College of Creative Studies
Fall 2013
Course Offerings
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ART CS 15, 1     EC# 01172

Art Colloquium

Art Colloquium is designed to assist you in making the most of your experience as a CCS art student. It is required for all new CCS Art Majors who are entering UCSB as freshmen or transferring into CCS in the fall quarter.

This course will:
- acquaint you with CCS privileges, expectations, course offerings and procedures
- familiarize you with UCSB campus offerings and opportunities available to you as art students
- introduce you to potential research tracks
- support your developing studio practice
- build community and dialogue between the CCS art students

We will meet weekly as a group on Thursday afternoons.
You must also attend, the CCS Art Symposium (ART CS 106).
Additional requirements outside of class will be listed in the course syllabus.
Enroll in the Art Colloquium (ART CS 15) for 3.0 units.
   Time and location: Thursday, 2:30pm-4:30pm - Room 136

Enroll in the Art Symposium (ART CS 106, Section 1) for 1.0 unit.
   Time and location: Thursday 5-6:50pm, Embarcadero Hall, Isla Vista
   This course is a symposium that features visiting artists who lecture on their work.

Required Texts:

Holzwarth, H.W.      Art Now! Vol. 4      Taschen
ISBN-10: 3836528169

Instructor: Linda Ekstrom
Time: Thursday, 2:30 pm - 4:20 pm
Place: Bldg. 494, Rm. 136
Life Drawing Workshop

A professional styled drawing workshop and a formal critique. First we draw from the model for 3 hours and then we critique for 1 hour. Serious students at all levels are welcome. CCS art majors are encouraged to repeat this class every quarter.

Most professional artists draw from life regularly throughout their careers. In addition to working on their own, artists often gather once a week to share a model and work together. (This is not limited to figurative, or even realist artists; this includes abstract painters, poets, singers, and other artists who value the discipline and discovery particular to this activity). There is no group assignment. The goal is to explore and “push” individual practice. Each artist is working on her own problems with the understanding that there is value to seeing the process and progress of others. This class adds a formal critique at the end to aid students in understanding and articulating the principles and practice of drawing the nude.

The Pose: The model will keep the same pose for each 3-hour session. Please note that students wishing to do “gesture” drawings may move around the room to have different poses to draw.

Materials: There is no restriction on size or medium except that the work be monochromatic. (Red chalk on white paper is monochromatic, red chalk on green paper is polychromatic). There are drawing boards in the classroom. Please do not remove or destroy them. The student purchases all other materials.

Units: Two units for attending all 10 classes and completing 10 drawings.

Additional units may be awarded for work done outside of class. This includes drawing and research. Additional units will be determined by the UC standard of one unit representing 3 hours of work per week, or 30 hours of work per quarter.

Instructor: Hank Pitcher
Time: Wednesday, 9:00 am - 12:50 pm
Place: Bldg. 494, Rm. 120
This course will explore the artists’ book as a structure and a space for the containment and interplay of words and images. Both technique and content will be addressed to find appropriate pairings between the book structure and that which the structure contains. We will create a variety of bindings and forms within the tradition of artists' books, covering a broad range of options for your future book projects. While the course will explore artists’ books as a genre having a particular form, content, and technique of its own, we will also see examples of how the book operates as a symbolic form, as sculpture extended into space, and as a component of an artist’s larger body of work. At an appropriate time during the quarter the focus will shift to your own research and the course project you plan to develop over the second half of the quarter.

Advanced students may take this course on an independent track and develop their work outside of the course syllabus.

NOTE: In addition to the class meeting time, you must also be able to attend lab on Thursday evenings from 6:00-8:00PM.

Enrollment is limited to 10, and at consent of instructor. Priority will be given to students who have taken Letterpress Printing in CCS or Print 14 in Art Studio.

Required Texts:


Instructor: Linda Ekstrom
Time: Wednesday, 1:00 pm - 4:50 pm (class)
      Thursday, 6:00 pm - 7:50 pm (lab)
Place: Bldg. 494, Rm. 107
ART CS 112, 1       EC# 01503

Materials and Practices of Painting

This class is a thorough treatment of what every painter should know about materials and craft. There will be a presentation by the instructor at each meeting and students will paint in class as well. There will also be a written examination at the end of the quarter, successful completion of which will account for two of the four units offered for this class.

In addition to attending the presentations and passing the exam, to earn four units in this class you must do the following:

- build and prepare one well-crafted stretcher (strainer) complete with canvas*
- build and prepare one well-crafted panel for painting
- make a painting “in the manner of” another artist. You should choose an artist who made work before 1950 and whose work you have seen in person. Dan must approve the artist you choose.
- make one painting from observation
- make one painting using a material or technique you have never used before.

