<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Professor</th>
<th>Time Block</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 102WW*</td>
<td>Children and Youth in War Zones</td>
<td>Rosalind Shaw</td>
<td>8R; TBA</td>
</tr>
<tr>
<td>BIO 14WW*</td>
<td>Organisms and Populations</td>
<td>Frances Chew</td>
<td>D; LR</td>
</tr>
<tr>
<td>BIO 50WW*</td>
<td>Experiments in Molecular Biology</td>
<td>Juliet Fuhrman</td>
<td>ARR; HR</td>
</tr>
<tr>
<td>BIO 130WW*</td>
<td>Animal Behavior</td>
<td>Philip T. B. Starks</td>
<td>B; LT</td>
</tr>
<tr>
<td>BIO 144WW*</td>
<td>Conservation Biology</td>
<td>Michael Reed</td>
<td>G+; GF</td>
</tr>
<tr>
<td>BIO 177WW*</td>
<td>Seminar on Inflammation</td>
<td>David Cochrane</td>
<td>ARR; T 3-4:15, Th 3-5:20</td>
</tr>
<tr>
<td>EC 62WW*</td>
<td>Economics of International Migration</td>
<td>Anna Hardman</td>
<td>K+; IW</td>
</tr>
<tr>
<td>EC 175WW*</td>
<td>Economics of Management and Strategy</td>
<td>George Norman</td>
<td>H+; JR</td>
</tr>
<tr>
<td>ENG 110WW*</td>
<td>Chaucer</td>
<td>John Fyler</td>
<td>E+; CW</td>
</tr>
<tr>
<td>ES 27WW*</td>
<td>Environmental Health and Safety</td>
<td>David Gute</td>
<td>G+; ARR</td>
</tr>
<tr>
<td>FR 32 WW*</td>
<td>Readings in French Literature II</td>
<td>Isabelle Naginski</td>
<td>H+; J+T</td>
</tr>
<tr>
<td>HIST 186.1WW*</td>
<td>Travel Writing and History</td>
<td>Ina Baghdiantz McCabe</td>
<td>3R; TBA</td>
</tr>
<tr>
<td>ITAL 4WW*</td>
<td>Intermediate Italian II</td>
<td>Daniela Bartalesi-Graf</td>
<td>E+; F+; ARR</td>
</tr>
<tr>
<td>ITAL 22WW*</td>
<td>Composition and Conversation II</td>
<td>Patricia DiSilvio</td>
<td>G+, J+; IM</td>
</tr>
<tr>
<td>ITAL 121WW*</td>
<td>Advanced Italian Language/ Italian Women’s Images and Voices</td>
<td>Laura Baffoni-Licata</td>
<td>K+; IW</td>
</tr>
<tr>
<td>PHIL 123WW*</td>
<td>Philosophy of Law</td>
<td>Erin Kelly</td>
<td>D+; DM</td>
</tr>
<tr>
<td>PHYS 43WW</td>
<td>Electricity and Magnetism II</td>
<td>Roger Tobin</td>
<td>D+; ARR</td>
</tr>
<tr>
<td>SOC 20WW*</td>
<td>Family and Intimate Relations</td>
<td>Paula Aymer</td>
<td>L+; TBA</td>
</tr>
<tr>
<td>SPAN 4WW*</td>
<td>Composition and Conversation</td>
<td>Patricia Smith</td>
<td>I; HF</td>
</tr>
<tr>
<td>SPAN 21-22W*</td>
<td>Composition and Conversation II Intensive</td>
<td>Conchita Davis</td>
<td>E; DM</td>
</tr>
<tr>
<td>SPAN 101WW*</td>
<td>Latin American Popular Theater</td>
<td>Claudia Kaiser-Lenoir</td>
<td>I+; TBA</td>
</tr>
</tbody>
</table>

*--Offered as an optional section of a larger class. Be sure to sign up for both the general and “WW” sections of these courses. Time blocks for WW workshops are listed SECOND.
• “I joined the guerillas to escape. I thought I’d get some money and could be independent.” (Girl soldier with FARC in Columbia)
• “Other trainees, if they were caught trying to run away, their hands and feet were beaten with a bamboo stick.” (Boy abducted at age 13 by government forces in Myanmar [Burma])
• “I joined the Mahdi army to fight the Americans.” (12-year-old boy in Najaf, Iraq)

Children and youth are fighting in armed conflicts all over the world. Those who are not part of combatant groups are often displaced and/or separated from their families. In this discussion-based class exclusively for Sophomores, we will explore the lives of young people in war zones through the lens of Anthropology. What are some of their strategies when separated and displaced? Is the use of child and youth combatants today more widespread than in the past? Why are they valued as fighters? How are they recruited, trained, and retained? Why do some choose to join? What are young peoples’ experiences as fighters or camp followers? What are the challenges of disarming and reintegrating them after conflict? How do the lives of young combatants differ from those of non-combatants, and how do the experiences and needs of girls differ from those of boys? How do social norms and cultural ideas about childhood and youth structure their lives in war zones, and shape our own international interventions? Students will select projects on topics of interest.

