

Interdisciplinary Studies

Associate Dean for Interdisciplinary and General Studies
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Interdisciplinary courses use the resources of several disciplines to investigate topics that cut across departmental lines. These courses raise awareness about the distinctive methodologies and conceptual frameworks of different disciplines and their strengths and possible biases in describing, explaining, and evaluating reality.

Courses

ID 110: *Interprofessional Education: Exploration in Healthcare*

Students are exposed to healthcare careers while they examine the science of health and wellness in relation to self-care, stress-management, sleep, rest, and nutrition. Students learn about physiological biochemical responses to stress, grief, and loss as well as the mechanisms of coping. Students use medical terminology in therapeutic communication and explore values and ethics for collaborative interprofessional practice. An overview of the healthcare system, holistic care, and evidence-based practice is provided. Counts toward nursing and exercise science majors. Offered during interim.

ID 150: *Explorations in Science*

This interdisciplinary, topics-based course explores contemporary issues in science with emphasis on developing students' understanding of scientific and quantitative approaches to problem solving. Specific topics, ranging from environmental chemistry and public health to biomechanics and genetics, vary from year to year. Students attend nine hours of lectures or small group discussion sections, two to three hours of quantitative workshops, and four hours of laboratory per week. Does not count toward any major. The course is taught with WRIT 109. Offered annually during the summer.

Prerequisite: acceptance into the Summer Bridge Program.

ID 202: *Human-Spatial Interaction*

Organized around three current issues, this is an interdisciplinary course examining human-spatial interaction within Africa, Asia and the Middle East. The topics of study include, for example, global warming, potable water issues, and the Palestinian dilemma. The course is deliberative in nature with a focus on the development of critical thinking skills. Taught during summer session I.

ID 210: *Pathopharmacology*

This course explores pharmacodynamics and pharmacokinetics, integrating principles of pathophysiology through examining drug classifications in relation to disease processes and symptom management. Evaluation of efficacy, potential complications, and special considerations for medication administration are emphasized. Monitoring of physical signs and symptoms, diagnostic evaluation, and complications of drug therapy are reviewed. Counts toward the nursing major. Offered annually in the spring semester.

Prerequisite: concurrent registration in (or previous completion of) BIO 243.

ID 230: *Communicating Science and Mathematics (0.25)*

Oral communication is an essential part of science and mathematics. Students work closely with a faculty member to learn and practice important aspects of communicating technical information to both expert and non-expert audiences. Enrollment by permission of instructor only. P/N only. Offered each semester.

Prerequisite: previous participation in summer communication series.

ID 234: *Human Geography of the Middle East*

This course provides an examination and application of the key content, skills, and perspectives of human geography. The lens of the geographer focuses on the spatial distribution of phenomena over the surface of the earth, asking the questions "where?" and "why there?". The practices and skills of geography are used to investigate a variety of issues in the Middle East, including environmental problems, the culture and management of sacred places, and the reasons for war and the need for peace. Counts toward environmental studies major (social science emphasis) and middle eastern studies concentration.

ID 235: *Introduction to Modern Middle Eastern Studies*

This course introduces students to the intellectual dimensions of cultures and traditions of the modern Middle East, focusing on the period from the late 18th century to the present. Students gain familiarity with significant moments, movements, voices, and trends in society, politics, architecture, and literature, and their interdependence. The course also acquaints students with intellectual debates and conflicts in and about the Middle East, and enables them to better think through those debates for themselves. Counts toward middle eastern studies concentration.

ID 237: *McNair Research Writing Across the Disciplines*

This course prepares McNair Scholars for the rigors of academic writing. Because the enrolled students represent a variety of disciplines, this course serves as a general introduction to writing in research; it is not meant to replace discipline-specific research methods or writing courses. Students read scholarly literature in their disciplines, write a literature review, draft various sections of a research paper, and prepare for a formal poster presentation. Offered every summer.