Instructor:        Dan Connally
Time:             Monday, 1:00 pm - 3:50 pm
                   Wednesday, 1:00 pm - 2:50 pm
Place:            Bldg. 494, Rm. 136
The Transverse Way

There’s an old episode of *The Simpsons* - Season 9, Episode 11 for all you stattos out there - where Homer goes to the video store and rents *Paint Your Wagon*, starring Clint Eastwood and Lee Marvin. Expecting a western bloodbath - after all, these are two of the toughest guys ever to appear in ponchos - he’s horrified to discover that he’s rented a musical: “Singing!!! They’re singing!!! Singing is the lowest form of communication,” screams Homer as he throws the tape in the garbage. Of course what he didn’t realize at the time was that he had discovered a “transverse way” within the film - a genre invaded by another genre, which took it to another narrative place entirely. This has both comic and subversive potential - the “Springtime for Hitler” routine in Mel Brooks’ *The Producers* is a classic filmic example - as well as culturally transformative ramifications: what if an entirely new audience - a people yet to come - is in the process of being born through these very acts of transversality in much the same way that subcultures evolved from a combination of anti-establishment rock music, political disaffection and the fashion industry? Each week this class will encourage students to build their own transversally hybrid connections between pre-existing social and cultural phenomena, weaving together art, film, music, politics, fashion, history, and social/media geography to create a new form of cultural studies that is always in the act of formation, where the students themselves are the active catalysts for developing new (albeit necessarily ephemeral) disciplines.

**Required Texts:**

Bogue, R. *Deleuze’s Way* Ashgate
ISBN-10: 075466032X

**Instructor:** Colin Gardner  
**Time:** Tuesday, 2:00 pm - 4:50 pm  
**Place:** Bldg. 494, Rm. 136
Material Knowledge

Students will select a single sculptural material for the duration of the academic term. A workbook will be kept in order to catalog the various properties of one’s chosen material. Students are encouraged to select non-familiar materials that are cheap and abundant. The course goal is to build up effective strategies on how to intensely explore the potential value of any given material. Throughout the quarter, four distinct sculptural works will be presented based research completed. Basics of wood shop and tool demos will be conducted in class. No prior knowledge is required. All disciplines are welcome.

Instructor: Ryan Bulis
Time: Monday and Wednesday, 9:00 am - 11:50 pm
Place: Bldg. 494, Rm. 136
BIOLOGY READING PROJECTS

Reading projects to be arranged between the student and biology faculty. A Proposal for Reading Project form must be completed, signed by the instructor, and turned in to the CCS Office before an enrollment code may be issued and you may register for the class. A completed, signed proposal must be turned in by the end of the second week of the quarter. Necessary forms are available in the CCS Office.

For this quarter, the following Creative Studies faculty MAY be available for Independent Reading Projects: Kathy Foltz, Armand Kuris, John Latto, Bruce Tiffney, Claudia Tyler or Robert Warner. If you have an opportunity to do research with a UCSB faculty person who is not in Creative Studies, please check with your CCS Biology advisor before getting appropriate forms from the CCS office. You may then set up the course through Creative Studies (as above), or you may wish to inquire about doing the project as a “199” Independent Studies course through the instructor’s department in the College of Letters and Science, in which case you may earn a letter grade for your work.

BIOLOGY LABORATORY PROJECTS

Laboratory projects to be arranged between the student and biology faculty. A Proposal for Laboratory Project form must be completed, signed by the instructor, and turned in to the CCS Office before an enrollment code may be issued and you may register for the class. A completed, signed proposal must be turned in by the end of the second week of the quarter. Necessary forms are available in the CCS Office.

For this quarter, the following Creative Studies faculty may be available for Independent Laboratory Projects: Kathy Foltz, Armand Kuris, John Latto, Bruce Tiffney, Claudia Tyler or Robert Warner. If you have an opportunity to do research with a UCSB faculty person who is not in Creative Studies, please check with your CCS Biology advisor before getting appropriate forms from the CCS office. You may then set up the course through Creative Studies (as above), or you may wish to inquire about doing the project as a “199” Independent Studies course through the instructor’s department in the College of Letters and Science, in which case you may earn a letter grade for your work.
BIOLOGY CS 10, 1       EC# 03228

Biology Colloquium

THIS COURSE IS DESIGNED FOR AND REQUIRED OF NEW CREATIVE STUDIES BIOLOGY MAJORS (both incoming students to UCSB and transfer students from the College of Letters and Science).

It will provide a roadmap to enter the world of research and point the way to becoming a junior colleague rather than an undergraduate student. We will discuss styles of research, creativity, philosophy of science, and faculty-student relationships. We'll also introduce you to the tools necessary to read research papers, to seek preexisting information in the library and on the web, to generate and develop your own ideas and papers. In the latter part of the course we will use this information to determine how to gain access to a research laboratory at UCSB and how to move most rapidly towards intellectual parity with the sponsoring professors, graduate students, and postdocs in the laboratory.

Instructor: John Latto, Claudia Tyler, Armand Kuris and Bruce Tiffney
Time: Wednesday, 3:00 pm - 4:50 pm
Place: Bldg. 494, Rm. 136
Biology CCS 12 is an augmentation to the MCDB 1A class, designed specifically for CCS biology students enrolled in that class. The course content will focus on introductory biochemistry, molecular cell biology, development and genetics, but it will also include content on understanding how the University works and successfully navigating one’s first year at UCSB. The course will emphasize research, critical analysis and contemporary relevance, integrating MCDB 1A course material with the primary literature. The course will meet once per week for one hour.

