

CRN#**Fall 2019 Learning Communities**

20535 LC 203-A Making a Magazine about Big Questions, 3 cr., (TR 4:00-5:15)

20731 IND 357-A Special Topics in Interdisciplinary Studies: Skepticism and Rationality, 3 cr., Prof. G. Scala, (TR 2:30-3:45)

20536 PHL 210-A God, Darwin and America's Struggle with Creation, 3 cr., Prof. K. Giberson, (TR 1:00-2:15)

The Integrative Seminar in the Learning Community Exploring Big Questions has a tangible goal: The student-led conceptualization, design, and production of a magazine that will engage meaningful philosophical questions in an accessible, journalistic, thoughtful way. This magazine will be produced, edited, reviewed and printed by the end of the semester. Each student will have a copy by the end of final exams.

Students will engage the full range of activities associated with a magazine. Based on interests and experience the students will be divided into teams: Editorial, marketing, creative design, production. Every student will have a slot on the masthead of the magazine. Members of the class will function as editor-in-chief, editor, senior editors, acquisitions editors, copy editors, book editors, layout editors, production directors, photo editors, and so on.

The bulk of the written content for the magazine will be produced in the companion courses in the LC, both of which have been designed to feed material into the magazine. Editing for style & length, graphics, cartoons, and other journalistic details will occur in the integrated seminar.

NOTE: *PHL 210 fulfills the Catholic Intellectual Traditions and Natural Scientific Inquiry requirement.*

20348 LC 206-A Depression, War, and BOOM!, 4 cr., Prof. N. Hammerle, Prof. A. Brecke, (MW 2:30-4:30)

In this learning community, students will explore the socio-economic experiences of the American family in the mid-twentieth century. Using a combination of economics, history and popular culture, students will role-play as families from varying social, economic, and racial or ethnic perspectives. Throughout the semester, the students will present the changing landscape of the American family, in its varied demographics, as it was affected by economic changes, technological innovation, and evolving social mores, as well as by national and international events. As we traverse the decades from the 1930's through the 1960's, covering the Great Depression, WWII, the post-war boom, and the Civil and Women's Rights movements, students will see how these various changes affected our various family groups. We will employ popular culture artifacts like music, movies and television contemporary to, or illustrative of, the times. This LC will include guest speakers and presentations from members of the local academic and music community. This course is the equivalent to ECO 217, Economic History of the 20th Century American Family.

20068 LC 207-A Mathematical Experiments in Computer Science, 3 cr., (W 2:30-5:00)

20063 CSC 201-A Discrete Mathematics, 3 cr., Prof. S. Simonson, (MWF 9:30-10:20)

20064 CSC 211-A Data Structures, 3 cr., Prof. R. Bravaco, (TR 11:30-12:45)

Computers provide us with tools to explore mathematics in deeper ways than ever before. They allow empirical testing of mathematical conjectures with elusive proofs. Computers enable us to experimentally analyze algorithms whose performance defies theoretical analysis. This LC focuses on the delicate balance between theory and practice in computer science, revealing the dual and sometimes contradictory nature of computer science as both an engineering and a mathematical discipline.

NOTE: *CSC 201 has a prerequisite of CSC 104 and MTH 126. CSC 211 has a prerequisite of CSC 104.*

20793 LC 209-0 Organic Chemistry of the Cell, 0 cr., Prof. K. Nolin, Prof. L. Liotta, (This course will be taken in Spring 2020)

Students must have taken a section of BIO 211, Cell Biology (WID) and lab and CHM 222, Organic Chemistry II and lab

Students will select, read, and critique primary literature that ties together topics currently being learned in Cell Biology and Organic Chemistry II to develop their abilities to understand and critically analyze the literature. The seminar will culminate with student teams proposing an experiment or series of experiments that address a specific area of interest on the boundary between organic chemistry and cell biology. These proposals will be presented in both written and oral forms, allowing fellow students to evaluate and expand upon the proposed ideas.