ID 238: *Religion and Politics in Jordan (abroad)*

Students explore how religion impacts political thought and social-political activism in contemporary Jordan amidst changes sweeping the region. Topics include the interpretation of democracy, rights, and secularism; the statements and influence of religious leaders; the development of religiously coded legal initiatives and political parties; and the experiences of everyday Jordanians including youth, women, and Christian minorities. Counts toward Middle Eastern studies concentration. Offered alternate Interims.

ID 245: *Integrated Science/Society: Interdisciplinary Approach Contemporary Iss*

This course explores the intersection of science, scientific knowledge, and contemporary social problems. Through sustained inquiry into a specific issue or topic, it shows students the strengths and potential overlap of different research methods and perspectives from the social and natural sciences. Depending on the topic, students may also investigate the impact of the legal and political context on such work, and the complexities of representing research to the larger public. Offered periodically. May be repeated if topic is different.

Prerequisite: junior or senior standing; a limited number of sophomores will be allowed to enroll.

ID 249: *Mare Balticum (in English, abroad)*

Starting with Hanseatic and Teutonic traditions of entrepreneurship from the 13th-century, this course focuses on the political and economic history of a region that has transitioned from tribalism to feudalism, then to mercantilism, capitalism, communism, and now EU-style capitalism. The course develops in an itinerant way -- city to city -- starting in Lübeck, Germany, then proceed eastward to the cities of Wismar, Rostock, Stralsund, Greifswald, Wolgast, Szczecin, Koszalin, Danzig, Malbork, Ketrzyn, Vilnius, Kaunas, the Russian enclave of Kaliningrad (formerly Königsberg in Germany's East Prussia), Klaipeda, Riga, Tartu, Tallinn, crossing by ship to Helsinki, Finland, and again by ship to Stockholm, Sweden. Students deliver several oral presentations, including a group project of a business plan for a hypothetical start-up. Offered during Interim.

ID 250: *Research Opportunity in Science for Sophomores*

This course provides a guided summer research opportunity in science for rising sophomores. The course focuses on a research topic(s) to be determined by the instructor. Students learn how to ask and evaluate scientific question(s) with emphasis on quantitative approaches; read from and research the scientific literature; collect and analyze data; and summarize and present their results in writing and orally.

Prerequisite: completion of Summer Bridge program or permission of instructor.

ID 255: *The Physician in Clinical and Hospital Health Care (off campus)*

Students will explore health care in a clinical and hospital setting through association with a physician in one of the clinics that are a part of the metro area Fairview Health System or the Family Practice Medical Center of Willmar, Minnesota. Students will follow the physician, who serves as their primary mentor, or other designated physicians through their daily activities in pertinent clinical and hospital settings. Students will observe the delivery of health care in primary and specialty areas and in practices dealing with all age groups. Emergency health care and physician support areas are other aspects of medicine to which students will be exposed. Students will keep a journal detailing their observations and their interpretation of and reaction to these observations and will write a research paper on an aspect of current medical care and practice. Selection is based on a review of all applicants (preference given to junior or senior pre-medical students with demonstrated strong academic achievement). P/N grading. Offered annually during Interim. Counts toward biomedical studies concentration (for students through class of 2016).

ID 256: *Issues in Global Health*

This course examines multicultural health concepts and health care systems from biological, social, psychological and practical points of view. Students examine critical global health issues, including globalization, emerging infectious diseases, women's health and economic development, food and nutrition, trends in global environmental health, chronic disease, cultural considerations, and health policy and advocacy. Students explore the course material through readings, films, case studies, debates, and expert guest speakers. Offered periodically during Interim.

Prerequisites: sophomore standing or above, and completion of at least one of the following courses: any level I biology course, ECON 121, ENVST 137, PSCI 117, PSCI 121, PSYCH 125, SOAN 121, SOAN 128.