Instructor: Stu Feinstein  
Time: Thursday, 8:00 am - 8:50 am  
Place: Bldg. 494, Rm. 160B
The choices we make as a society about the food we eat affects both the species being consumed and its ecosystem (and us, too, of course!). In this seminar-style course we will consider our food, acquired on land and from the sea, and discuss the natural history and ecology of our “prey” and its relationship with us.

We will start “on land” by reading “The Omnivore’s Dilemma” by Michael Pollan, discussing industrial and organic agriculture, and the hunter-gatherer approach. In the second half of the course we will go “to the sea”, reading “Four Fish” by Paul Greenberg to guide our study of the impact of history, geography and consumption on the wild stocks of salmon, seabass, cod, and tuna. Readings will be supplemented by research and popular articles.

Normative number of units awarded for the class is 2, with the option of an additional unit awarded for a research project in area of student’s interest

Required Texts:

Greenberg, P.  
*Four Fish: The Future of the Last Wild Food*  
Penguin Group Inc  

Pollan, M.  
*The Omnivore’s Dilemma: A Natural History of Four Meals*  
Penguin Group Inc  

Instructor: Claudia Tyler
Time: Tuesday, 9:30 am - 10:50am
Place: Bldg. 494, Rm. 136
CHEMISTRY

CHEMISTRY/BIOCHEMISTRY READING PROJECTS

Reading projects to be arranged between the student and chemistry/biochemistry faculty. A Proposal for Reading Project form must be completed, signed by the instructor, and turned in to the CCS Office before an enrollment code may be issued and you may register for the class. A completed, signed proposal must be turned in by the end of the second week of the quarter. Necessary forms are available in the CCS Office.

For this quarter, the following Creative Studies faculty MAY be available for Independent Reading Projects: Donald Aue or Leroy Laverman. If you have an opportunity to do research with a UCSB faculty person who is not in Creative Studies, please check with your CCS Chemistry/Biochemistry advisor before getting appropriate forms from the CCS office. You may then set up the course through Creative Studies (as above), or you may wish to inquire about doing the project as a “199” Independent Studies course through the instructor’s department in the College of Letters and Science, in which case you may earn a letter grade for your work.

CHEMISTRY/BIOCHEMISTRY LABORATORY PROJECTS

Laboratory projects to be arranged between the student and chemistry faculty. A Proposal for Laboratory Project form must be completed, signed by the instructor, and turned in to the CCS Office before an enrollment code may be issued and you may register for the class. A completed, signed proposal must be turned in by the end of the second week of the quarter. Necessary forms are available in the CCS Office.

For this quarter, the following Creative Studies faculty may be available for Independent Laboratory Projects: Donald Aue or Leroy Laverman. If you have an opportunity to do research with a UCSB faculty person who is not in Creative Studies, please check with your CCS Chemistry/Biochemistry advisor before getting appropriate forms from the CCS office. You may then set up the course through Creative Studies (as above), or you may wish to inquire about doing the project as a “199” Independent Studies course through the instructor’s department in the College of Letters and Science, in which case you may earn a letter grade for your work.
CHEMISTRY CS 103, 1      EC# 09506

Problem Solving in General Chemistry

This course is an adjunct to Chemistry 2A (honors general chemistry). Problem solving skills will be developed and supplemental lectures will reinforce key concepts. When appropriate, experiments in the upper division undergraduate laboratory will be performed to examine chemical concepts in a laboratory setting. All CCS students enrolled in Chemistry 2A are encouraged to enroll in this course.

Instructor:   Leroy Laverman
Time:        Monday and Wednesday, 12:00 pm - 12:50 pm
Place:       Bldg. 494, Rm. 136
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COMPUTER SCIENCE
COMPUTER SCIENCE CS 1A, 1   EC# 09506

Computer Programming and Organization

This course is required for all incoming CCS Computer Science freshmen.

OPEN ONLY TO CCS CS MAJORS, except by permission of the instructor.

This course is the first half of a two quarter sequence (CS1A/CS1B) designed to prepare students to take upper division courses in Computer Science, and participate in undergraduate research projects in Computer Science under the direction of CCS and College of Engineering Computer Science faculty.

In both quarters, the course is paired with CS1L, "Programming Lab", where students undertake individual and group programming projects to build and reinforce their skills and knowledge.

CS1A provides students with the opportunity to build skills and knowledge in the following areas: problem solving and algorithm development, Java, C and C++ programming, software development tools, programming language paradigms (structured, functional and object-oriented programming), basic UNIX utilities and tools, basic data structures including arrays and linked lists representations of lists, stacks, queues, and binary trees, binary and linear search, sorting techniques, iteration vs. recursion, basic running time analysis, data representation.

In addition to basic skills in C, C++, and Java (which is a fundamental preparation for upper division CS courses at UCSB), other programming languages such as Scheme, Python, and JavaScript and others may be explored either because of the principles they illustrate, or based on student interest.

