer 1 and Summer 2

Home department: Pharmacology

SURG 670B: Principles of Perfusion Sciences I (4 units)

Description: This course is to provide the student with a thorough understanding of the physiological, pharmacological and pathophysiological principles and perfusion techniques related to heart disease, and cardiopulmonary bypass support. The course will run concurrent with PHCL 671 and PHCL 691L Preceptorship. Examinations will cover lectures, text readings and lecture notes.

Grading basis: Regular Grades

Career: Graduate

Course Components: Lecture Required

Also offered as: PCOL 670B, PHCL 670B

Course typically offered:

Main Campus: Fall

Home department: Pharmacology

SURG 671: Perfusion Technology Laboratory (1 unit)

Description: An introduction to basic extracorporeal systems.

Grading basis: Regular Grades

Career: Graduate

Course Components: Laboratory Required

Equivalent to: PCOL 671, SURG 671

Also offered as: PHCL 671 Course typically offered:

Main Campus: Fall

Recommendations and additional information: Open to majors only.

Home department: Pharmacology

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

SURG 699: Independent Study (1 - 18 units)

Description: Qualified students working on an individual basis with professors who have agreed to supervise such work. Graduate students doing independent work which cannot be classified as actual research will register for credit under course number 599, 699, or 799.

Grading basis: Alternative Grading: S, P, F

Career: Graduate

Course Components: Independent Study Required

Course typically offered: Main Campus: Fall, Spring

SURG 800A: Research Distinction Track (1 - 16 units)

Description: Goals: To enhance research awareness, skills and productivity in a continuum during medical school; to encourage students to value being at the forefront of medicine by becoming scientific physicians, as well as to help fill the gap in the decreasing numbers of translational physician-scientists; to design and implement a research proposal extensive and complete enough to allow the student to pursue a research topic from beginning to completion; to critically review journal articles and give medical students the opportunity to network and present their research; to demonstrate competence in the scientific method.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required

Lecture May Be Offered

Equivalent to: SURG 800A Course typically offered: Main Campus: Fall, Spring

Recommendations and additional information: Prior approval of MSRC.

SURG 800E: Research (1 - 16 units) **Grading basis:** Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 99 times.

Course typically offered: Main Campus: Fall, Spring

Recommendations and additional information: SURG 803.

⁻SA represents a Student Abroad & Student Exchange offering

⁻CC represents a Correspondence Course offering

SURG 813C: Surgery Clerkship (5 - 10 units)

Description: The basic clerkship stresses preoperative evaluation in emergency and ambulatory settings, proper operating room conduct and postoperative management. An awareness of the nature and management of surgical disease is developed by case-oriented small group sessions, rounds, and weekly conferences. The clerkship is a required course for all medical students

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required **Repeatable:** Course can be repeated for a maximum of 10 units.

Course typically offered: Main Campus: Fall, Spring

Recommendations and additional information: Successful completion of 1st & 2nd year of medical school.

SURG 837B: Cardiothoracic Surgery (Surgery Subspecialty) (2 - 3 units)

Description: The surgical subspecialty requirement has been created to allow the medical student to focus a minimum of two weeks on a specialty of the surgical field. These surgical specialties include anesthesia, cardiothoracic surgery, otolaryngology (ENT), neurosurgery, orthopaedic surgery, pediatric surgery, plastic surgery, transplant surgery, urology, and vascular surgery. The goal is to provide a more specific exposure to surgical issues and diseases encompassed by the subspecialties listed above. Similar to the basic general surgery experience, the specialties are designed to focus on the diagnosis, operative treatment, and postoperative management of surgical patients requiring subspecialty service.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Fall, Spring

Recommendations and additional information: Successful completion of all Clerkships. Medical students only.