ID 257: *Arts and Literature of Australia and New Zealand (abroad)*

This course examines how history and place have shaped artistic expression in unique subcultures of Australia and New Zealand, focusing on literature, drama, dance, and visual arts. Students meet with working artists, attend live performances, and connect literature and art to the built environment and geographical locales on Australia's East Coast and in New Zealand. Assignments integrate research on cultural contexts and analysis of art forms. Offered alternate Interims. Counts toward theater and English majors.

ID 258: *Theater in London (abroad)*

A full immersion in the art of theater, students will attend approximately 22 performances at London and Stratford theaters. The course will include the reading of play texts, dramatic criticism, group discussions and backstage tours. England, a theatrical center of the English-speaking world, enables students to experience a wide variety of theatrical performances ranging from traditional to modern. Excursions to Stratford-upon-Avon, Stonehenge, Canterbury and Oxford offer additional cultural perspectives. Offered annually during Interim. Counts toward English major.

ID 259: *HiPerCiC: Collaborative Web Applications*

Computer science (CS) students team with students in non-CS fields in order to create custom web-based software that serves the research needs of particular professors in those non-CS fields of application. Students in a field of application provide disciplinary content, context, and feedback throughout project development, while pursuing relevant independent work. CS students develop software collaboratively and rapidly using the HiPerCiC (High-Performance Computing in Context) framework, while learning current web programming principles and technologies. Counts toward computer science major.

Prerequisite: CSCI 251 or permission of instructor.

ID 294: *Academic Internship***ID 295: *Internship and Reflection Seminar***

This seminar integrates the liberal arts with the experience of work and the search for a vocation or career. Course content will include both an off-campus internship and on-campus class sessions that connect academic theories/analyses of work with their particular internship experience. Students will also consider and articulate the value of the liberal arts for their pursuit of a creative, productive, and satisfying professional life.

ID 298: *Independent Study***ID 394: *Academic Internship*****ID 396: *Directed Undergraduate Research***

This course provides a comprehensive research opportunity, including an introduction to relevant background material, technical instruction, identification of a meaningful project, and data collection. The topic is determined by the faculty member in charge of the course and may relate to his/her research interests. Offered based on department decision. May be offered as a 1.00 credit course or .50 credit course.

Prerequisite: determined by individual instructor.

ID 398: *Independent Research*

Faculty

Chair, 2015-2016**Dana L. Gross**

Professor of Psychology, Associate Dean of Interdisciplinary General Studies

developmental psychology; academic civic engagement; off-campus study

Richard A. Brown

Professor of Mathematics, Statistics, and Computer Science

computer science; parallel/distributed systems

Kevin M. Crisp

Associate Professor of Biology

electrophysiology; computational neuroscience; medical devices

Shelly D. Dickinson

Associate Professor of Psychology

behavioral neuroscience; addiction; conditioning and learning;

psychopharmacology

Diane C. LeBlanc

Associate Professor of Interdisciplinary Studies and Director of the Writing Program

rhetoric and composition, creative writing and women's studies

Robert W. McClure

Associate Professor of Education

social studies; curriculum and instruction

Gregory W. Muth

Associate Professor of Chemistry

biochemistry

Wesley Pearson

Professor of Chemistry

Organic chemistry, reaction mechanisms and stereochemistry

Diana Postlethwaite

Professor of English

nineteenth-century British literature; the novel

LaVern J. Rippley

Professor of German

German Romanticism and German Americana; Grimm's fairy tales;

Germany in WWI and WWII

Jamie A. Schillinger

Associate Professor of Religion

Christian thought and ethics; Islamic thought and ethics

Steve Soderlind

Professor of Economics

urban and regional economics; welfare economics and social choice

Thomas A. Williamson

Associate Professor of Sociology/Anthropology

Southeast Asia; theory; globalization; medical anthropology

Karen Wilson

Professor of Theater

theater; ethics and theater; directing; voice/phonetics