2016-2017 Catalog  
(Courses offered to International Students)

Emergency Health Sciences/EMSP Courses

EMSP 4010. Emer Med Serv-Ambulance. 4 Credit Hours.

Orientation to the San Antonio Fire Department Standard Medical Operating Procedures (SMOPs) and EMS Organization is followed by assignment to SAFD Paramedic Ambulance teams. The student experiences emergency patient encounters involving on-the-scene pre-hospital management of medical, surgical, pediatric, psychological, obstetrical, and social emergencies. Experiences include vehicle extrication, full range of pre-hospital medical and trauma patients, EMS communication procedures, medical-legal situations, conflict resolution, EMS-Police cooperation, BLS/ACLS, hospital diversions experience and patient access to care problems peculiar to EMS. During 40 requisite patient encounters, the student makes brief assessment notes, assists in the care and transportation of patients to the 20 San Antonio Emergency rooms. The rotation also includes EMS Case Discussions, formal classes in comparative EMS organizations, methods of emergency triage, introduction to disaster medicine, management of mass casualties, and a survey of weapons of mass destruction. Prerequisite: Current BLS Certification and successful completion of third year of medical school is required.

Internal Medicine /MEDI Courses

MEDI 4002. Clinical Cardiology. 4 Credit Hours.

Students are required to participate in inpatient consultations and outpatient clinics evaluating patients with cardiovascular disease. Students are required to perform inpatient consultations at University Hospital and Audie L. Murphy V. A. Hospital. Students are required to perform appropriately focused history and physical exam, prepare written and verbal presentations, interpret laboratory data, and develop differential diagnosis and management plan on each assigned patient. Students are required to also have learning opportunities in ECG interpretation, the cardiac catheterization laboratory, and non-invasive test interpretation such as exercise treadmill testing and echocardiograms. Students must meet expectations of clinical performance and professional behavior based on School of Medicine evaluation for fourth year students to "pass" course.
MEDI 4006. Coronary Care Unit - Subinternship - VA. 4 Credit Hours.

This subinternship is designed to prepare students for the intense and responsible role of the intern. The subintern is an integral member of the team and is required to participate in all team activities and participate in all medical care for his/her patients, under the supervision of the Internal Medicine resident, Cardiology fellow, and Cardiology attending. Students are required to care for patients in the CCU and Telemetry ward. The student will be involved in the inpatient care of patients with cardiac disease, including critically ill patients needing hemodynamic and respiratory monitoring and ventilation support. Students must meet expectations of clinical performance and professional behavior based on School of Medicine evaluation for fourth year students to "pass" course.

MEDI 4008. Clinical Endocrinology. 4 Credit Hours.

Students are required to participate in inpatient consultations and outpatient clinics evaluating patients with pituitary and hypothalamic disease, adrenal disease, diabetes mellitus, thyroid disorders, and lipid disorders. Students are required to perform inpatient consultations at Audie Murphy VA Hospital and University Hospital. Outpatients will be evaluated in weekly endocrine clinics at the VA Hospital and Texas Diabetes Institute. Students will be responsible for the initial evaluation of assigned patients, presentation of findings from the history and physical exam, interpretation of endocrine testing, and formation of differential diagnosis. If rotation is done as the Ambulatory selective, the student is required to prepare a written essay based upon specific course objectives concerning systems of care. Essays must be submitted on the last day of the rotation and are required to receive a passing grade in the course. Students must meet expectations of clinical performance and professional behavior based on School of Medicine evaluation for fourth year students to "pass" course.

MEDI 4010. Clinical Dermatology. 4 Credit Hours.

