

Ampersand Programs

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Courses

Visit online course listings to view semester offerings for L61 FYP.

L61 FYP 1100 Ampersand - American Stories: Place, Power, and Imagination

If an American landscape could tell a story, what would it say? American Stories is an interdisciplinary approach to reading landscapes from the nineteenth century to today, uncovering untold stories of American places and the people, politics, and power that shaped them. The first semester of this Ampersand program introduces ways of seeing and interpreting American histories and cultures, as revealed in the built environment and stories of our cities. We will travel through time and place, touching down in Boston, Charleston, New York, Chicago, Los Angeles, and more. The course encourages students to read landscapes as multilayered records of past and present social relations, and to speculate for themselves about cultural meanings. It also introduces students to the social, economic, and political forces that have profoundly shaped the American urban landscape. This class is for first-year non-transfer students only.

Credit 3 units. A&S: AMP A&S IQ: HUM Arch: HUM Art: HUM BU: HUM EN: H

L61 FYP 2010 Ampersand: The Science of Biotechnology

Biotechnology is truly interdisciplinary, incorporating a myriad of pieces from biology, chemistry, engineering, physics, computer sciences, management, public policy, and law that apply the scientific process to societal challenges. This course introduces topics for science and engineering majors with an interest in biotech, and it teaches scientific concepts to business students considering careers in biotech management and entrepreneurship. Students whoi complete Biol 2010 understand key science concepts, how discoveries lead to applications addressing global challenges, how to effectively use a variety of resources to explore connections between science and biotech business, how to synthesize information from different fields, and how to exhibit strong teamwork skills and communicate information in written and oral forms. This course also provides a gateway for students interested in the two-year Biotech Explorers Program (BEP) The first two weeks of the course introduce students to the history of biotechnology, the BEP, and the use of case studies. The remainder of the course uses a series of four three-week units that combine lecture material, in-class group assignments, and readings to introduce the science and scope of biotechnology. For each unit, student teams also develop short case studies of St. Louis biotech companies and present their findings to the class. A series of site visits introduce students to the vibrant St. Louis biotech community. This course is for students in the Biotech Explorers Program only.

Same as L41 Biol 2010

Credit 3 units. A&S: AMP A&S IQ: NSM BU: SCI

L61 FYP 223A Ampersand: The Age of Pericles

This seminar will explore the relationship between the sociopolitical history and cultural development of Athens in the fifth and fourth centuries BC. Students will be encouraged to analyze both archeological and literary evidence throughout the process of democratization, paying particular attention to the Periclean building program, including the sanctuary of Athena on the Acropolis, the Agora, domestic Athenian architecture, and the panhellenic sanctuaries of Delphi and Olympia. Selections from the histories of Herodotus and Thucydides, the plays of Sophocles and Aristophanes, the dialogues of Plato, and Aristotle's "Constitution of Athens" will highlight the functions and limitations of the democratic regime. This course is for first-year, non-transfer students in the Democracy and Myth in Ancient Greece Ampersand program.

Same as L08 Classics 223

Credit 3 units. A&S: AMP A&S IQ: HUM, LCD Arch: HUM Art: HUM BU: IS EN: H

L61 FYP 116 Ampersand: Geographies of Globalization and Development

This course provides an overview to the geographies of globalization and development in the world today. We begin by engaging with a variety of theoretical perspectives, definitions, and debates in order to establish the foundations upon which students can conceptualize and understand existing patterns of inequality, social injustice and environmental conflicts. In order to further highlight the different ways in which development and globalization interventions are experienced and contested, in the second half of the course we will focus our considerations towards specific contemporary issues at the forefront of globalization and development debates, including migration and refugees, urbanization, sustainable development, tourism, and alterglobalization social movements. This course is restricted to first-year students in the Global Citizenship Program.