Writing Workshop section:
In the Writing Workshop section for this class we will meet once a week for 50 mins., time/place TBA. This does not involve extra formal writing assignments. We will use informal writing exercises as a way of engaging more deeply with the readings for this class, and as an aid to discussion. We will discuss and try out writing tips. You will have the opportunity of writing a first draft of your writing assignments, getting feedback from me, and revising it for an improved second draft. You will have more personal attention from me. And the fact that you have taken a Writing Workshop class will be recorded on your transcript. Please join us!

Professor Rosalind Shaw, Anthropology

Time Block: 8R; TBA

Drawing by child ex-combatant, northern Sierra Leone
Help take control of the demands of a large science course by joining an optional workshop of Biology 14 students using writing as a tool to focus, expand, and extend their involvement in biology. Writing Workshop provides undergraduates with the advantage of putting more attention on Biology 14 without doing extra graded work.

Biology 14 includes selected topics in population biology, plant physiology, and animal physiology with emphasis on evolutionary mechanisms. Together with Biology 13, this course forms the first-year core sequence for Biology majors. There are three lectures and one laboratory each week.

The ww section meets once a week, using in-class writing to discover linkages between lecture topics, predict exam questions, boost performance on laboratory write-ups, and more. If you’re interested in bring biology to the front of your thoughts at least once a week, join the active cohorts of Biology 14 WW—the writing workshop.

Prerequisite: Biology 3 or 13 are recommended, but the Biology 13-14 sequence can be completed in reverse order. Students who attend 7 out of 10 writing workshops can get the ww notation on their transcripts. The ww section is ungraded and carries no extra course credit, but see the comment below from someone who thought the section helped...

An extended comment from a ww-student:

Overall...most of the workshops [were] quite beneficial, particularly those involving writing/analyzing papers. I think most people don’t realize how important effective analysis is (or at least I didn’t my first time around). I thought there were a sufficient number of workshops on these topics, and I liked how you selected interesting articles for analysis (e.g., the childhood obesity paper) that was more engaging....I also liked how you were able to tailor the class to our wishes. The last writing workshop, regarding our digestion papers, definitely helped my writing a lot (and, as a side note, I got an A- on the paper!)

Professor: Frances Chew, Biology

Time Block: D; LR
Experiments in Molecular Biology

We will investigate a series of laboratory problems using modern techniques of biotechnology. Gene cloning, recombinant protein expression, protein biochemistry, and immunochemistry are emphasized for teaching state-of-the-art laboratory skills and for reinforcing basic concepts of modern molecular biology.

The optional writing workshop section is designed to familiarize students with several forms of professional writing, including the format used in most scientific journals for the publication of novel findings. Thus, the WW section will provide extra opportunities for students to improve their graded laboratory reports for this and other science courses. We will also use a variety of ungraded exercises to enhance understanding of the molecular biology underlying the laboratory experiments, and to explore science writing for various audiences.

Prerequisite: Sophomore standing and Biology 13 or equivalent. Only open to majors in biology, biochemistry, and chemical engineering. Must be simultaneously enrolled in Bio 50A or Bio 50B.

Professor: Juliet A. Fuhrman, Biology

Time Block: M 1:20-5:30
R 3-30:50; HR

The Structure of DNA

Representation of how nucleotide pairing of A-T and G-C (top figure on opposite strands produce the DNA double helix (bottom figure). The specific sequence of nucleotides will encode amino acid sequences that determine the structure and function of cellular proteins. (From Suzuki, Griffiths, and Lewin (eds.), An Introduction to Genetic Analysis, W.H. Freeman & Co., San Francisco, 1981.)
Why does an animal perform a given behavior? In this course, we will explore the many approaches used to answer this question. You will learn a logical framework within which all aspects of animal behavior can be examined. Because this course has the potential to change the way you look at nature, I hope you find it to be one of the most important classes of your academic career. The course is designed for undergraduate and graduate students who want to better understand the evolution, adaptive significance, and mechanisms of animal behavior.