⁻SA represents a Student Abroad & Student Exchange offering

⁻CC represents a Correspondence Course offering

SURG 837C: Neurosurgery (Surgery Subspecialty) (2 - 3 units)

Description: The surgical subspecialty requirement has been created to allow the medical student to focus a minimum of two weeks on a specialty of the surgical field. These surgical specialties include anesthesia, cardiothoracic surgery, otolaryngology (ENT), neurosurgery, orthopaedic surgery, pediatric surgery, plastic surgery, transplant surgery, urology, and vascular surgery. The goal is to provide a more specific exposure to surgical issues and diseases encompassed by the subspecialties listed above. Similar to the basic general surgery experience, the specialties are designed to focus on the diagnosis, operative treatment, and postoperative management of surgical patients requiring subspecialty service.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Fall, Spring

Recommendations and additional information: Successful completion of all Clerkships. Medical students only.

SURG 837E: Pediatric Surgery (Surgery Subspecialty) (2 - 3 units)

Description: This surgical subspecialty rotation provides students with a two week exposure to a busy pediatric surgery service. At the end of the rotation the student should be comfortable with the evaluation and management of the child for common surgical issues. They will also have some familiarity with the more complex problems encountered in pediatric surgery.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Fall, Spring

Recommendations and additional information: Successful completion of all Clerkships. Medical students only.

⁻CC represents a Correspondence Course offering

SURG 837F: Plastic Surgery (Surgery Subspecialty) (2 - 3 units)

Description: The Division of Plastic and Reconstructive Surgery clinical elective has been created to allow medical students to focus a minimum of two weeks on the surgical subspecialty of plastic surgery. The goal is to provide dedicated exposure to the diagnosis and management of adult and pediatric conditions requiring plastic surgical management. These include breast surgery, surgical wound management, congenital issues such as cleft lip and palate, hand surgery and assorted reconstructive problems. Participation with in patient care in the operating room, in the outpatient clinics and emergency room, and on the wards is required.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Fall, Spring

Recommendations and additional information: Successful completion of all Clerkships. Medical students only.

SURG 837H: Urology (Surgery Subspecialty) (2 - 3 units)

Description: The Division of Urology clinical elective has been created to allow medical students to focus a minimum of two weeks on the surgical subspecialty of Urology. The goal is to provide dedicated exposure to the diagnosis and management of adult and pediatric Urologic diseases. These include urologic oncology, stones, male and female voiding dysfunction, male and female urologic reconstruction, sexual dysfunction and infertility, laparoscopy, and robotic surgery. Participation with in patient care in the operating room, in the outpatient clinics and emergency room, and on the wards is required.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Independent Study **Course Components:** Required

Course typically offered: Main Campus: Fall, Spring

Recommendations and additional information: Successful completion of all Clerkships.

Medical students only.

SURG 840A: General Surgery (1 - 16 units)

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required Repeatable: Course can be repeated a maximum of 99 times.

Course typically offered: Main Campus: Fall, Spring

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

May Be Offered Departments may offer this component in some semesters. See the Schedule of

Classes for term-specific offerings.

SURG 847A: Minimally Invasive Surgery (1 - 4 units)

Description: The purpose of this elective is to provide medical students with the fundamentals of minimally invasive surgical care. Specifically, medical students at the end of this elective should be able to:1. Understand principles and techniques of minimally invasive surgery.2. Observe the use of minimally invasive surgery and how it affects patients in the preoperative and postoperative setting.3. Participate in minimally invasive surgical cases such as laparoscopy, single incision/port approaches and robotic surgery.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Fall, Spring

Recommendations and additional information: Third-year medical students. Successful completion of 1st & 2nd-year medical school.

SURG 847B: Endocrine Surgery (1 - 4 units)

Description: The purpose of this elective is to provide medical students with the fundamentals of treating patients with surgical endocrine diseases. The goals of the rotation are to: 1. Learn how to diagnose and perform the comprehensive work-up of patients with endocrine diseases and endocrine cancers.2. Be able to perform office base procedures: ultrasound of the neck and fine-needle biopsy.3. Understand how to treat and manage patients with endocrine cancers; pre-, intra-, and post-operatively. This elective will cover benign and malignant disease of the following glands: Thyroid, Parathyroid, Adrenal, and Neuroendocrine pancreas.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Fall, Spring

Recommendations and additional information: Third-year medical students. Successful completion of 1st & 2nd-year medical school.