Credit 3 units. A&S: AMP A&S IQ: SSC, SC, SD Arch: SSC Art: SSC BU: HUM, IS EN: S

L61 FYP 2850 Ampersand: The Holocaust: A European Experience

Between 1939 and 1945, Nazi troops invaded, occupied and destroyed major parts of Europe. A central aim of the Nazi project was the destruction of European Jewry, the killing of people, and the annihilation of a cultural heritage. This course seeks to deal with questions that, more than seventy years after what is now known as the Holocaust, still continue to perplex. Why did Germany turn to a dictatorship of racism, war, and mass murder? Why did the Nazis see Jews as the supreme enemy, while also targeting Poles, Ukranians, Soviets, homosexuals, the Roma, and the disabled? The course introduces students to issues that are central to understanding Nazi occupation and extermination regimes. Students will look at survival strategies in Western Europe including emigration, resistance movements in Eastern European ghettos, local residents' reactions to the murder in their midst, and non-European governments' reactions. Course is for first-year, non-transfer students only. Credit 3 units. A&S: AMP A&S IQ: HUM, LCD, SC, SD Arch: HUM Art: HUM

L61 FYP 2811 Ampersand: Literary Culture of Modern Ireland

This course will examine the literature of Ireland from the fall of Parnell to the outbreak of the Second World War. This is the period of an emerging cultural nationalism, a great efflorescence of literature in many genres, and some of the most important political, social, and military events in modern Irish history. One of the remarkable things about the period is the close relationship between prominent figures in the literary and artistic world and those in the realm of politics and social change. The result was a rich cross-fertilization of ideas and attitudes which had enormous implications for the future of this

BU: HUM, IS EN: H



embattled island nation. We will explore this vital and transformative exchange by close attention to some primary texts of the period. Writers to be studied will include: Yeats, Gregory, Wilde, Synge, Shaw, Joyce, O'Casey, and Bowen. Course is for first-year, non-transfer students only. Credit 3 units. A&S: AMP A&S IQ: HUM Arch: HUM Art: HUM BU: IS EN: H

L61 FYP 141 Ampersand: Medicine and Society

This course provides the basic foundation in medical anthropology and cultural anthropology for students enrolled in the Medicine and Society Program. The purpose of the course is to introduce students to the central themes and theoretical approaches employed by medical anthropologists to study health and illness in crosscultural perspective. Topical areas include analyses of disease, illness and sickness at micro and macro levels; impact of personal and interpersonal factors on health; health effects of social, political, and economic factors; relationship of anthropology to biological and social science approaches; ecology of health and development; and cross-cultural health studies of language, gender, and race/ethnicity. Note: Content for this course overlaps with and replaces Anth 160 for students enrolled in the Medicine and Society Program. Open only to students enrolled in the Medicine and Society Program.

Credit 3 units. A&S: AMP A&S IQ: LCD, SSC Arch: SSC Art: SSC BU: BA EN: S

L61 FYP 120A Amp: Intro to Study of the Mind-Brain: Psychological, Biological, & Philosophical Perspectives

A consideration of three primary areas of research in cognitive science: attention, memory, and language. These topics are used to illustrate the techniques by which mental abilities are investigated and explained in psychology and neuroscience: the focus, in particular, is on the use of reaction time studies, brain imaging, and cell recordings to isolate the basic components that make up complex functions. In addition to the central concepts and theories in each area, the course will address philosophical implications of this research concerning how the mind and brain are related, how the mind-brain encodes or represents information, and the nature of consciousness. And there will be an emphasis on applying these findings to important problems, such as Alzheimer's disease and deficits due to brain damage. The class is taught by three members of the faculty from different disciplines and combines a whole-group lecture with small discussion classes. The goal is to give students a good understanding of the interdisciplinary nature of cognitive science and to help them develop the ability to think and write critically about scientific research into the mind-brain. Prerequisite: admission to the Hewlett Program in the Study of the

Credit 3 units. A&S: AMP A&S IQ: NSM Arch: NSM Art: NSM BU: BA

L61 FYP 1505 Ampersand: Modern Media: The Good, the Bad, & the Future

This first term of a two-semester course would establish an essential background in media literacy and theory for both traditional mass media and the types of digital, or "new," media which have exploded over the past thirty years of the digital age. Accruing a nuanced understanding of the historic and present-day realities of journalism, publishing, documentary, and news reportage, we will consider the myriad ways in which new media have transformed the landscape of each. Eileen G'Sell will be leading discussion on readings relevant to mass media and new media histories, and assigning short, generative assignments. John R. Green will appear via Zoom to discuss television in the time of 9/11 and the new landscape of documentary. Small class. First Year Students Only. Credit Only