NOTE: *BIO 211 has a prerequisite of BIO 101 (grade of C- or better) and BIO 102. CHM 222 has a prerequisite of CHM 221 (grade of C- or better). BIO 211 fulfills the Writing-in-the-Disciplines requirement.*

20752 LC 214-A The Age of Information, 1 cr., Prof. S. Cohen, (W 1-2:15)

20572 ENG 390-A Topics in Modernism (Writing-in-the-Disciplines), 4 cr., Prof. J. Green, (WF 11:30-12:45)

This course combines the emergent techniques of the digital humanities with information theory and literary and cultural analysis to explore the moral, ethical, and philosophical questions posed by texts that examine the modern information state. During the first half of the semester, we will study detective, adventure, horror, and science fiction including short stories by Jorge Luis Borges, Arthur Conan Doyle, and Edgar Allan

Poe, followed by Bram Stoker's *Dracula*, Joseph Conrad's *Heart of Darkness*, Yevgeny Zamyatin's *We*, Thomas Pynchon's *The Crying of Lot 49* and William Gibson's *Neuromancer*.

Students in this course will also take the 1-credit course, **LC 214, The Age of Information**, in which we will learn how to use data collection, visualization, and computational tools for cultural and literary analysis, including text encoding, analysis, annotation, and data mining. This broad survey of tools and digital humanities theory will set the stage for the semester's final focus on Mohsin Hamid's novel, *Exit West*. We will put our analytical and digital skills to use to collaborate on producing a deeply layered and extensive digital archive edition of the novel, incorporating documents, audio recordings, visual art, and video.

NOTE: *LC 214 is the equivalent of DIG 201, Digital Design Studio. ENG 390 fulfills the Writing-in-the-Disciplines requirement.*

20730 LC 215-A The Golden Dome: Studying Massachusetts Internship, 3 cr., Prof. P. Ubertaccio (M 6:30-9)

20727 POL 358-A Massachusetts State Politics, 3 cr., Prof. P. Ubertaccio (M 4-6:30)

No state is so rich in its political heritage as our commonwealth. Its politics have been described as a "city upon a hill" and "an organized system of hatreds." This LC combines a course on the government/politics of Massachusetts with an internship to better understand what makes Massachusetts unique.

NOTE: *Must complete the "U.S. Internship Request for Approval" process found under the myPlans tab in myHill to officially earn credit for this Internship. This process will be completed as part of the class.*

20751 LC 221 -A Lift Every Voice: The Vocal Revolution, 4 cr., Prof. K. Oberoi, Prof. A. Popa (MW 4-5:15)

This course examines the musical traditions of disparate cultures and explores common threads that unite diverse peoples in communal song. Under discussion is the power of song to shape and nurture community; to forge cultural, national, or religious identity; and to serve as a catalyst for social or political change.

20751 LC 224 -A What Is There Beyond Knowing: Poetry Writing, Poetry Reading, 1 cr., Prof. A. Brooks, Prof. G. Piggford (R 1-1:50)

20565 ENG 242-A Topics in Creative Writing: Poetry I Prof. A. Brooks, 3 cr., (TR 10-11:15)

20571 ENG 380-A Modern Poetry 3 cr., Prof. G. Piggford (TR 11:30-12:45)

This learning community couples the creation of students' original works in verse (ENG 242) with an understanding of significant trends in twentieth and twenty-first century poetry, including slam, song, and rap (ENG 380). The seminar affords opportunities to write a chapbook, organize a reading, and/or critique one's own work.

20054 LC 226 -A Community Health Promotion (Community Based Learning), Prof. S. Turner (W 2:30-3:20)

20053 IND201-A Nutrition & Health Behavior, Prof. J. Greene (TR 1-2:15)

In this course we will examine the development, prevention and treatment of common diseases and ailments affecting the U.S. population. We will learn about health problems ranging from obesity and heart disease to relationship violence and eating disorders. In addition, we will explore factors that increase an individual's risk for these health issues such as culture, gender, race and the environment. This course also includes a Community-Based Learning component.