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

SURG 847C: Vascular/Podiatric Medicine & Surgery (S.A.L.S.A.) (1 - 16 units)

Description: This elective is designed to offer a comprehensive introduction to vascular and podiatric medicine and surgery of the lower extremities and foot. The student will be able to: improve fundamental surgical skills (e.g., suturing, injections, minor surgery); perform a complete diabetic foot exam; properly debride lower extremity ulcers and formulate a wound care regimen which includes a robust exposure to wound healing and tissue repair; interpret foot and ankle x-rays; assist in the preoperative assessment, interoperative treatment, and post operative care of reconstructive surgical patients.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Fall, Spring

Recommendations and additional information: Completion of clinical clerkships.

SURG 847F: Plastic Surgery- Private Practice (2 - 8 units)

Description: Goals: Develop understanding of wound healing principles and plastic surgical techniques applied to a variety of clinical circumstances. Format: Clinical rotation involving various types of plastic surgery. This will be taught on a one-to-one basis in a private practice setting.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Fall, Spring

SURG 847L: Breast Surgery (1 - 16 units)

Description: 1. To familiarize student with the clinical management of breast problems, specifically malignancies, including in-depth review of the diagnostic modalities and treatment options of a patient with breast carcinoma. 2. Operative and clinical experiences based on providers' schedules. The student will participate in the outpatient clinic, in the operating room and with inpatient rounding as necessary. May include weekends.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Fall, Spring

Recommendations and additional information: SURG 803, prior consent of instructor.

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

SURG 848A: Vascular and Endovascular Surgery (Subinternship) (1 - 12 units)

Description: This rotation is meant to provide a more extensive experience for students that are interested in surgery or in vascular and endovascular surgery. Specific and defined experience will be provided in the following areas: 1. carotid occlusive disease and stroke 2. diagnosis, management and societal impact of abdominal aortic aneurysms 3. lower extremity occlusive disease (PAD) and its impact on quality of life, 4. chronic venous disease and venous leg ulcers 5, acute deep vein thrombosis 6, diabetes and diabetic foot problems and their comprehensive management 7. vascular trauma 8. endovascular therapy and 9. end stage renal failure and hemoaccess. Students will spend 4-6 weeks rotating on the vascular surgery inpatient service at University Medical Center. They will function as an extern equivalent and will be given a small number of inpatients to help manage and round on daily. They will also be assigned minor procedures to scrub on, as well as to read about and learn before each procedure is performed. The goal of this rotation is to expose students to a higher level of vascular surgery than that which is available in the current medical school curriculum and to expose them to the possibility of vascular and endovascular surgery as a career, and also to prepare them for an internship in any of the surgical or minimally invasive disciplines or subspecialties.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Fall, Spring

SURG 848B: Cardiothoracic Surgery (1 - 16 units)

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 99 times.

Course typically offered: Main Campus: Fall, Spring

SURG 848C: Neurosurgery (1 - 16 units)

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 99 times.

Course typically offered: Main Campus: Fall, Spring

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

SURG 848D: Transplantation (2 - 4 units)

Description: Serve as a sub-intern on the surgery transplantation service at the Banner

University Medical Center Tucson Campus for a period of 4 weeks. The student will follow/take

call with the PGY 3 general surgery resident on the transplant team.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Fall, Spring

Field trip: None

SURG 848E: Pediatric Surgery (1 - 16 units)

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 99 times.

Equivalent to: PED 816A Course typically offered: Main Campus: Fall, Spring

SURG 848F: Plastic Surgery (1 - 16 units)

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 99 times.

Course typically offered: Main Campus: Fall, Spring

Recommendations and additional information: Senior year in medical school.