This elective is recommended for students with a serious interest in Dermatology, and for those intent upon further training in Internal Medicine, Family Medicine, and Pediatrics. It offers considerable clinical experience in both outpatient clinics and supervised inpatient consultations. Students rotating at UTHSCSA are required to attend teaching conferences every Wednesday (all day) and Friday afternoons. This didactic time for students and residents includes lectures, journal reviews, text reviews, and clinical Kodachrome sessions. Didactic sessions will be held separately at WHMC and BAMC. Each student is required to do a 10-minute PowerPoint presentation on a topic of choice that is both dermatology related and fits in with choice of residency. Students must meet expectations of clinical performance and professional behavior based on School of Medicine evaluation for fourth year students to "pass" course.
MEDI 4015. Clinical Gastroenterology. 4 Credit Hours.

Students are required to participate in inpatient consultations at Audie L. Murphy V. A. Hospital (ALMVAH) and University Hospital, outpatient clinics at ALMVAH and University Health System, and special gastrointestinal diagnostic testing under the supervision of Internal Medicine residents, GI fellows, and GI Faculty. Students are required to participate in the independent evaluation of patients with disorders of the gastrointestinal tract, pancreas, and liver. Students are required to become familiar with the application, indications, contraindications, and complications of gastroenterological procedures, as well as the proper preparation of the patient for the procedure. Students are required to perform appropriately focused history and physical exams, prepare written and verbal presentations, interpret laboratory data, and develop differential diagnosis and management plans on all assigned patients. Students must meet expectations of clinical performance and professional behavior based on School of Medicine evaluation for fourth year students to "pass" course.

MEDI 4018. Clinical Hematology. 4 Credit Hours.

The consultation service includes clinical exposure to inpatient consultations, conferences, and outpatient clinics. There is opportunity for training in blood and marrow morphology, observation, and performance of special clinical and laboratory procedures. Students are responsible for the following on all assigned patients: history and physical examination, admission/progress notes, doctor's orders, interpretation of laboratory data, formation of differential diagnosis, assessment, and management plan. Students on both services are required to attend conferences including Hematology Clinical Conference, Hematology/Pathology Conference, Bone Marrow Transplant Conference, and Coagulation Conference. Students must meet expectations of clinical performance and professional behavior based on School of Medicine evaluation for fourth year students to "pass" course.

MEDI 4023. Clinical Infectious Disease. 4 Credit Hours.

Infectious diseases cross all subspecialty lines, especially because antibiotics and antifungal and antiviral agents are employed widely throughout medical practice. This elective will provide practical experience in the diagnosis and management of patients with infectious diseases. There will be particular emphasis upon the pharmacology and pharmacodynamics of antimicrobial agents, selection of appropriate diagnostic tests and therapeutic agents, and the appropriate orientation of the clinician to hospital microbiology laboratories. Students are required to participate in outpatient clinics and inpatient consultations at University Hospital and Audie L Murphy V. A. Hospital and the associated clinics. Students will be responsible for the following in all assigned patients: history and physical examination, written and verbal patient presentations, interpretation of laboratory testing, participation in applicable procedures, development of differential diagnosis, assessment, and management plans. Students must meet expectations of clinical performance and professional behavior based on School of Medicine evaluation for fourth year students to "pass" course.
MEDI 4025. Clinical Nephrology. 4 Credit Hours.

Students are required to participate in the consultation service, outpatient clinics, conferences, acute dialysis unit, and renal biopsy program. A variety of acid-base fluid and electrolyte disorders are seen in addition to the entire spectrum of renal diseases. Student exposure to chronic dialysis and renal transplantation programs is also possible. Students perform appropriately focused history and physical exam, prepare written and verbal presentations, interpret laboratory data, and develop differential diagnosis and management plans on all assigned patients. If rotation is done as the Ambulatory Selective, the student is required to prepare a written essay based upon specific course objectives concerning systems of care. Essays must be submitted on the last day of the rotation and are required to receive a passing grade in the course. Students must meet expectations of clinical performance and professional behavior based on School of Medicine evaluation for fourth year students to "pass" course.

MEDI 4034. Oncology Consultation Service. 4 Credit Hours.