Instructor: Phill Conrad
Time: Monday and Wednesday, 3:30 pm - 4:50 pm
Place: Bldg. 494, Rm. 160B
This course is required for all incoming CCS Computer Science freshmen.

*** OPEN TO CCS CS MAJORS. ALL OTHERS REQUIRE PERMISSION OF THE INSTRUCTOR ***

This course is the laboratory course that supports the (CS1A/CS1B) sequence. This course is oriented around individual and/or group software projects completed by students that support, extend and transcend the learning that takes place in the CS1A/1B course.

Instructor: Phill Conrad  
Time: Thursday, 6:00 pm - 7:50 pm  
Place: Bldg. 494, Rm. 160B
Mathematical foundations of computer science: Introduction to propositional and predicate logic, set theory, functions and relations, mathematical induction and recursion, and an introduction to combinatorics.

Required Texts:


Instructor: Peter Cappello
Time: Tuesday and Thursday, 9:30 am - 11:20 am
Place: Bldg. 494, Rm. 160B
Projects in Computer Science

Prerequisite: Consent of instructor.

This is a research and project oriented hands on course for advanced Computer Science students. This quarter the primary focus will be on Cloud Computing. Students are expected to work on a group or individual project which needs to be approved by the instructor. Students working on advanced individual projects outside of Cloud Computing are also welcome to join.

This is a hands-on lab class where participants will be expected to work on an advanced project, read, discuss and present research papers, and present their project progress continually to their peers. Units will be assigned by the instructor to reflect the extent and quality of student’s participation and progress on group and/or individual projects.

Instructor: Murat Karaorman
Time: Monday and Wednesday, 6:00 pm - 8:50 pm
Place: Bldg. 494, Rm. 143
LITERATURE
How It’s Done: The Craft of Poetry

Though you cannot teach a person to be a poet, you can teach the craft of poetry, which will help anyone interested in reading or writing poetry obtain a deeper knowledge of what it takes to produce successful verse. That poetry is a craft in no way implies that it is not an inspired form of writing. In fact, knowledge of craft facilitates inspiration and helps shape it in meaningful ways. In this course we will examine some of the great poems written by English and American authors, and discuss how they work in terms of craft. If a poem is “a little machine of words,” as William Carlos Williams claims, we will all become ace mechanics by learning what parts are required to assemble a poem, what tools are necessary for the job, and how to use them to build a poem and make it run. No prior knowledge of craft is necessary, but a passing knowledge of prosody will be useful. Bring your interest in poetry, your enthusiasm for the subject, and your eagerness to learn.

Required Texts:

Hoagland, T.                                 Real Sofistikashun                Graywolf Press

Korn, A.                                         The Poem’s Heartbeat             Copper Canyon Press, 2nd ed.

Instructor:        Kurt Brown
Time:             Tuesday and Thursday, 2:00 pm - 3:20 pm
Place:            Bldg. 494, Rm. 143
From Diaries to Stories

The diary as a literary form is as old as the hills. It's incredibly flexible. Authors of all kinds have kept diaries: the common writer, the king and queen, the rag-picket, the poet, the murderer, the mortician, the child, the student, the teacher (less often than the student), the philosopher, the philanderer, the concubine, the critic (less often than the teacher), the curmudgeon, the cur. Their interests in keeping diaries have varied as much as their vocations and luck. One element alone is common to diaries: the entry. In the strictest sense of the word diary, it should be daily, a daily entry. Writers often whole keeping records of their daily lives, thoughts, remembrances, and imaginings, have worked toward stories. That's what you'll be doing in this class.

You write five entries a week and print out one or two of them each week to be read in class; then, after the middle of the quarter you select, arrange, and revise entries to see how you can put some of them together into narratives. Your entries are the subject of the course, and besides writing your own you read everybody else’s soon after they are handed out, preparing to discuss them in the next class. You write under pen names, so think of one before coming to class.

Instructor: Caroline Allen
Time: Monday and Wednesday, 1:00 pm - 2:20 pm
Place: Bldg. 494, Rm. 143
LITERATURE CS 102, 2        EC# 28290

Short Fiction

In this class we will read short fiction, talk about short fiction, and write short fiction. We will explore various literary techniques, “craft,” the nuts and bolts, and also explore matters less effable, like the importance of heart (the writer, says Chekhov, must have compassion down to his fingertips) and developing one’s powers of attention (the writer, says Henry James, is one upon whom nothing is lost). Please be expected to read deeply, contribute in class, and write two to three finished short stories of reasonable length.

Required Texts:

Ed. by Halpern, D.                The Art of the Tale                Penguin Books
ISBN-10: 0140079491

Instructor:    Edward Macker
Time:          Tuesday and Thursday, 3:30 pm - 4:50 pm
Place:         Bldg. 494, Rm. 143
Screenwriting and new media are ever expanding mediums, and yet, in an age of constant visual stimulation, it remains a relatively untapped tool for young writers. Combining both written and visual story-telling, the screenplay is a unique genre because unlike other writing styles it is comprehensive, intended for a specific audience and has its own language. The goal of this course will be for students to understand the elements of screenplay, the larger methods, schools of thought, tools and structures (both experimental and traditional) in order to begin their own original work.