Credit 3 units. A&S IQ: HUM EN: H

L61 FYP 121 Ampersand: Pathfinder - A Sense of Place: Discovering Missouri's Natural Heritage

This is the first course in the Pathfinder program, and it will introduce students to their new home for the next four years. This interdisciplinary course will cover Missouri geology, climate, archaeology, and native megafauna. We will explore many of the habitats found in Missouri (prairie, forest, glade, and stream) and the biology of our diverse plant and animal wildlife (arthropods, mollusks, fish, salamanders, lizards, birds, and mammals). This will provide a foundation that will inform the study of ecology, policy and management in other courses. In addition to weekly lectures and discussions, students in this course will visit sites across the state during three weekend camping trips and two one-day trips. Attendance on field trips is an essential component of the course. Course enrollment is open only to students admitted into the Pathfinder Fellowship program.

Credit 3 units. A&S: AMP A&S IQ: NSM Arch: NSM Art: NSM BU: SCI

L61 FYP 1910 Ampersand: Phage Hunters

A research-based laboratory class for first years. Students join a national experiment organized by HHMI, with the goal of isolating and characterizing bacteriophage viruses found in the soil in the St. Louis area. Laboratory work includes isolation and purification of your own phage, DNA isolation and restriction mapping, and EM characterization of your phage. Several WU phage are selected for genome sequencing over winter break, and are annotated in the spring in Bio 192, Phage Bioinformatics. Students who successfully isolate and annotate a phage may become co-authors on a scientific paper. Prereqs: High school courses in biology and chemistry, at least one at the AP or International Baccalaureate level; permission of the instructor. One hour lecture, one hour discussion, and 3 hrs lab per week. Course is for first-year students in the Phage Hunters Program only.

Credit 3 units. A&S: AMP A&S IQ: NSM Arch: NSM Art: NSM BU: SCI

L61 FYP 2443 First-Year Seminar: The Nuremberg Trials and International Justice

This course is an exercise in understanding how professional historians and the general public discover and use the past. The main goals of this course are to understand the many different methods and standards applied to the past; to understand how and why each generation changes the past as it seeks to make it "usable"; and to develop the skills of exposition and argumentation necessary to describe and analyze complex historical issues and to express critical ideas effectively. The subject of this inquiry will be the Nuremberg trials the innovations and critiques around the law and politics of the trials themselves, as well as the trials' legacies for ideas about international justice in postwar America and the world. Course is for first-year, non-transfer students only.

Same as L22 History 2443

Credit 3 units. A&S: FYS A&S IQ: HUM BU: HUM, IS EN: H

L61 FYP 1441 Ampersand: Frontiers in Cancer Research and Treatment

Cancer as a disease has touched countless people in every country and every lifestyle. Cancer is not one single disease; rather, it is a collective scourge of many underlying disorders. Over the years, biomedical research has led to a fuller understanding of cancer etiology and spawned new diagnostic and treatment strategies to better manage and treat this condition. More recently, the launch of the Precision Medicine Initiative by the National Cancer Institute has led to unprecedented insights into the cellular signaling pathways that drive the development and progression of cancer. Furthermore, the current onset of "omics" technology and high-throughput biological readouts has opened the possibility of precisely identifying molecular changes and affected metabolic pathways in individual cancers, paving the way for precision medicine and patient care. In this second semester, we will build upon our foundational understanding of cancer and

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explore recent and groundbreaking advances in cancer research and therapies. The course is driven largely by student-led presentations and discussions with a mix of faculty lectures and guest seminars. Students work in teams and take responsibility for their own active, inquiry-based learning by examining various cancer topics using primary literature as the principle resource. Learning to read, interpret, and assemble a presentation from scientific literature and biomedical research is emphasized. Student teams choose a hypothesis-driven topic of interest in the field of oncology for further study and, near the end of the semester. prepare a written report and oral presentation to the class outlining its background, central hypothesis-driven question(s), experimental rationale/strategy, research data, scientific conclusion, and future direction. Prerequisite: BIOL 144. Enrollment is limited to students in the Hallmarks of Cancer & Patient Care program. Limited to 20 students.

Same as L41 Biol 1441

Credit 3 units. A&S: AMP A&S IQ: NSM Art: NSM BU: SCI