The students are required to participate in the clinical activities of the Medical Oncology Section of the Division of Hematology/Oncology, with experience on the consultation service at both University Hospital and the VA Hospital, plus intensive outpatient experience in the Oncology Clinics. The inpatient consultation experience provides exposure to management of complex oncology problems. The clinic experience provides exposure to a variety of clinical medical oncology problems and their management in the outpatient setting. The student is required to become familiar with all aspects of supportive care for the oncology patient. Students are required to perform appropriately focused history and physical exams, prepare written and verbal presentations, interpret laboratory data, and develop differential diagnosis and management plans on all assigned patients. Students must meet expectations of clinical performance and professional behavior based on School of Medicine evaluation for fourth year students to "pass" course.

MEDI 4042. Coronary Intensive Care Unit - Subinternship - UH. 4 Credit Hours.

The objective of this subinternship is to prepare students for the intense and responsible role of the intern. The subintern is an integral member of the team and are required to participate in all team activities and participate in all medical care for his/her patients, under the supervision of the Internal Medicine resident, Cardiology fellow, and Cardiology attending. The student is required to become proficient in the work-up, diagnosis, and management of patients with acute myocardial infarction, acute respiratory failure, and other commonly encountered acute crises; develop expertise at arrhythmia recognition/therapy, principles involved with airways management/mechanical ventilation. Students must meet expectations of clinical performance and professional behavior based on School of Medicine evaluation for fourth year students to "pass" course.
MEDI 4043. Clinical Chest Disease Consultation Service. 4 Credit Hours.

Students are required to work in the inpatient and outpatient settings, participating in clinics, inpatient consultations, and division conferences. Students are required to perform appropriately focused history and physical exams, prepare written and verbal presentations, interpret laboratory data, and develop differential diagnosis and management plans on all assigned patients. Students are required to actively participate in the work-up and management of patients with acute and chronic lung diseases seen by the Consultation Service and attend Pulmonary clinics at the VA Hospital and UHC-D. Students will be exposed to various diagnostic methods including radiographic, radionucleotide, bronchoscopy, and pleural biopsy techniques. Through active participation, the student should become proficient in interpreting commonly used pulmonary function tests and chest x-rays. Principles and methods involving respiratory therapy, antimicrobial therapy, and evaluation of common pulmonary disorders will be emphasized. Students must meet expectations of clinical performance and professional behavior based on School of Medicine evaluation for fourth year students to "pass" course.

MEDI 4046. General Medicine Ward Subinternship-UH/VA. 4 Credit Hours.

The goal of this subinternship is to prepare students for the intense and responsible role of the intern. The subintern is an integral member of the team and is required to participate in all team activities and participate in all medical care for his/her patients, under the supervision of the Internal Medicine resident and attending. Students must meet expectations of clinical performance and professional behavior based on School of Medicine evaluation for fourth year students to "pass" course.

MEDI 4049. Clinical Rheumatology. 4 Credit Hours.

The differential diagnosis and treatment of rheumatic and autoimmune diseases are taught through active student participation in outpatient clinics, consultation rounds, journal clubs, and division conferences. Students are required to evaluate patients at University Hospital, Audie Murphy VA Hospital, and UHC-D. Students are required to perform appropriately focused history and physical exams, prepare written and verbal presentations, interpret laboratory data, and develop differential diagnosis and management plans on all assigned patients. Students will also have exposure to community resources for the special problems encountered by the patients in this clinic and be able to identify different types of medical delivery systems. If rotation is done as the Ambulatory Selective, the student is required to prepare a written essay based upon specific course objectives concerning systems of care. Essays must be submitted on the last day of the rotation and are required to receive a passing grade in the course. Students must meet expectations of clinical performance and professional behavior based on School of Medicine evaluation for fourth year students to "pass" course.
MEDI 4066. Medical ICU Subinternship - UH/VA. 4 Credit Hours.

