# INTERDISCIPLINARY STUDIES

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Interdisciplinary courses use the resources of two or more disciplines to investigate a broad theme or a set of issues. 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 evidence and experience.

# 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 140: Health and Social Inequality: Rural and Urban Perspectives (off campus

Health begins where we live, work and play. Students are immersed in public, private, and community-based organizations in Northfield (rural) and Minneapolis-St. Paul (urban) to gain an understanding of the social determinants of health (environmental conditions, resources and supports) and the relationship to individual health outcomes through service learning. A special emphasis is placed on the impact of socioeconomic status, geographic location, and disability on health disparities.

**Prerequisite:** one course in sociology/anthropology, women's and gender studies, social work, family studies, economics, political science, environmental studies, or nursing. Offered occasionally 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 quantitiative 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 sympton 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 227: Human and Environmental Flourishing

This course investigates the interrelationships between humans and their surroundings in New Zealand and Australia, exploring conditions and practices that encourage human and environmental flourishing. The off-campus portion of the course in particular integrates psychological and environmental discourses with personal experience and mindfulness practices. Students explore meanings, values, and questions that demonstrate how the ability to flourish relies on individual and collective action connected to place as made manifest in nature as well as culture. Offered Interim 2018 only.

Prerequisite: membership in the St. Olaf Band.

#### 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 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

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

### 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 premedical students with demonstrated strong academic achievement). P/ N grading. Offered annually during Interim.

#### 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 attend approximately 22 performances at London and Stratford theaters. The course includes 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 260: Ethics and the Ability to Flourish

This course investigates the interrelationships between humans and their surroundings in New Zealand and Australia. Students study conditions and practices that encourage human flourishing though with special applied schooling in matters of ethics and the environment. The off-campus portion of the course integrates psychological and environmental discourses with personal experience and mindfulness practices. Students explore meanings, values, and questions that demonstrate how the ability to flourish relies on individual, collective, and ethical thought and action in relationship to place and environmental stewardship. Offered Interim 2018 only.

Prerequisite: BTS-T and membership in St. Olaf Band.

#### ID 280: Comparative Public Health: the US and the World (Abroad)

The focus of public Health efforts differs markedly for the U.S. in contrast to the rest of the world. Through talks, interviews, readings, and research, students conduct comparative assessments of the public health systems of the U.S. and the world. Students tour and visit with researchers at the Center for Disease Control (CDC) in Atlanta, Georgia, and the World Health Organization (WHO) in Geneva, Switzerland, in order to explore factors affecting public health nationally and internationally. Offered alternate Interims.

# 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**

Director, 2017-2018 Dana L. Gross

Professor of Psychology, Associate Dean of Interdisciplinary and General Studies developmental psychology; off-campus study

## Kevin M. Crisp

Associate Professor of Biology electrophysiology; computational neuroscience; microglia

#### **Todd F. Edwards**

Assistant Professor of Theater design and technical production; stage combat; media and video design

#### Timothy R. Howe

Professor of History ancient Greece and Rome; the Middle East; Alexander the Great; ancient archeology

#### **Charles Huff**

Professor of Psychology social psychology; moral psychology; science and technology studies; psychology of religion

#### Dale H. Kruse

Visiting Assistant Professor of Music voice; lyric theater

#### **Donna McMillan**

Associate Professor of Psychology clinical psychology; personality psychology; environmental psychology; positive psychology

#### Justin W. Merritt

Professor of Music composition; theory; instrumentation; electronic music

#### Linda Y. Mokdad

Assistant Professor of English film history; classical film theory; feminist film theory; art cinema; Arab cinemas

# Sian E. Muir

Entrepreneur in Residence marketing; entrepreneurship; strategy; arts management

#### Peter B.B. Nelson

Assistant Professor of Art and Art History new media; photography

#### **John Saurer**

Associate Professor of Art and Art History sculture; drawing; printmaking; installation

# **David C. Schalliol**

Assistant Professor of Sociology/Anthropology social stratification; urban sociology; visual sociology; criminology; education

# William Sonnega

Associate Professor of Theater

theater; media studies

#### **Charles Taliaferro**

Professor of Philosophy philosophy of religion; ethics; philosophy of mind; aesthetics

#### Christopher M. Tradowsky

Assistant Professor of Art and Art History contemporary art; critial theory; African art; gender studies

#### **Anne Walter**

Professor of Biology

comparative animal and cell physiology; membrane physiology and biophysics; comparative enzymology; applying biology in international settings

**Thomas A. Williamson** (on leave fall and Interim) Associate Professor of Sociology/Anthropology Southeast Asia; theory; globalization; medical anthropology