

SCIENCE PREPROFESSIONAL (SCPP)

SCPP 23100 Interdisciplinary Science Seminar (1 Credit Hour)

This course objective for this seminar is to provide an opportunity for students to interact with community leaders and top interdisciplinary faculty members throughout the University who will describe how their research or work impacts biomedical research. Students typically do not have much interaction with faculty outside their home department. They may not be aware that many faculty members from diverse departments such as physics, math, and engineering are making important advancements in the biomedical field. This seminar would expose the students to different career opportunities, provide them with the opportunity for faculty interactions they would otherwise not have, and give them a better understanding of the most current and significant advances in the field. For interdisciplinary science students in particular, a broader understanding of the biomedical field is helpful in interviews for professional schools.

Enrollment is limited to students with a major in Science- Business, Science - Computing, Science - Education or PreProfessional.

SCPP 30211 The Art & Science of Well-Being (3 Credit Hours)

Is there a formula for becoming happier? Yes. Drawing on my 40 year practice as a cardiovascular physician, we will merge the art and science of medicine while discovering that happiness and well-being indeed can be nurtured. This course explores the intersection of medical science, positive psychology, individual well-being, and philosophical reflections on life and death by examining the scientific literature, and most importantly, sharing our personal stories. A major point of emphasis involves how we deal with, and protect ourselves from loss, suffering, and death, and how this informs the way we live our lives. The course will emphasize personal stories; practices to promote a healthy mind and body; explore the concepts of positive and negative emotions, savoring, resilience, and how to harness our own character strengths; and investigate both the impediments and pillars to building a happier life. We will examine the ethics and means by which modern medicine prolongs life, implements organ transplantations, and confronts the dying process. Satisfies the following University Core Requirements: WKSS - Core Social Science

SCPP 30224 Sick and Tired: Archaeological histories of health (3 Credit Hours)

Illness and disease have been part of the human experience for as long as we have existed. The nature of these challenges, and how we have responded to them, has evolved over time. In this course, we will dig into evidence from the archaeological record and bioarchaeological data from skeletal remains to trace the history of human health. From prehistoric pandemics to ancient healing practices, we'll uncover the sick and tired side of archaeology that reveals how illness and the pursuit of health have shaped—and been shaped by—human history. You'll learn how archaeologists and bioarchaeologists reconstruct stories of past health, exploring how humans have cared for one another since our evolutionary origins and how our understanding of "health" has shifted across time.

SCPP 30300 Introduction to Clinical Ethics (3 Credit Hours)

The focus of the course will be an examination of the advances in medicine over the last 30 years that have challenged traditional values and ethical norms, and the institutional processes and procedures in place that facilitate decision-making in the health care setting. It will include a sketch of the most recent advances in the various fields of medicine, followed by an examination of the clinical and ethical questions they raise and how they have affected the physician-patient relationship. Note: This course counts as a general elective. Fall and spring.

Enrollment is limited to students with a major in Pre-Health Studies (Supp.), Biochemistry, Biological Sciences, Chemistry, Mathematics, Neuroscience and Behavior, Physics/Education, Physics in Medicine, Physics, Science- Business, Science - Computing, Science - Education or PreProfessional.

Enrollment limited to students in the College of Arts and Letters or College of Science colleges.

SCPP 30311 Introduction to the American Health Care System (3 Credit Hours)

The course will begin with a short history of the American health care system and will be followed by a discussion of the major components of the system (patients, providers, payers), health insurance coverage, managed care programs, the movement for quality health care, physicians in the changing medical marketplace, health care expenditures, and academic medical centers. This course counts as a general elective. Fall.

Enrollment is limited to students with a major in Pre-Health Studies (Supp.), Biochemistry, Biological Sciences, Chemistry, Mathematics, Neuroscience and Behavior, Physics/Education, Physics in Medicine, Physics, Science- Business, Science - Computing, Science - Education or PreProfessional.

Enrollment limited to students in the College of Arts and Letters or College of Science colleges.

SCPP 30320 Film and the Physician - Portrayals of Medicine in Film and the Arts (3 Credit Hours)

This course will examine the representation of medicine in film, still art and texts. The point of view will be to examine the interdisciplinary arts, primarily film plus secondary readings of literary texts, with the goal of broadening the understanding of the lives of patients, families and providers for future health care professionals, particularly physicians. The goal is to heighten the awareness of the world surrounding medical encounters and encourage an open minded approach to people in medical need. Based on Cinemeducation training in medical schools and residency programs, topics examined include delivering bad news, end of life issues, medical malpractice, family dynamics, professionalism, cultural diversity, gender issues, grief, balance of professional and personal life and medical errors. Film clips will be introduced and reviewed with specific discussion points. Strong emphasis will be placed on group discussion, with four short papers, one discussion lead and a final paper.