20750 LC 234-A Community, Faith, and Social Justice (Community Based Learning), 4 cr., Prof. L. Hoke, Prof. L. Carlson, (W 2:30-6)

This course examines spiritual and religious belief systems and psychological research in physical and mental health, as they inform the promotion of social justice. Students work closely with the Brockton Interfaith Community to learn about inequality in the city, develop skills to take action, and participate in community-based projects.

20738 LC 235-0 Quantum Waves, 0 cr., (This course will be taken in Spring 2019)

20313 MTH 261-B Multivariable Calculus, 4 cr., Prof. H. Su, (TR 11:30-12:45; F 11:30-12:20)

20737 PHY 221-A Physics III, 4 cr, Prof. A. Massarotti, (MWF 10:30-11:20, W 2:30-3:55)

The course is meant for students with a strong background in elementary physics. It is a natural continuation of the two elementary physics courses PHY 121-122, and students who have already taken these preliminary courses plus MTH 126 can automatically join LC 235. "Quantum Waves" can be taken as a stand-alone course or as part of a Learning Community, which includes Multivariable Calculus (MTH 261) as well as Physics III (PHY 221). "Quantum Waves" teaches about various quantum mechanical phenomena. With the creation of quantum mechanics in the 1920s, physicists conceived of a new and unexpected kind of wave that is neither a Newtonian (c. 1700) mechanical wave nor a Maxwellian (c. 1860) electromagnetic wave. These mysterious DeBroglie – Schroedinger waves of probability are the essence of quantum mechanics. These waves determine the structure of atoms and molecules, i.e. they are the deepest foundation of both physics and chemistry.

NOTE: *MTH 261 has a prerequisite of MTH 126. PHY 221 has a prerequisite of MTH 126 and PHY 122. LC 235 allows students to fulfill the Writing in the Disciplines requirement along with the LC requirement of the Cornerstone Program.*

20753 LC 236-A Everybody Counts: Elementary Math for Teachers, 1 cr. (Times will be arranged)

20307 MTH143-A Mathematical Reasoning for Education, 3 cr., Prof. K. Marin, (WF 11:30-12:45)

This four credit LC pairs MTH143: Mathematical Reasoning for Education with a one-credit seminar taught by a math specialist from a partner district. Students will examine the ways in which elementary school students engage with mathematics content through curriculum, instructional routines, games, and pedagogical structures.

- 20041 LC 336-A The Origin of Resources from Farm to Studio (Community Based Learning), 1 cr. TRAVEL LC**
20040 ENV 326-A Sustainable Agriculture (Community Based Learning), 3 cr., Prof. B. Meigs, (TR 1:00-2:15)
20185 VPS 207-A Special Projects: The Handmade Studio: Making Art Materials, 3 cr., Prof. C. Smith-Corby, (T 2:30-5:50)

This seminar combines a dual interest in sustainable food systems, an in depth understanding of the basis, production, and use of historical studio materials and how they share a symbiotic relationship. There will be a focus on homemade and sustainable ingredients that reflect the local and global Slow Food movement and important issues of fair trade, organic production, and humane methods of consumption will be discussed. Travel dates will be in January 2020. Throughout the semester, students will participate in creating historical artist materials from start to finish, which will include harvesting plant materials from the farm to make pigments and inks, tools, making hand-made paper, utilizing animal by-products, and cooking with the same ingredients. We hope to reflect a "nose to tail" mindset to honor the origins of our resources.

The week-long travel component will be held at an agriturismo whose mission aligns with our course goals (negotiations underway) in Italy and include visits to Italian Slow Food Presidias, which support the protection of biodiversity, territories and knowledge of traditional productions. Visits to small-scale producers may include farmers, fishers, butchers, shepherds, cheesemakers, bakers and pastry chefs. A studio workshop will be held at the agriturismo featuring indigenous materials and how they relate to the history of art in Italy. Day visits to nearby Siena and Florence will also allow students to see how the studio materials they have worked with all semester are made evident in the masterworks from Art History.