Screenplay marries written word, traditional character development, creativity and story structure with inclusive, modern story-telling. This course will work as an introduction to and overview of the creative and technical elements of screenwriting: theme, story structure, character, conflict, dialogue and format. The course will focus simultaneously on analysis of text (both already written and student work) and development of an original script, leaning more heavily towards writing. Analysis of narrative will help to strengthen understanding of how dramatic writing is translated to screen, as will further exploration of screenwriting components such as theory, movement, the use of cinematic elements and language of screenplay. Throughout the course students will work towards producing an original screenplay, idea, beat sheet, writing exercises and narrative.

Instructor: Randall Shulman
Time: Tuesday and Thursday, 2:00 pm - 3:20 pm
Place: Bldg. 494, Rm. 143
Family life can mess you up, or pick you up, but writing about family is a world of material to explore and develop. In this course we’ll workshop various kinds of narrative forms: creative nonfiction, fiction, that get at the essential truth of family life in its broadest sense and in its various manifestations. You’ll create 35-40 pages that depict the complexity of family and that work as a creative narrative. We’ll look into Junot Diaz’s Drown, his first collection of short stories, as a model of how family memoir/fictionalized memoir can function at the highest level.

Required Texts:

Diaz, J.  
*Drown*

Hemingway, E.  
*A Movable Feast*

**Instructor:** Jervey Tervalon  
**Time:** Thursday, 5:30 pm - 8:20 pm  
**Place:** Bldg. 494, Rm. 143
Expository Writing: Criticism and the Essay

This seminar will help students develop their skills in literary criticism and essay writing. We will work on identifying audiences and their expectations, making wise decisions about format, style, and method, and establishing effective, persuasive arguments through well-crafted prose. Our goal is to enable students to write confidently in a broad range of situations, with particular emphasis on genres they will find most useful in discussing literature, the arts, and other areas of the humanities.

We will examine the purpose, audience, genre, and criteria for effectiveness in all these situations by reading model works, writing three short papers and evaluating each other's work according to the recently created "Standards of Excellence for Critical and Scholarly Essays in the CCS Literature Program." We will discuss the role of evaluation in various rhetorical situations as well as the ethical implications of critical judgment as we refine our writing skills.

Required Texts:

Zinsser, W.  
W. Harper Perennial  
ISBN: 978-0060891541

Williams, J.  
Style: Lessons in Clarity and Grace  
Longman, 10th Ed.  
ISBN: 978-0205747467

Hacker & Sommers  
A Pocket Style Manual  
Bedford/St. Martin’s  
ISBN: 978-0312542542

Instructor:  
James Donelan

Time:  
Tuesday and Thursday, 9:30 am - 10:50 am

Place:  
Bldg. 494, Rm. 143
The prose writing workshop offers students the opportunity to work exclusively with classmates who are at the same high level of accomplishment in the major. Students in the workshops produce original works of fiction or nonfiction, and submit them to their classmates and instructor for a close critical analysis. Workshop critiques (which include a detailed written report, as well as thorough line-edits) assess the mechanics and merits of the piece of writing, while the individual conferences with the instructor distill the various critiques into a direct plan of action to improve the work. A student writer develops by practicing the craft under the diligent critical attention of his or her peers and instructor. This dynamic is meant to continually assist the student writer toward new levels of creative endeavor. Students will have the opportunity to be workshopped twice during the quarter, and will be expected to write informal critiques of classmates' workshop pieces each class.

Instructor: Ellen O'Connell
Time: Monday and Wednesday, 4:00 pm - 5:20 pm
Place: Bldg. 494, Rm. 143
This seminar will explore the intersection of literature (novels, poetry, short stories) and music (focusing on rock, jazz, rap, and other contemporary genres). Students will read, discuss, and write about three areas. First, we will study works with music as the subject. Second, readings will center on literature influenced by music in form. Third, we will explore music itself with literary connections.

Class will be predominantly instructor-facilitated discussion of readings, with occasional lecture and in-class writings. There will be one academic paper due, as well as a number of smaller writing exercises of both creative and academic nature.

Required texts include four books and a reader—students are encouraged to locate used copies of all texts. Sample authors include Michael S. Harper, David Wojahn, Jennifer Egan, Joyce Carol Oates, Denis Johnson, Nikki Giovanni, Patti Smith, and Bob Dylan, among others.

A course reader will also be available through AS Notes.

Required Texts:

Egan, J.  
ISBN: 978-0307477477 
A Visit from the Goon Squad  
Anchor

Wojahn, D.  
ISBN: 978-0822954923 
Mystery Train  
University of Pittsburg Press

Harper, M.  
ISBN: 978-0252011931 
Dear John, Dear Coltrane  
University of Illinois Press

Instructor: Robert Krut
Time: Tuesday and Thursday, 12:30 pm - 1:50 pm
Place: Bldg. 494, Rm. 143
Every quarter various poets, novelists, short story writers, journalists, playwrights, cartoonists, editors, publishers, filmmakers, and critics will present their work at the weekly CCS Literature Symposium. **Students who attend all 10 meetings will receive 1 unit of college credit. If you miss the first day of symposium on Wednesday, April 1st, you must talk to Caroline Allen in order to remain enrolled for credit.** The symposium is open to the community. Students who are not enrolled in the class are welcome to come to symposia that interest them.