SURG 848G: Urologic Oncology (1 - 16 units)

Description: To obtain an in-depth understanding of disease states and clinical patient care as it relates to urologic oncology, and have fun in the process. 4wks only; offered year round.

Directly Supervised/Patient care. Maximum enrollment of 1.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required **Recommendations and additional information:** SURG 803.

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

SURG 848H: Urology (1 - 16 units) **Grading basis:** Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 99 times.

Course typically offered: Main Campus: Fall, Spring

Recommendations and additional information: Open to majors only.

SURG 848M: Trauma (1 - 16 units) **Grading basis:** Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 99 times.

Course typically offered: Main Campus: Fall, Spring

SURG 848N: Surgical Oncology (2 - 4 units)

Description: This elective is offered to medical students who are interested in pursuing a residency training in surgery with interest in surgical oncology. It provides an introduction to the complex and intricate nature of surgical treatment of cancer. It is meant to help students understand the pathology of solid malignancies and their management. The course emphasizes a multi-disciplinary approach to the treatment of such disease which includes interventional radiology, medical oncology, and radiation oncology alongside with surgical approaches. It also emphasizes the humane interactions that occur in the office setting and introduces the student to the complex nature of the care of patients with terminal illnesses beyond the hospital setting. The faculty emphasize developing a supportive, nurturing, and non-biased environment for medical students who are interested in surgical oncology to excel, thrive and achieve their dreams. We all have a personal story that drives us and we would like to help you with yours!

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Fall, Spring

Field trip: None

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

SURG 850A: Fluid and Electrolyte Balance (1 - 16 units)

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required **Repeatable:** Course can be repeated for a maximum of 16 units.

Course typically offered: Main Campus: Spring

SURG 850B: Lymphvascular System Health and Disability (1 - 16 units)

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 99 times.

Course typically offered: Main Campus: Spring

SURG 850C: Clinics in Medical Ignorance (1 - 16 units)

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 99 times.

Course typically offered: Main Campus: Spring

Recommendations and additional information: Junior year in medical school.

SURG 850D: Surgery Residency Boot camp (2 - 4 units)

Description: The goal of this elective is to give 4th year medical students the opportunity to delve deeper into the surgical management of patients. This rotation is for individuals who are going into general surgery or any surgical subspecialty, and is designed to focus on application of knowledge and skills to the care of general surgery and surgical subspecialty patients. This rotation will expose students to crucial concrete knowledge and technical skills important for a surgical internship as well as for a successful surgical career. It includes focused didactic lectures, hands-on skills laboratory and focused rotations; these activities are all designed to augment a student's exposure to real-life scenarios one would expect in a surgical internship and beyond.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Fall, Spring

Field trip: None

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

SURG 881B: Rural Health Professions Program II (2 - 4 units)

Description: The Rural Health Professions Program (RHPP) was designed to provide medical students with quality educational experiences in selected rural settings. Students will participate in patient care providing service in the practices of their preceptors. In addition, students will interact with social service and other health care agencies to gain a more complete knowledge of services available. Students will work with their assigned physician preceptors in their practices located in rural Arizona. Students will compare/contrast experiences with rural setting with that of an academic health center.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Fall, Spring

Field trip: None

SURG 891A: Surgery and Subspecialties (1 - 16 units)

Description: Specialized work on an individual basis, consisting of instruction and practice in actual service in a department, program, or discipline. Teaching formats may include seminars, in-depth studies, laboratory work and patient study.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required **Repeatable:** Course can be repeated for a maximum of 54 units.

Course typically offered: Main Campus: Fall, Spring

SURG 896A: Medical Ignorance (1 - 16 units)

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Seminar Required **Repeatable:** Course can be repeated a maximum of 2 times.

Course typically offered: Main Campus: Spring

SURG 899: Independent Study (1 - 16 units)

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 99 times.

Course typically offered: Main Campus: Fall, Spring

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering