

ENRICHMENT ELECTIVE (ELEC)

Courses

ELEC 5004. Surgical Oncology Service. 0 Credit Hours.

Purpose and objective of this elective is to expose the student to the current and multi-modal approach in the diagnosis and management of cancer. Students will observe and monitor all activities directed to the workup, treatment, and follow-up of patients with cancer. Students will have the chance to observe and participate in the different surgical procedures, specifically those related to the treatment of cancer. He or she will be introduced to and familiarized with the principles and concepts of adjuvant chemotherapy, immunotherapy, and hormonal therapy before and after surgical treatment of different diseases. They will also have the opportunity to observe and partake in the different activities in the conduct of clinical trials as sponsored by the different national cooperative groups, i.e. the Southwest Oncology Group and the National Surgical Adjuvant Breast and Bowel Program. The students will learn the necessity for establishing different protocols in the quest for a greater understanding and improvement in the management of malignant diseases and will participate in the discussion of problems related to cancer patient care during rounds and more didactic teachings during Grand Rounds and the regular conferences of the service. Upon completion of this elective, students will have a fairly significant introduction and familiarization into clinical surgical oncology.

ELEC 5022. History Of Anatomy. 0 Credit Hours.

This course is designed to acquaint medical, dental and graduate students with the history of medicine and especially with the physicians and scientists who made essential discoveries in human anatomy. Using a biographical approach, the course is presented as a seminar with lectures, assigned readings and student presentations.

ELEC 5023. Sports Medicine Perspectives. 0 Credit Hours.

Course will expose students to the clinical practice of orthopaedic sports medicine. This includes exposure to high school, collegiate and professional sports. Emphasis will be on injury evaluation, prevention and treatment. Sports may include football, basketball, track and field, baseball, soccer, gymnastics and water sports.

ELEC 5027. Family Violence Education. 0 Credit Hours.

The course will analyze the dynamics of family violence, including the statistics, myths, types of abuse, characteristics of battered persons, the effect of violence on children, characteristics of batterers, treatment programs, the skills needed for intervention and the responsibilities of the medical profession, the legal profession and law enforcement in family violence.

ELEC 5030. Advanced Neuroanatomy. 0 Credit Hours.

This enrichment selective is intended to reinforce basic principles learned in Medical Neuroscience and to explore in greater depth current research and thought in neuroanatomy. Clinical relevance will also be stressed whenever applicable. The instructor will meet with the student(s) 2-3 hours per week for 4 weeks. A 20-page library research paper is also required. The course will be subdivided into the following components - 1) Essential Concepts - Cell Biology of Neurons & Glia, Electrochemical Basis of Neuronal Integration, Development of the Nervous System & Its Disorders; 2) Regional Neuroanatomy- Ventricles and Meninges, Cerebrovascular System, Spinal Cord, and Brainstem Anatomy; 3) Systems Neurobiology - Somatosensory System Chemosenses, Special Senses, Motor System, Extrapyramidal System, Cerebellum, Limbic System; and 4) Homeostatic Mechanisms.

ELEC 5031. Introduction To Emergency Medicine. 0 Credit Hours.

Students will be exposed to clinical emergency medicine in an extracurricular setting by working with assigned preceptors in the University Hospital Emergency Department (with the possible addition of BAMC ED or a community ED experience, including toxicology experience). Students will learn about the specialty of Emergency Medicine and its subspecialties. Students will also receive lectures on core emergency medicine topics and attend case presentations.

ELEC 5032. Interdisciplinary Issues & Approaches to Death & Dying. 0 Credit Hours.

The course provides an opportunity to explore issues and interdisciplinary approaches related to death and dying at both the personal and professional levels. Emphasis is placed on the positive and necessary values of compassion, listening and tolerance for varied beliefs. The course encourages participants to engage in constructive critical analysis through self-discovery about death and dying. Areas for discussion include: values clarification, definitions of death, stages of dying, emotions surrounding loss, survivorship, ethical and legal components of death, and transcultural aspects related to death and dying. Communication will be presented as a primary intervention method in dealing with death related issues. Critical analysis of a variety of situations will be stressed as an integral part of the interdisciplinary approach in determining appropriate therapeutic interventions.

ELEC 5036. Let Your Life Speak: Authentic Decision-Making For Your Medical School Career. 0 Credit Hours.

This course is designed to give students in their first or second year of medical school a unique opportunity to evaluate their personal decision-making process. The course will provide a forum for learning and dialoguing with other students about the various factors from a student's history and present circumstances that impact how the student makes decisions. Questions like, "How will I choose a specialty?" and "How will I maintain my passion for medicine?" will be addressed as the anatomy of the decision-making process is considered. Class will be held in a guided group discussion format with each student also receiving a one-hour personal coaching session with the instructor during the semester.

ELEC 5038. Medicine Through Literature 1. 0 Credit Hours.

The purpose of the course is for second year medical students to engage in literature that prepares them for and to process their clinical experiences and identity as people and as physicians. The course also will allow students to interact with fourth-year medical students enrolled in INTD 7007 and faculty in a venue that is open and informal. In this course we will read short stories, poems, essays, and excerpts from books of nonfiction and fiction. Many of the texts directly address medical or ethical issues, and we will promote our appreciation of these works through discussions with each other.

ELEC 5040. Trauma Enrichment Elective. 0 Credit Hours.

This course is designed to give first- and second-year medical students an introduction to the exciting field of trauma and trauma surgery. It will offer students the opportunity to observe how attendings, medical residents, medical students, and hospital staff work towards caring for patients who suffer from traumatic injury. Students may also have the opportunity to observe the surgeries if approved by the attending on duty.

ELEC 5041. Homelessness, Addiction, & How To Better Care For Patients. 0 Credit Hours.

The goals and objectives of this course are to increase awareness about homelessness and addiction and how they relate to healthcare; to prepare first-and second-year students for working at student-run clinics; and encourage student teaching within all four years of medical school. This a student-run courses, led by MS4 students in the Humanism fellowship, for MS1 and MS2 students with a special interest in learning about issues of homelessness and addiction, and how these relate to the provision of healthcare.

ELEC 5044. Enrichment Elective In Interprofessional Community Service Learning. 0 Credit Hours.

This innovative inter-professional community service learning (CSL) course, offered in partnership with the UT School of Pharmacy, PHR 270S, to allow medical students to integrate meaningful community service with instruction, preparation, and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities. Students will have the opportunity to examine social justice and social determinant of health issues and apply these principles in a structured service learning practicum. The student-led service learning project will address the social and health needs of a community partner and will be conducted with a partner agency in a culturally competent manner. Through online learning modules, readings and discussion; monthly class sessions; a group service learning project; and a structured service learning practicum, this course combines community service with preparation and reflection to help foster civic responsibility in the health professions. Open for Cross Enrollment on Space Available Basis.

ELEC 5047. Global Health Enrichment Elective. 0 Credit Hours.

The course is a longitudinal enrichment elective for first- and second-year medical students who are planning to pursue global health experiences during winter, spring, or summer breaks. This elective will utilize a community-service learning module, in which preparation, mentorship, evaluation, reflection, and reporting are essential in meeting the expressed need of a particular community. The elective will provide an opportunity to learn a foundation of practical knowledge in global health and to optimize the students' overseas experiences, maximize the safety of their travel, facilitate their adaptation to working in different cultural settings, and maximize their impact in communities where they serve. Course material will be presented through a variety of approaches, including lectures, small-group case discussions, laboratory sessions, practical workshops, and online learning modules. Open for Cross Enrollment on Space Available Basis.

ELEC 5048. Enrichment Elective in Art. 0 Credit Hours.

This is an interactive, interprofessional course that takes students to the McNay Art Museum to learn physical observation skills. Studies demonstrate that increased observational skills translate to improved physical examination skills. Using artwork as patients, students will have the opportunity to learn how to observe details and how to interpret images based on available evidence. Taught jointly by Health Science Center faculty and McNay museum educators, students will have the opportunity to develop and hone their observation, problem solving, and assessment skills. They will also observe, interpret, and give case reports on the original works of art to teach them the skill of verbalizing descriptions of what is seen, and not to accept assumptions made with a first impression. Open for Cross Enrollment on Space Available Basis.

ELEC 5051. Applied Neuroanatomy. 0 Credit Hours.

This course is aimed at students and faculty who are interested in understanding applied neurosensory pathways. The purpose of the course is to reinforce the neurosensory material in the MSI Neuroanatomy course by applying the material to real world situations via interactive activities and clinical vignettes. Additionally, this course would allow students to use different types of art media to express themselves as they learn the material through different types of art media. The course content and schedule is constructed to correspond with the material and schedule of the MSI Neuroanatomy course. This elective will explore four neurosensory modalities: proprioception/balance, vision, auditory and taste/olfaction. Each modality will be covered in one two-hour class session that will be comprised of a lecture component and its corresponding laboratory component. The course will be open to 15 students.

ELEC 5054. Introduction to Culinary Nutrition. 0 Credit Hours.

Introduction to Culinary Nutrition is a medical student enrichment elective that provides the foundation for learning the principles of culinary nutrition and its role in optimizing health and wellness for the physician as a healer as well as encouraging physicians to serve as role models and educators of their patients. Intro to Culinary Nutrition is an enrichment elective, set in a state of the art kitchen theater in a downtown Culinary Academy and is taught by chefs trained in culinary nutrition and facilitated by your peers who have successfully completed the course and faculty dedicated to the practical application of nutrition in physician and patient wellness. The culinary medicine elective is a series of eight dynamic hands-on cooking experiences and will meet on various afternoons throughout each semester. Patterned after Tulane University School of Medicine's groundbreaking course, the elective aims to teach medical students about nutrition in a new way through one-on-one coaching and interactive cooking so that they can embrace a healthy lifestyle themselves while helping their patients and peers to do the same.

ELEC 5055. Issues in Women's Healthcare. 0 Credit Hours.

A comprehensive introduction to Women's Health, with an emphasis on topics that are not covered in preclinical curriculum. This course is an enriching supplement to medical school education. It will empower future doctors in any specialty to consider female patients in the context of their unique body processes, and potentially catch symptoms of various health problems early. Lectures will be given throughout the semester. Faculty and local experts in the fields under discussion will be our guest lecturers.

ELEC 5056. Integrating Public Health and Medicine in the 21st Century: Special Topics for MD/MPH Students. 0 Credit Hours.

This hybrid in-person and virtual seminar course is designed for MD/ MPH students to discuss the intersection of medicine and public health. Throughout the elective, students will explore career pathways for MD/ MPH recipients in in different sectors and brainstorm regarding their own goals as physicians with public health expertise. The course will include readings, group discussion, and monthly seminars, including guest seminars from leaders in public health locally and from around the globe. Prerequisites: Students must be a part of the MD/MPH dual-degree program.

ELEC 5057. Global Health Longitudinal Elective. 0 Credit Hours.

Student demand to learn about global health and participate in global health service learning at the School of Medicine continues to grow every year. To date, the Center for Medical Humanities & Ethics has met this demand successfully. However, students who complete the Longitudinal Global Health elective (ELEC 5047) in their first year are now requesting the opportunity to continue their education in global health and engagement with global health service learning. These experienced students play an important role on subsequent trips as they serve as peer mentors and trip coordinators, improving the overall quality of the services our teams provide abroad. As a result, we are requesting the creation of a new Global Health Longitudinal Elective, specifically for second year medical students who have previously completed ELEC 5047. The Center has set a precedent for offering another elective course for students wishing to participate in the Literature in Medicine course a second time, by offering the course to both second year (ELEC 5038 - ELEC 5039) and fourth year (INTD 7004) medical students. This proposed elective will utilize a community service learning model, in which preparation, mentorship, evaluation, reflection and reporting are essential in meeting the expressed need of a particular community. The elective will also provide a foundation of practical knowledge in global health and will optimize the students' overseas experiences, maximize the safety of their travel, facilitate their adaptation to working in different cultural settings, and maximize their impact in the communities where they serve. The course material will be presented through a variety of approaches, including lectures, small group case discussions, optional laboratory sessions, practical workshops, and online learning modules. Prerequisites: ELEC 5047.

ELEC 5058. Healthcare Value Elective. 0 Credit Hours.

A comprehensive introduction to the principles of Value-Based Health Care (VBHC), with an emphasis on topics that are not typically covered in preclinical curriculum. Lectures will be given throughout the semester by School of Medicine Faculty, visiting lecturers, and community-based professionals with experience and knowledge germane to VBHC. The course material will be complemented by Dell Medical VBHC Modules.

ELEC 5059. Introduction to Research Study Design. 0 Credit Hours.

This course will provide students with an overview of basic research study design and methods. The goal of this elective is to equip students with the knowledge and skills to design a standard research protocol, thereby achieving success in their individual research endeavors. Through a combination of didactic lectures and individualized mentoring, students will learn how to conduct and interpret research literature, the basics of research ethics and regulatory considerations, and about basic study designs and data analysis. Throughout this semester long elective, students will work on a research protocol, and at the conclusion they will submit this protocol, thereby demonstrating their knowledge and application of the principles learned.

ELEC 5060. The Healer's Art. 0 Credit Hours.

The Healer's Art engages students in a community of inquiry focusing on the meaning of physicianhood and the practice of medicine. It combines seed talks in a large group setting along with small group experiential exercises. Session themes include: Discovering and Nurturing Your Wholeness, Sharing Grief and Honoring Loss, Allowing Awe in Medicine, and The Care of the Soul: Service as a Way of Life. This elective is available to first year medical students in the spring session and second year medical students in the fall session.

ELEC 5061. Basic Science Technical Training. 0 Credit Hours.

The next generation of physician leaders will interface at the frontline of clinical care and basic science research. Clinical care requires mechanistic knowledge of underlying disease progression to evaluate treatments. As a co-investigator in a basic science grant or leading a clinical care unit, physicians with advanced basic science knowledge are called to lead in the medical community. To cultivate the next generation of physician leaders, research training during medical school becomes critical for successful research opportunity achievements. The LSOM Deans Office for Research has developed an initiative to help medical students achieve a basic science foundation that will allow them to capitalize on research opportunities across campus. Through this course, medical students will learn basic science techniques and enhance technical communication and critical thinking skills that are the requisite attributes of physician leaders.

ELEC 5070. Introduction to Generative AI. 0 Credit Hours.

This longitudinal course provides a comprehensive introduction to Generative AI technologies with specific focus on applications in medicine. Through monthly 90-minute sessions combining lectures, interactive demonstrations, and hands-on exercises, students will explore the fundamental concepts and practical applications of Large Language Models (LLMs). Topics include data structures, vectorization, tokens, encoding/decoding, sentence transformers, fine-tuning techniques (PEFT/LORA), retrieval augmented generation, multimodal applications (visual/audio), and critical considerations regarding bias and legal implications. Open for Cross Enrollment on Space Available Basis.

ELEC 5080. Introduction to Python and Machine Learning. 0 Credit Hours.

This introductory enrichment course is to learn Python programming and explore its applications in Machine Learning. Machine Learning is a field of study within artificial intelligence (AI) that focuses on pattern recognition and predictive modeling, as such it has many potential applications in clinical medicine and medical research. In Machine Learning, data are given to an AI model which is used to learn patterns in the data capable of permitting predictions on non-training data. Participants will learn into Python basics, progressing to advanced topics like OOP and data manipulation. The course culminates with hands-on implementation of Machine Learning algorithms, including Random Forests and Neural Networks using NumPy. Each session features an in-class project to reinforce learning.

ELEC 5306. Medical Spanish. 0 Credit Hours.

Effective communication in health care is crucial for patients with limited English proficiency. Language-concordant care enhances patient satisfaction and reduces communication barriers. Despite a shortage of Spanish-speaking physicians, prioritizing language concordance can improve health equity and overall healthcare quality. This elective course will enhance medical students' linguistic and cultural competency to better prepare them to communicate with Spanish-speaking patients. The curriculum integrates language learning with clinical experiences to ensure students improve their Spanish skills alongside their medical education. This curriculum is open to second-year students of all levels of Spanish fluency. Permission is needed to enroll in this course along with being an MS2. A pre-test must be taken before the start of the course.

ELEC 6068. Beauty and the Brain: Neuroaesthetics and Neuroarthistory. 0**Credit Hours.**

Does your brain help you appreciate the Mona Lisa? What about the Taj Mahal? This elective course explores the role of the brain in the human experience of art as well as how artists have manipulated these effects to design and orchestrate aesthetic experiences. Heavily focusing on, but not limited to, visual perception, this course investigates the way that neuroscience can be used to examine contemporary and historical human experiences of art. We begin with a critical survey of existing neuroaesthetic literature guided by the question: what assumptions about art and art viewership do researchers bring to their study of art objects and are these assumptions valid? We will then observe how collaborations between art historians and scientists have historically situated neurological phenomenon and effects of perception to examine human experience with art and the built environment. Students will then lend their own medical expertise to the examination of artistic case studies that engage the body within the sensory environment. What neural, physiological, and cognitive systems might be coming to bear on engagement with or the appreciation of a work of art and how might medical professionals begin to investigate the connection between beauty and the human brain? Open for Cross Enrollment on Space Available Basis.