**Important Etiquette:** Students should be in the Old Little Theatre no later than 4 o’clock. Students should sit in the first half of the seating area—no back row sleepers or doers of crossword puzzles! Do not leave before the end of the symposium. Our readers come here to give you the best of themselves. Please be courteous and attentive.

*If you need special assistance due to a disability, please call 893-2364.*

**Instructor:** Caroline Allen  
**Time:** Wednesday, 4:00 pm - 5:15 pm  
**Place:** The Old Little Theater
Along with Chaucer and Shakespeare, Milton is one of the three major writers on which the CCS Literature Program has always insisted. Over the quarter, we'll explore why this is so and why his poetry is so compelling. The emphasis will fall, as it must, on *Paradise Lost*, but we'll begin by reading some of the earlier poetry, and, as time permits, some of his prose. Milton sought – and attained – an eventful public life, one that spanned war and revolution in mid-seventeenth-century England. But when all his political hopes collapsed, they found transmuted expression in *Paradise Lost* and *Paradise Regain’d*, his paradoxical “anti-poem”, which we'll also read.

Students can expect to write two papers and some informal response pieces to stimulate discussion.

**Required Texts:**

_The Complete Poetry and Essential Prose of John Milton_  
Modern Library

**Instructor:** Michael O’Connell  
**Time:** Monday and Wednesday, 10:00 am - 11:20 am  
**Place:** Bldg. 494, Rm. 143
Faulkner, an regional author with an international reputation, portrayed the fictional Yoknapatawpha County in almost all of his writing. Although the translation is unverified, Faulkner once said that Yoknapatawpha means "water flowing slow through the flatland" in Chickasaw dialect, a description that might apply to his characters as well. Yoknapatawpha County's residents live downstream where the river fills and empties with the seasons, despite human trial and yearning, and the characters surrender to their landscape, even when the waters of the past rise, threatening to overflow and drown the present. We will study the most prolific period of Faulkner's long career, the years from 1929-1942, reading six novels that will give us a sense of the deep scope of Yoknapatawpha's humanity. Students will write two papers and give an in-class presentation on a novel.

Required Texts:


Faulkner, W. *Absalom, Absalom!* Vintage Books USA ASIN: B009CRX7VG


Instructor: Ellen O'Connell
Time: Monday and Wednesday, 2:30pm - 3:50 pm
Place: Bldg. 494, Rm. 143
This class will examine the formal, thematic, and aesthetic aspects of the poetry of Langston Hughes. He is the most important African American poet of the twentieth century. He is also a poet and writer whose work is of great significance to both American and African American literature, and to the practice of modern writing. This class will focus on the poems, but it will do also use poetry criticism as way of anchoring our reading. Topics under discussion will include: (a) which characteristics of Hughes’s poetry can be called “African American”? What is not “African American” about it? What is the difference? What is the significance (if any) of the difference? (b) “Jazz age” poetics and Modernist poetry; (c) poetic language, vernacular language, and poetic form; (d) the Harlem Renaissance, the “Black Atlantic,” and Langston Hughes; (e) whether criticism does Hughes justice; and (f) literary tradition, stereotype, and anti-stereotype in Hughes’s work. To this end, the discussion in each class meeting will be prompted by a consideration of the work of one critical reading of Hughes’s poetry, to which we will add our own critical readings, through discussion as well as through the critical essays students will write.

Required Texts:

Hughes, L.  
University of Missouri Press  
ISBN: 978-0826213396

Hughes, L.  
University of Missouri Press  
ISBN: 978-0826213402

Hughes, L.  
University of Missouri Press  
ISBN: 978-0826213419

Instructor: Geoffrey Jacques  
Time: Tuesday and Thursday, 12:30 pm - 1:50 pm  
Place: Bldg. 494, Rm. 160B
Naturalist Classics Older and Newer

Jon Young, in his profound new book *What the Robin Knows*, shares a quote from a San Bushman:

“If one day I see a small bird and recognize it, a thin thread will form between me and that bird. If I just see it but don’t recognize it, there is no thin thread. If I go out tomorrow and see and really recognize that same individual bird again, the thread will thicken and strengthen just a little. Every time I see and recognize that bird, the thread strengthens. Eventually it will grow into a string, then a cord, and finally a rope. This is what it means to be a Bushman. We make ropes with all aspects of the creation in this way.”

In this class we will read Mary Austin’s *The Land of Little Rain*, Aldo Leopold’s *A Sand County Almanac*, David Abram’s *The Spell of the Sensuous*, and Jon Young’s *What the Robin Knows*, four classic books by writers who have made ropes with creation, writers who inspire a healing intimacy with the great family of natural things.

In addition to careful reading, classroom discussions, and two substantial essays, we will also make trips down to the lagoon to write and poke around “in nature.”