Enrollment is limited to students with a program in Arts & Letters PreProfessional, Biochemistry, Biological Sciences, Chemistry, Mathematics, Physics in Medicine, Science- Business or PreProfessional.

SCPP 30401 Medical Counseling Skills and Patient-Centered Medicine (3 Credit Hours)

This course is designed to provide an overview and introductory practical training in medical counseling skills and patient-centered medicine. It is designed specifically for undergraduates interested in careers in medicine, but can also be helpful for students aspiring to other helping professions. This course will provide a theoretical and evidence-based foundation in compassionate care and communication skills for patient care. Emphasis will be placed on clear and professional communication across a wide range of patient care situations. This 3 credit hour class with limited enrollment will provide opportunities to practice these skills through practical classroom training, outside assignments, and an introduction to the field of Caring Science as it applies to the medical professions.

SCPP 30403 Cultural Humility and Social Determinants of Health (3 Credit Hours)

This course will foster thoughtful dialogue on the importance of cultural humility in healthcare. Students will work to grow their cultural awareness and understanding of the social determinants of health by exploring the lived-experiences of individuals. Through the utilizations of skills based in the compassion science framework, students will consider how cultural humility impacts patient outcomes. An exploration of current topics in healthcare disparities will deepen classroom discussion. This course provides an added entry point into the understanding of the important place cultural humility and understanding hold in the healthcare relationship. The course is open to CCIM minors. Permission is required for those outside of the minor who are planning to pursue the health professions as space permits.

SCPP 30405 Compassionate Care and the Medical Professions (3 Credit Hours)

This course is designed to provide the theoretical and practical foundation to providing compassionate care in the medical professions. It will provide an introduction to the field of Caring Science and provide the behavioral and attitudinal components to providing effective patient care as well as teaching how practitioners can be balanced in providing patient care. Topics include Caring Science theory, clinician burnout, compassion fatigue, maintaining caring in the encounter with suffering, and physician self-care. While designed specifically for the future medical professional, the course is open as enrollment allows to students in allied helping professions. Class material will include research from medical, psychological, caring science, business, and spiritual sources. Enrollment is limited to students with a major in Applied & Comp Math and Stats, Pre-Health Studies (Supp.), Biochemistry, Biological Sciences, Chemistry/Business, Chemical Engineering, Chemistry, Environmental Sciences, Mathematics, Neuroscience and Behavior, Physics in Medicine, Physics, Science- Business, PreProfessional or Statistics.

SCPP 30406 Spiritualities of Caring in the Helping Professions (3 Credit Hours)

This 3 credit hour seminar course is designed to explore how helping professionals articulate, cultivate, and rely on their spirituality or philosophy of caring as they participate in the work of helping and healing others. We will study how helping professionals rely on a spirituality of caring in order to help them maintain and cultivate their compassion in their work in the face of suffering and the problem of evil. An overall model for a spirituality/philosophy of caring will be presented and then explored as it is exemplified in various spiritual and philosophical traditions. The course is not intended to be an exhaustive survey of all spiritual traditions, but as an introductory opportunity for the student to understand the role of spirituality in helping work and to begin to articulate their own spirituality of caring in preparation for helping professions. The course is designed especially for the preprofessional student as well as anyone who is preparing for work in a helping profession. We will rely on readings from Christianity, Buddhism, Hinduism, Islam, Judaism as well as other traditions and philosophies, and also will examine writings by people who have reflected on the practical aspects of living out a spirituality of caring.

Enrollment limited to students in the College of Science college.

Enrollment limited to students in the Pre-Professional Studies department.

SCPP 34405 Compassionate Care and the Medical Professions (3 Credit Hours)

This course is designed to provide the theoretical and practical foundation to providing compassionate care in the medical professions. It will provide an introduction to the field of Caring Science and provide the behavioral and attitudinal components to providing effective patient care as well as teaching how practitioners can be balanced in providing patient care. Topics include Caring Science theory, clinician burnout, compassion fatigue, maintaining caring in the encounter with suffering, and physician self-care. While designed specifically for the future medical professional, the course is open as enrollment allows to students in allied helping professions. Class material will include research from medical, psychological, caring science, business, and spiritual sources.