An optional writing workshop is offered (limited enrollment). In this workshop we will develop critical thinking skills, explore more deeply concepts discussed in class, and sharpen our understanding and application of Darwinian thought.

Professor: Philip Starks, Biology

Time Block: B; LT
Principles of Conservation Biology  

Learning and application of principles from population ecology, population genetics, and community ecology to the conservation of species and ecosystems. Focus on rare and endangered species, as well as threatened ecosystems. Includes applications from animal behavior, captive breeding, and wildlife management. Readings from current texts and primary literature.

**Prerequisite:** BIO 14 or equivalent.

Writing workshop is optional - will focus on communicating science among scientists, to resource managers, and to the public.

**Professor:** Michael Reed, Biology  
**Time Block:** G+; GF
A study of the physiological, cellular, and molecular mechanisms involved in the inflammatory response in mammals. Weekly lectures will be followed by readings and discussion of papers from the contemporary literature. Topics covered include the participating cells of inflammations (e.g. neutrophils, mast cells, macrophages), the generation and actions of inflammatory mediators (e.g. histamine, cytokines, leukotrienes), the cellular mechanisms involved (e.g. chemotaxis, cell adhesion), and relevant pathological states (e.g. allergic disease, asthma, autoimmune diseases).

A variety of writing techniques will be used to aid in the understanding of the biological concepts involved, to organize and direct class discussions, and to develop experimental hypotheses and protocols to solve research problems in inflammation. Much of the writing will be informal and ungraded (but read and comments offered). The major piece of writing will be an original research proposal to be done at the end of the semester. Students will work closely with the instructor and with peers on the development and writing of the proposal.

Prerequisites: One year of biology and chemistry and consent of instructor.

Professor: David Cochrane, Biology               Time Block: ARR; T 3-4-15, R 3-5:20pm
Cheap travel and information about opportunities abroad have led to growing flows of migrants across international frontiers. Countries that sent emigrants abroad now receive immigrants, and transnational migrants can maintain ties to their homelands. As workers and refugees cross national borders as temporary or permanent migrants, legal and illegal, legal barriers are being lowered for skilled would-be migrants and raised for unskilled workers and refugees and migration (legal and illegal) is a hot political issue. You will learn about economists’ new (and often controversial) insights into causes of migration and its impacts.

The course develops economic tools for understanding individuals’ decisions to migrate and the resulting international migrant flows. We explore migration’s economic impact and policy implications for home (migrant sending) and host (migrant receiving) economies. We use economic tools to tackle questions like: Who migrates? Who stays and who returns, and why? Which migrants send money home? What impact do their remittances have on economic development? How can economics explain refugee flows and illegal migration? Why do immigrants cluster in ethnic neighborhoods? Why are remittances of money home increasing so steeply?

The optional writing workshop is designed to make the course work both easier and more rewarding. The first assignment is a review of a fictional movie dealing with immigration. The idea is to look for the economics of migration portrayed in it. For the next assignment, after brainstorming to find topics, each student develops in stages a research paper on an aspect of the economics of migration. Over the semester, the paper lets you explore a topic of interest to you in more depth as a sequence of writing tasks: topic statement, proposal, draft and final paper and a presentation.

The WW is a chance to work more closely on the assignments with me and others in the class in a small group where we work together, share and develop ideas, polish drafts, give and get feedback and ideas on the course’s writing assignments, and practice using writing as a tool.

For more information email: Anna Hardman <anna.hardman@tufts.edu>

Prerequisites: Principles of Microeconomics – EC1 or EC 5

Professor: Anna Hardman, Economics

Time Blocks: Class K+MW; Workshop IW

Note: The writing workshop will meet Wednesday afternoons at 3:30 – 4:20, immediately before the class.
This course focuses upon the strategic aspects of management decision making from an explicitly economic perspective. It will show how economic reasoning can inform and develop insights with respect to strategies that are necessary for a firm to deal with its external and internal operating environment. The course draws from recent work in industrial organization, transactions cost economics, economics of organization and the modern strategy literature. It illustrates the central role of game theory in informing a firm’s strategic choices. Topics covered in the first part of the course will include decision making under uncertainty, optimal search and competitive bidding, bargaining and negotiation. The second part of the course will consider the determination of the vertical and horizontal boundaries of the firm, strategic commitment, dynamic pricing rivalry, entry and exit and the origins, creation and maintenance of competitive advantage.