Required Texts:

- Austen, M. *The Land of Little Rain* Modern Library
- Leopold, A. *A Sand County Almanac*
- Abram, D. *The Spell of the Sensuous*
- Young, J. *What the Robin Knows*

Instructor: Edward Macker  
Time: Tuesday and Thursday, 11:00 am - 12:20 pm  
Place: Bldg. 494, Rm. 143
Strange Familiars

From *Beowulf’s* Scandanavia to Marlowe’s Malta, Bishop’s Brazil to Walcott’s Caribbean, Lahiri’s immigrant American to Friel’s Ireland and Coetzee’s Imperial outpost, this course will chart an expansive itinerary traversing centuries and a variety of geographies. Exploring the unfamiliar worlds of their narratives, this course will seek in their imagined encounters between natives and foreigners, insiders and outsiders, colonizers and colonized, to understand what it means to be foreign or familiar, and how these cultural exchanges impact our individual and communal identity. In our age of globalization, we have *Lonely Planets* enough to make the farthest flung town a little less lonely, a little more familiar, but through our readings of these texts, we will interrogate the politics and ethics of familiarizing the unfamiliar, along with the attractions and dangers that attend these *strange* encounters.

**Required Texts:**

Seamus Heaney Translation
*Beowulf*  
W. W. Norton & Company, 2001 Ed.  
ISBN: 978-0393320978

Marlowe, Christopher
*The Jew of Malta*  
Bloomsbury Methuen Drama, 3rd Ed.  
ISBN: 978-0713677669

Friel, Brian
*Translations*  
Faber and Faber, 1995 Ed.  
ISBN: 978-0571117420

Coetzee, J. M.
*Waiting for the Barbarians*  
Penguin, 1999 Ed.  
ISBN: 978-0140061109

**Instructor:** Pavneet Aulakh  
**Time:** Monday and Wednesday, 11:30 am - 12:50 pm  
**Place:** Bldg. 494, Rm. 143
Combinatorics deals with ways of arranging and distributing mathematical objects and involves ideas from geometry, algebra, and analysis. This area of mathematics has numerous applications within mathematics but also in other fields such as engineering, computer science, statistics, biology, etc. In this course we will focus on Enumerative Combinatorics, that is counting the number of elements of a finite set. Although we all may think that we know how to count, this course will show that there are many counting questions that are not trivial to answer and it will provide interesting tools to answer them.

This course is mainly a problem-solving course. The focus will be on students solving problems rather than an instructor lecturing.

**Instructor:** Maria Isabel Bueno Cachadina  
**Time:** Tuesday and Thursday, 2:00 pm - 3:20 pm  
**Place:** Bldg. 494, Rm. 164B
In this course, we will cover the following topics: Systems of linear equations, matrix algebra, determinants, vector spaces and subspaces, basis and dimension, linear transformations, eigenvalues and eigenvectors, diagonalization, and orthogonality.

**Required Texts:**

Lay, D. *Linear Algebra, 4th edition* Addison Wesley (Pearson)
ISBN: 0321385179

**Instructor:** Padraic Bartlett

**Time:** Monday, Wednesday and Friday, 2:00 pm - 3:20 pm

**Place:** Bldg. 494, Rm. 164B
Fall 2013 Course Offerings

**MATH CS 103, 2**  
**EC# 30874**

**Advanced Linear Algebra I**

This is a first-year course, which is part of a sequence of two consecutive courses.

In this course, we will cover the main topics in Linear Algebra: vector spaces, linear transformations, matrices, systems of linear equations, and determinants.

The language and concepts of matrix theory and, more generally, of linear algebra, have come into widespread usage in the social and natural sciences, computer science, and statistics. In addition, linear algebra continues to be of great importance in modern treatments of geometry and analysis.

**Required Texts:**

S. Friedberg, A, Insel & L.E. Spence  
*Linear Algebra, 4th edition*  
Pearson

ISBN-10: 0130084514  

**Instructor:** Maria Isabel Bueno Cachadina  
**Time:** Monday, Wednesday and Friday, 11:00 am - 12:20 pm  
**Place:** Bldg. 494, Rm. 164B
Fall 2013 Course Offerings

MATH CS 120, 1       EC# 30916

Introduction to Higher Mathematics

The main goal is to become accustomed to thinking about and writing about mathematics clearly and accurately while, at the same time, learning basic techniques that will be used in the upper division courses. Specific topics may include: Sets and Proofs, Number Systems, Decimals, Induction, Euler's formula and Platonic Solids, Prime Factorization, Complex Numbers, Congruence of Integers, Equivalence Relations, Counting and Choosing, Infinity

Required Texts:

Liebeck, M.  
A Concise Introduction to Pure Mathematics  
Chapman & Hall 3rd ed.  
ISBN: 1439835985

Instructor:  
Martin Scharlemann

Time:  
Monday and Friday, 1:00 pm - 1:50 pm  
Wednesday, 1:00pm - 2:50pm

Place:  
Bldg. 494, Rm. 160B
This is the second part of a two-semester sequence on Multidimensional Analysis. This course focuses on integration. We will start with a brief review of integration in one variable. The first part of the course will present the main ideas of multiple integrals: volume and the n-dimensional integral, Riemann sums, iterated integrals and Fubini’s theorem, the change of variables theorem, and improper integrals. The second part of the course studies line and surface integrals, Green’s theorem, and Stokes’ theorem.