SCPP 40001 Preparing for Health Professions (1 Credit Hour)

This course will prepare students to apply to health professions graduate programs. Topics covered will include how to write a personal statement, framing your experiences, preparing for interviews and specifics about the centralized applications. We will also have panel discussions regarding the balance of personal and professional life, the meaning of professionalism, hot topics in healthcare and a look at the way medicine is portrayed in the arts. Satisfactory performance will require completion of Concourse quizzes, written reflections in the form of questionnaires, written organization of experiences and a draft of the personal statement. This course should be taken the semester preceding application.

SCPP 40397 Capstone in MCCM (3 Credit Hours)

The Capstone project is designed for students to integrate the scientific understanding of compassion along with some sense of its practical implications in the health professions and helping work in general. The Capstone project should demonstrate an advanced understanding of the phenomenon of compassion from its biological, neuroscientific, social-cognitive, and social science perspectives as well as how this is connected to the way this is manifest or impeded in practical application. The Capstone project will need to demonstrate how actual helping dynamics are reflective of the underlying scientific mechanisms. The Capstone project may focus on a variety of examples of compassionate care in exemplifying how the scientific mechanisms of compassion determine the critical dynamics in clinical or other helping work as well as what is required to sustain this type of work on a long-term basis. The student will be required to do a twenty-page paper of the student's own design integrating the courses and experiences of the CCIM minor. The Capstone project must be pre-approved by the Director or capstone advisor. Successful completion of the Capstone project is necessary to receive the Minor in Compassionate Care in Medicine. Permission required. Fall and Spring. Note: This course counts as a general elective and is used to satisfy the capstone project for the Minor in Compassionate Care in Medicine.

Prerequisites: SCPP 30405

Satisfies the following University Core Requirements: WRIT - Writing Intensive

SCPP 40698 Contemporary Concerns in Medicine (3 Credit Hours)

From anti-vaxxers to designer genes, this class explores some of the most important and challenging topics in medicine and society today. Students will gain an understanding of the ethical, social, and practical dimensions of a variety of healthcare and health policy issues. Students will also have the opportunity to engage directly with healthcare workers from around the US who will serve as guest speakers. Topics we will cover include the opioid and COVID-19 epidemics; stem cell research; brain death in pregnancy; and freedom of speech in clinical settings. This course is open to all and will be especially useful for those planning for careers in science, medicine, and public health.

SCPP 43531 Psychology and Medicine (3 Credit Hours)

This course has two basic objectives. First, it examines from a lifespan and psychobiological perspective the factors that place individuals at different stages of life at risk for illness and assist them in maintaining their health. In addition, it addresses a variety of challenging psychological and social issues that physicians and other healthcare professionals must face in the practice of medicine. The course covers a range of topics dealing with health issues related to different stages of human development (childhood, adolescence, and adulthood), disabled populations, culture and gender, stress, physician-patient interactions, death and dying, professional ethics, and social policies relating to health care. The course is primarily intended for students intending to enter medical school. Most classes will involve brief formal presentations by the instructors and invited guests, followed by discussion of assigned readings pertinent to the day's topic. In addition, students will be exposed, via a limited practicum, to a variety of medical settings.

SCPP 46397 Directed Readings (1-3 Credit Hours)

Readings focus on learning how patients, families, and healthcare professionals experience illness and healing, how the stories that patients tell become the basis for diagnosis and therapeutic response, what it's like to go through medical training and grow in identity as a physician, and the nature of the doctor-patient relationship and how it is changing. Fall and spring. Note: This course counts as a general elective. Course may be repeated.

SCPP 46937 Directed Readings: Biomedical Case Studies in Medicine (1 Credit Hour)

This course will focus on the biomedical aspects of medicine that expand on foundational courses like physiology or biochemistry. It would give a more in-depth insight into the health professional's role across a variety of disciplines. Alumni health providers will present a clinical case study, give the background of the case, guide students through their methodology (thought process and actions in diagnosis, treatment, and patient interaction), explain how they gather additional resources for difficult cases, and describe how they work with the Interprofessional team. Students will read pertinent background information before the case that would be posted on Sakai. Following the session, students would be split into learning groups, each working with the professor or a TA to discuss the case further. A reflection will be due at the end of each week explaining what students learned about the health professional's role, how basic science applies to clinical care, and how they see themselves connected (or not) to that type of work. Reflection on these experiences will help students process their own understanding of medicine. The course counts toward general elective credit.

SCPP 48498 Research (1-3 Credit Hours)

Participation in research

Course may be repeated.