The writing workshop will meet for an extra hour each week and will focus upon the development of critical writing skills by participants. This is intended to sharpen powers of analysis and synthesis by means of the written rather than the spoken word. It will also develop effective reading skills of participants by asking them to provide written summaries of some of the more technical primary literature discussed in the lecture course. The course requires that students write a major paper and the writing workshop will pay attention to how such a paper should go through its various stages of topic formation, initial draft, and final revision.

Professor: George Norman, Economics

Time Block: H+; JR
This course explores the works of one of the three or four greatest poets in English. We’ll read Chaucer in Middle English, but he is in almost every respect easier to understand than Shakespeare, who lived two centuries later. We will spend roughly half of the semester on the Canterbury Tales, the other half on Chaucer’s most extraordinary poem, Troilus and Criseyde. Chaucer is primarily a narrative rather than a lyric poet: though the analogy is an imperfect one, the Canterbury Tales are like a collection of short stories, and Troilus like a novel in verse. We will talk about Chaucer’s literary sources and contexts, the interpretation of his poetry, and his interest in a number of issues, especially gender issues, that are of perennial interest.

English 110WW is an optional writing-workshop section of 110 that will meet once a week in addition to regular class meetings. The workshop pays special attention to paper writing and revision; it also emphasizes the function of writing in the learning process through informal, exploratory assignments and journal entries that encourage a closer examination of the course material.

Professor: John Fyler, English

Time Block: E+; CW

Portrait of Chaucer, Harley Manuscript 4855, f.88 at the British Library
Environmental Health and Safety

Engineering Science 27/ 27WW

Engineering Science/ Environmental Studies 27 is intended to familiarize participants with the terminology, philosophy, and implementation of environmental health and safety programs. This course emphasizes the role of technology in the identification, control and amelioration of environmental health and safety problems. Elements of hazardous materials management and occupational health will be evaluated from an engineering viewpoint.

This term ES 27/ENV 27 is offered with an optional writing workshop. Participants will engage in journal writing as a means of further exploring the course material and in making progress on the major group project of the course. Students in the writing workshop will have the opportunity to get extra feedback on the structure and form of the written and conceptual material of their projects.

This course is required for the environment and technology track of the Environmental Studies program. There are no prerequisites.

Professor: David Gute, Civil and Environmental Engineering      Time Block: G+; W 4-5
Selected readings in various literary genres (novel, short story, poetry), from Pre-Romanticism to the present. The course emphasizes close textual analysis and is designed to refine further students' critical skills. Class participation is essential. Four short papers (2-3 pages) or three short papers and one exposé; mid-term and final examinations. Conducted in French. Pre-requisite: French 21 or equivalent.

Students using the Writing Workshop Option should register for French 32 WW. Workshop in this case means that the course will pay special attention to students' writing skills in French by emphasizing the planning and revision stages of writing. Informal writing assignments will encourage students to formulate and develop their ideas about the readings and the issues raised in the main class. Students do no extra graded writing but use writing to help in thinking out questions related to the course material.

The Writing Workshop associated with French 32 is open to students in all sections of French 32. Those who choose the Writing Workshop option will meet for one additional 50-minute session per week for special writing assignments, peer discussion of drafts, revisions and individual conferences with the instructor. Only final versions of papers will be graded. A record of participation will appear on your transcript.

Professor: Isabelle Naginski, French

Time Block: H +; J+T
This foundation seminar examines the literary roots of historiography. Travel accounts and their major influence in shaping historiography, from Marco Polo, to colonial reports, to travelogues and journalism today. The focus is on how cross-cultural encounters and exchanges shaped historiography, revolutionary writing and political philosophy in Europe and how narrative style and description still shapes historical text. Travel descriptions of Europe, the New World, Persia, India and China and Africa, some integrated into later historical texts are used as primary sources. Sources include text, early maps, photographs and documentary film are analyzed. Several short oral and written papers. Sources are analyzed for views of the “other”, views of the world, post-colonial issues of representation, Orientalist discourse, expressions of racism, sexism, imperialism and colonialism.

Professor: Ina Baghdiantz McCabe, History

Time Block: 3R; TBA
Intermediate Italian II

Through the study of authentic readings and films, the curriculum for Italian 4 focuses on Italian history and society from the Fascist era through the Seventies. The course is designed to improve writing and conversational skills and to reinforce the basic linguistic knowledge acquired in Italian 001-003.