This subinternship is designed to prepare students for the intense and responsible role of the intern. The subintern is an integral member of the team and is required to participate in all team activities and participate in all medical care for his/her patients, under the supervision of the Internal Medicine resident, Pulmonary fellow, and Pulmonary/Critical care attending. Students are expected to participate in daily hospital rounds, morning report, Grand Rounds, Morbidity and Mortality conference, IM Housestaff conferences. The students are required to actively participate in the work-up and management of patients with critical illnesses under close supervision of the housestaff, fellows, and faculty. During this rotation, the student will be exposed to the fundamentals of ventilation support, airway management, respiratory and hemodynamic monitoring, stabilization and support of the critically ill patient. Emphasis is placed upon a system approach to patient evaluation and will include didactic sessions with critical care faculty in addition to daily rounds. Students must meet expectations of clinical performance and professional behavior based on School of Medicine evaluation for fourth year students to "pass" course.

MEDI 4068. Geriatric Medicine. 4 Credit Hours.

This rotation offers clinical experience in geriatric internal medicine. The student is required to participate in the Section's outpatient clinic, academic nursing home, and didactic educational activities. The student also has the opportunity for exposure to other multidisciplinary programs in geriatric medicine, including hospital-based home care. Students are required to perform appropriately focused history and physical exams, prepare written and verbal presentations, interpret laboratory data, and develop differential diagnosis and management plans on all assigned patients. Students will also have exposure to community resources for the special problems encountered by geriatric patients and have the opportunity to learn to be able to identify different types of medical delivery systems. If the rotation is done as the Ambulatory selective, the student will be required to prepare a written essay based upon specific course objectives concerning systems of care. Essays must be submitted on the last day of the rotation and are required to receive a passing grade in the course. Students must meet expectations of clinical performance and professional behavior based on School of Medicine evaluation for fourth year students to "pass" course.
SURG 4002. Surgical Oncology. 4 Credit Hours.

Senior students must function as "interns" on the surgical oncology service. They admit and discharge surgical oncology patients. They perform history and physical examinations, and keep daily records on surgical oncology patients. They follow patients in the outpatient clinics, in the emergency department, in the intensive care units and on general wards. They participate in operations for their patients. They participate in pre- and post-operative care of surgical oncology patients. They present cases, attend all conferences, and take call as designated by the surgical oncology service. They mentor third-year medical students on the surgical oncology service. They may participate in basic science research projects in the surgical oncology laboratory and in ongoing clinical trials of cancer diagnosis and management.

SURG 4026. Plastic Surgery Selective. 4 Credit Hours.

Senior students function as "interns" on the plastic surgery service. They admit and discharge plastic surgery patients. They perform history and physical examinations, and keep daily records on plastic surgery patients. They follow patients in the outpatient clinics, in the emergency department, in the intensive care units, and on general wards. They participate in operations for their patients. They participate in pre- and post-operative care of plastic surgery patients. They present cases, attend all conferences, and take call as designated by the plastic surgery service. They mentor third-year medical students on the plastic surgery service. They have exposure to a wide range of plastic surgery issues including complex wound management, aesthetic plastic surgery, facial fractures, reconstructive surgery of the head and neck, and breast, hand, and extremity.

SURG 4031. Transplant Surgery Selective. 4 Credit Hours.

Senior students function as "interns" on the transplant surgery service. They admit and discharge transplant patients. They perform history and physical examinations, and keep daily records on transplant patients. They follow patients in the outpatient clinics, in the emergency department, in the intensive care units, and on general wards. They participate actively in live renal and liver donor evaluation. They participate in operations for their patients, including liver resection and renal, pancreas, and liver transplants. They participate in the evaluation and procurement of the multiorgan cadaveric donor. They participate in pre- and post-operative care of transplant patients. They present cases, attend all conferences, and take call as designated by the transplant service. They present patients at formal multidisciplinary transplant rounds daily. They mentor third-year medical students on the transplant service. They have much contact with gastroenterologists and nephrologists who care for patients on the transplant service. The students rotate at University Hospital and Santa Rosa Northwest Medical Center.
**SURG 4040. Surgical Critical Care Selective. 4 Credit Hours.**