NOTE: ENV 326 fulfills the Natural Scientific Inquiry requirement.

NOTE: Travel will occur in January 2019 (dependent on scheduling airfare, etc.). The approximate cost of travel will be \$3,300. Since participating in this learning community involves travel, you will incur additional costs. Soon after being enrolled in this Learning Community, you will be asked to attend a mandatory meeting, at which timing and travel logistics will be discussed, including estimated costs. After this meeting, you will have just a few days to decide whether you can remain in the learning community or not. However, once you have decided to remain, you will be responsible for all additional costs and these will be incorporated into your semester bill. Student Financial Services will review your file and, if you are eligible for additional aid, you will receive a revised award letter via e-mail from Student Financial Services.

- 20519 LC 342-A HONORS: Yoga, Mindfulness and Indian Philosophy, 4 cr., Prof. A. Lännström, Prof. K. Kuhn, (TR 11:30-12:45; M 8:00-10:00)**

This Learning Community has two parts:

A theoretical component where we study Indian philosophy and its Western adoption. We will study classical Indian philosophy (including but not limited to the *Bhagavad Gita* and Buddhist scriptures), investigate our Western fascination with 'the mystical East', including the hatha yoga tradition, and examine some of the current research on the benefits of contemplation and on the mindfulness movement.

A practicum, where we practice hatha yoga (first hour) and discuss the experience of doing yoga on and off our yoga mats, exploring how you might use mindfulness and yoga as tools to slow down and to center, becoming more aware of your strengths and weaknesses, and better balancing your priorities (second hour).

NOTE: This LC is restricted to Honors students only.

NOTE: Students will need a yoga mat, 2 yoga blocks, and a strap or belt.

NOTE: LC 342 allows students to fulfill the Moral Inquiry requirement along with the LC requirement of the Cornerstone Program. It also counts as an elective for Philosophy, Religious Studies, and Asian Studies.

- 20600 LC 344-A, The Global Struggle for Female Education, 3 cr., (R 2:30-5:00)**
20598 HIS 374-A, Bound Feet and Dragon Ladies: Women and Power in East Asia, 3 cr., Prof. K. Teoh, (MW 4-5:15)
20599 HIS 385-A, Topics in U.S. Women's History: A Long, Slow Revolution: Women and Education in American History, 3 cr., Prof. L. Brekke-Aloise, (TR 11:30-12:45)

From Malala Yousafzai challenging the Taliban to the Nigerian schoolgirls kidnapped by Boko Haram; from Chinese women "holding up half the sky" to American women earning 79 cents to every dollar earned by men despite having greater educational attainment at all levels—why is female education still so contentious? The United Nations has argued that female education is the single most important factor in reducing poverty and improving health outcomes on a global basis. Yet, around the world, girls and women continue to struggle for access to equal schooling opportunities. This course examines the roles of gender, race, politics, and religion in the global effort for female educational civil rights. We will guide students in generating solutions to address this challenge. We will also explore the role of Catholic institutions in providing educational services to underrepresented peoples such as this community.

NOTE: This LC allows students to fulfill the Catholic Intellectual Traditions requirement along with the LC requirement of the Cornerstone Program.

20002 LC 351-A Mind, Health, and Education (Community Based Learning), 1 cr., Saturdays 9:00 a.m.-4:00 p.m. (dates TBA)

20001 NEU 200-A Seminar in Neuroscience, 3 cr., Prof. N. Cyr, (R 1:00-3:50)

20130 PSY 415-A Brain and Behavior, 3 cr., Prof. J. McCoy, (MW 1:00-2:15)

This LC will explore the psychology and neuroscience underlying conditions such as Autism spectrum disorders, ADHD, eating disorders, obesity, and Type II Diabetes. Students will participate in community-based learning at local elementary/middle schools as well as the Yawkey House of Possibilities, a facility on the Stonehill campus that provides care for children with neurodevelopmental illness.

NOTE: NEU 200 has a prerequisite of BIO 101. PSY 415 has a prerequisite of PSY 101.