Students will use writing as a means to become more deeply engaged in the readings and films, develop critical thinking, and improve writing and discussion skills in Italian. No extra graded work will be assigned. The workshop will provide the opportunity to map ideas for compositions, engage in peer discussion of drafts, and have individual conferences with the instructor.

The writing workshop is open to students enrolled in either section of the course; participants must register for both IT 004 and IT 004WW. The writing workshop component requires an extra 50 minutes of class time each week, and in recognition of the extra time commitment, a record of participation will appear on the student’s transcript.

Professor: Daniela Bartalesi-Graf

Time Block: E+, F+; W 12:00-12:50

"Televisione per tutti al bar di paese, fine anni "50" (photo by Franco Pinna)
This course aims to improve written and oral expression through the reading of a contemporary novel, short stories, and selected articles. An in-depth study of A ciascuno il suo by Leonardo Sciascia will allow us to explore how literature adopts the motif of crime to raise issues of justice, politics, and morality and how power is deployed in the struggle between the Mafia and the law.

The workshop will pay special attention to students' analytical skills in Italian by emphasizing the planning and revision stages of writing. Students will use writing as a means to deepen their understanding of the course materials in an informal, interactive and small group setting. No extra graded work will be assigned.

The writing workshop is open to students enrolled in either section of the course; participants must register for both IT 022 and IT 022WW. The writing workshop requires an extra 50 minutes of class time each week, and in recognition of the extra time commitment, a record of participation will appear on the student’s transcript.

Professor: Patricia Di Silvio, Italian
Time Block: G+ or J+; IM
M 3-3:50

Learn contemporary Italian with emphasis on idiomatic usage and different styles of expression. Readings, both in critical and fictional prose, will explore women’s images and voices in Italian culture, society and literature. In Oriana Fallaci’s *Lettera a un bambino mai nato* we will come to terms with the heart-rending issues of an unwanted pregnancy and the right to life through the protagonist’s inner drama and difficult choices. In Susanna Tamaro’s *Va’ dove ti port a il cuore* we will read of an old woman’s attempts to overcome the gap between generations through love and understanding. Through her letters, she relives her life, teaching her estranged granddaughter that the most important journey we make in life is to the center of ourselves, to the point where we can summon the courage to follow our hearts. In *Il giardino dei Finzi-Contini* we will learn of the tragic and powerful figure of Micol Finzi-Contini as she struggles with her family to survive the Fascist persecution of the Jewish people. We will review grammatical difficulties and focus on intensive exercises aimed at building vocabulary.

The writing workshop component, which students can elect to take as a small section in addition to regular class meetings, will be devoted to learning through writing. The Workshop will use writing as a means to become more deeply engaged with the Italian texts, develop critical thinking, improve writing and discussion skills in Italian. Students in this section will not have extra graded work, but use in-class informal writing to help in thinking out questions related to the course material, while engaging in peer discussions of drafts, revisions, and individual conferences with the instructor. Students will keep a journal and use it to note down their reactions to the texts, questions they might want to discuss, and ideas for class papers. When formal paper time comes for the class, the workshop will pay attention to the early steps of finding a topic, working on drafts and revisions.

**Prerequisites:** Italian 21 and 22 or consent.

**Professor:** Laura Baffoni-Licata, Italian  
**Time Block:** K+; IW
This course examines various arrangements defined as family in the United States and cross culturally. Diverse family arrangements and the socioeconomic conditions that support them will be studied and compared with ideal type, nuclear family forms that still dominate images of family life in the United States. Concepts and accompanying relations of cohabitation, motherhood, fatherhood, marriage, and the pros and cons of various family forms for specific groups such as poor and immigrant families and gay partners will be studied. The class will examine family distress caused by divorce, death, and family violence.

*NOTE:* Students participating in WW must also register for WW section.

Professor: Paula Aymer

Time Block: L+ TR; TBA
This course encourages the development of a large active vocabulary and a greater awareness of Spanish-speaking cultures. It aims at developing a level of language proficiency sufficient for survival in unusual or complicated situations. There will be regular lab assignments, compositions, class discussions, debates, and oral presentations. Students will participate in a regular 40-minute conversation group. In addition to reading about and discussing current events, we will read the novel “Mosen Millan”, by Ramón Sender, which deals with the Spanish Civil War. In the Writing Workshop, which is optional, students will have more opportunity to discuss the topics we have examined in class. They will also have the chance to talk about writing strategies in Spanish, and to evaluate what they are in the process of writing for the class. This will give both students and instructor an opportunity to get to know one another better. Students will be given individual attention in the revision of their compositions.