This course provides senior students with a broad exposure to surgical critical care. Students rotate through the surgical trauma ICU and have the opportunity to gain a great understanding of the principles and practice of surgical critical care. The student will have good exposure to cardiovascular and pulmonary physiology. They will have the opportunity to learn about modern concepts of resuscitation, ventilator management, vasopressor support, nutritional support, and infection control. They will have opportunity to place central lines, PA catheters, arterial lines, and perform intubation and bronchoscopy. They will have opportunity to examine and manage critically ill and injured patients in the ICU and keep medical records daily. They will have opportunity to present patients on formal rounds daily and participate in didactic critical care conference and trauma morbidity and mortality conference. They will have opportunity to take call as designated by the service.

**SURG 4042. General Surgery (UH). 4 Credit Hours.**

Students function as "interns" on this broad-based general and laparoscopic surgery service. They admit and discharge general surgical patients. They perform history and physical examinations, and keep daily records on general surgical patients. They follow general surgical patients in the outpatient clinics, in the emergency department, in the intensive care units, and on general wards. They participate in operations for their patients. They participate in pre- and post-operative care of general surgical patients. They present cases, attend all conferences, and take call as designated by the general surgical service.

**SURG 4043. General Surgery (Minimally Invasive Surgery- MIS). 4 Credit Hours.**

Students function as "interns" on this broad-based general and laparoscopic surgery service. They admit and discharge general surgical patients. They perform history and physical examinations, and keep daily records on general surgical patients. They follow general surgical patients in the outpatient clinics, in the emergency department, in the intensive care units, and on general wards. They participate in operations for their patients. They participate in pre- and post-operative care of general surgical patients. They present cases, attend all conferences, and take call as designated by the general surgical service.
SURG 4044. General Surgery VA. 4 Credit Hours.

Senior students function as "interns" on this broad-based general surgery VA service. They admit and discharge general surgical VA patients. They perform history and physical examinations, and keep daily records on general surgical VA patients. They follow general surgical VA patients in the outpatient clinics, in the emergency department, in the intensive care units, and on general wards. They participate in operations for their patients. They participate in pre- and post-operative care of general surgical VA patients. They present cases, attend all conferences, and take call as designated by the service. They mentor third-year medical students on the general surgical VA service.

SURG 4047. Emergency Surgery. 4 Credit Hours.

Senior students function as "interns" on this emergency and trauma surgery service. They admit and discharge surgical patients. They perform history and physical examinations, and keep daily records on surgical patients. Although students will examine most patients in the emergency department, students will also examine patients in outpatient clinics, in intensive care units, and on general wards. They participate in operations for their patients. They participate in pre- and post-operative care of emergency and trauma surgical patients. They present cases, attend all conferences, and take call as designated by the service. They mentor third-year medical students on the emergency and trauma surgery service.

SURG 4048. Vascular Surgery University Hospital/VA Hospital. 4 Credit Hours.

Senior students function as "interns" on each vascular surgery UH/VA service. They admit and discharge vascular surgery UH/VA patients. They perform history and physical examinations, and keep daily records on vascular surgery UH/VA patients. They follow vascular surgery UH/VA patients in the outpatient clinics, in the emergency department, in the intensive care units, and on general wards. They participate in operations for their patients. They participate in pre- and post-operative care of vascular surgery UH/VA patients. They present cases, attend all conferences, and take call as designated by the service. They mentor third-year medical students on the vascular surgery UH/VA service. Students have the opportunity to learn to perform a complete vascular physical examination and learn to interpret vascular diagnostic studies. They will have the opportunity to learn the finer details of endovascular treatment of vascular diseases.