Professor: Patricia Smith, Spanish

Time Block: I; HF
This intensive course earns two course credits and meets six hours a week (2 time blocks). It is aimed at those students who wish to attain rapid progress in the language in order to study abroad or to finish the language requirement. Practice in oral expression will be accomplished through class discussions of modern literary works, films, articles, presentations and debates on current issues. Practice of written skills will be achieved through compositions and news summaries. Review of major grammar points such as the uses of the past tenses and of the indicative vs. the subjunctive. Students are required to attend a weekly 50-minute writing workshop. Conducted in Spanish. Prerequisite: Spanish 4 or equivalent.

Texts
- Gordon / Stillman: The Ultimate Spanish Review and Practice
- Halty / Labarca: Convocación de palabras
- Davis / Rosso: Spanish 21 Supplementary Material
- Skármeta: No pasó nada
- Aldecoa: Mujeres de negro

The Spanish 21/22I Writing Workshop is a companion course to Spanish 21/22 Intensive. It is mandatory, meets for 50 minutes each week, and will appear on your transcript, although you don’t have to do extra graded writing and has no credit. The purpose of the workshop is to help you improve your writing skills. We will concentrate on your assigned compositions for Spanish 21/22I, both to prepare and correct them. You will work with classmates in pairs and groups to discuss ideas, review each others compositions, and focus on different writing tasks. The activities in the workshop will help you to think out questions related to the material of Spanish 21/22 and you will have the opportunity to work closer to the instructor on specific problems.

Profesor: Conchita Davis, Spanish
Time Block: E; D (M 9:30-12:30)

(Spanish Riddle)
Campo blanco
semilla negra,
dos que lo ven
y una que siembra.
(La escritura)
Latin American Popular Theater

The course will focus on the theater of the last three decades, examining questions of form and modes of production. Special emphasis on the assimilation of dramatic popular forms to new political perspective. Discussions of single author plays as well as collective creation works from various Latin American countries and the US Latino sector. Conducted in Spanish. Students will be required to create/produce an original play as the course's capstone work.

Pre-requisites: SPAN 31/34, 32/35 or consent.

The Writing Workshop will stress the value of writing to probe deeper into questions related to the course, as well as aiding in the development of the creative work required as part of the course.


Professor: Claudia Kaiser-Lenoir, Spanish  
Time Block: I+; TBA.
This course examines the nature of law and legal reasoning and the relationship between legal and moral reasoning. We will read positivists, who stress the potential separation of law and morality, and critics of positivism, who reject that separation for various reasons that concern, for example, standards of correct reasoning and the role of judges in a legal system. We will consider the bearing different theories about the nature of law have on interpreting the Constitution and determining which rights we have. We will also assess various rationales for criminal punishment. The utilitarian defends acts of punishment only insofar as they bring about good results. The retributivist defends punishment as deserved by the guilty, whether or not punishing the guilty does any (further) good. We will evaluate these two dominant lines of thinking about punishment as well as some alternatives, remaining attentive to any connections there might be between a proposed justification of punishment and philosophical claims about the nature of law. Readings from Bentham, Austin, Hart, Dworkin, Kennedy and others, and from various court cases.

The optional writing workshop provides an opportunity for further analysis of course material in a relaxed, small group environment. It will emphasize informal ungraded writing exercises on the readings and themes of the course, and will aim to promote greater understanding, to stimulate creative thought and expression, and to advance formal writing skills. Writing will also be used to facilitate discussion. Peer review of papers written for the course will enable you to gather critical feedback and to revise your work.

Professor: Erin Kelly, Philosophy

Time Block: D+; DM
Maxwell’s Equations – You’ve seen them on t-shirts; now you can find out what they mean. For students who’ve completed the essential if sometimes tedious background of electrostatics in Physics 42, this class is the payoff, as we explore the beauty and practical importance of the laws of electrodynamics. We’ll cover magnetic induction, Maxwell’s equations, and the properties of electromagnetic waves. Theoretical analysis and problem-solving will be leavened with experiments and computer simulations.

At the same time, we will work together on the craft of good scientific writing in its various forms. No matter what kind of scientific or technical work you may pursue, the ability to describe and explain your work clearly and persuasively to a variety of audiences is absolutely indispensable.

**Prerequisites:** Physics 42 and Math 38, or consent of the instructor.

**Professor:** Roger Tobin, Physics

**Time Block:** D+; ARR