Required Texts:

Edwards Jr., C. H.  
*Advanced Calculus of Several Variables*  
ISBN: 0486683362

Optional Texts:

Friedman, A.  
*Advanced Calculus*  
Dover Publications, Dover Ed ed. 2007
ISBN: 0486457958

Instructor:  
Xianzhe Dai

Time:  
Tuesday and Thursday, 9:30 am - 10:50 am

Place:  
Bldg. 494, Rm. 164B
Fall 2013 Course Offerings

MUSIC COMPOSITION
MUSIC COMPOSITION CS 101, 1        EC# 36137

Individual Instruction in Composition

One on one instruction in music composition, with an emphasis on music in the notated tradition. Priority given to CCS Music Composition Majors. All others require the permission of the instructor to enroll **prior to registration.**

Students should come by Old Little Theater 154B to sign up for a lesion time prior to the first day of classes.

Information: leslie.hogan@ccs.ucsb.edu

Instructor: Leslie Hogan
Time: To Be Arranged
Place: Bldg. 494, Rm. 154B
Fall 2013 Course Offerings

MUSIC COMPOSITION CS 101, 2       EC# 36145

Individual Instruction in Composition

Individual instruction in music composition. Weekly schedule to be arranged with the instructor.

Permission of Instructor Required to Enroll. haladyna@music.ucsb.edu

Instructor: Jeremy Haladyna
Time: To Be Arranged
Place: Music Bldg., Rm. 0313
Most students of composition are familiar with the uses of variation on a micro level, that is, at the level of the phrase. This course will concern itself with variation techniques at the macro level: variation as a structural principal. As models, we'll turn not only to music in the standard repertory, but to 20th century works such as George Rochberg’s Caprice Variations, Charles Ives's Variations on America, and Aaron Copland’s Piano Variations. Students will write all music for the same 3 to 5 member ensemble, to be determined at the beginning of the quarter, with the goal of having a completed set of variations for chamber at the end of the quarter.

Instructor: Leslie Hogan
Time: Tuesday and Thursday, 12:30 pm - 1:50 pm
Place: Bldg. 494, Rm. 154
MUSIC COMPOSITION CS 103, 2    EC# 36236

Contemporary Keyboard Writing with Practical Exercises (includes pipe organ module)

This offering, popular in four previous runs with CCS composers, returns—again with a module on contemporary writing for the pipe organ, which holds often overlooked possibilities for today's composer. Previous classes have produced many short keyboard essays that have appeared both in concert and in the recording studio at Kerr Hall.

Keyboard writing is an area that plagues and discourages young composers who are not first pianists. As in orchestration, there are tricks and secrets to writing effectively for the keyboard, and it has never been--nor will it ever be--necessary for all composers to possess virtuoso skills. The practical exercises will not be in direct imitation of composers or styles. They will aim at one practical result: the effective realization of keyboard textures. Material will be recast into one or another texture, so that we will be orchestrating with keys.

Keyboard jazz idiom is not the focus of the course (it deserves a major study of its own). Rather, we'll be tackling the concert masterpieces of composers such as Ives, Dallapiccola, Boulez, Crumb, Messiaen, Cage, Ohana, Rochberg, Reich, Hindemith and Rzewski. We'll touch on the familiar, such as the finale of Prokofiev's 7th Sonata...and the offbeat, such as the bizarre, head-scratching complications of Sorabji's "Opus Clavicembalisticum."

The instructor is a keyboard composer and a concert musician with decades of experience on piano and organ, and commercial CD performances released on the CRI, Neuma, innova and Albany labels.

Open to anyone currently studying musical composition at UCSB.

ASSURANCE of 4.0 units credit is based on accrual of earned points. An award of 4.0 units will entail completion of all 6 assignments to an average or higher-than-average level.

Instructor: Jeremy Haladyna
Time: Monday, Wednesday, and Friday, 1:00 pm - 1:50 pm
Place: Bldg. 494, Rm. 154
PHYSICS

PHYSICS LABORATORY PROJECTS

Laboratory projects to be arranged between the student and physics faculty. A *Proposal for Laboratory Project* form must be completed, signed by the instructor, and turned in to the CCS Office before an enrollment code may be issued and you may register for the class. **A completed, signed proposal must be turned in by the end of the second week of the quarter.** Necessary forms are available in the CCS Office.

For this quarter, the following Creative Studies faculty MAY be available for Independent Laboratory Projects: *John Martinis*. If you have an opportunity to do research with a UCSB faculty person who is not in Creative Studies, please check with your CCS Physics advisor before getting appropriate forms from the CCS office. You may then set up the course through Creative Studies (as above), or you may wish to inquire about doing the project as a “199” Independent Studies course through the instructor’s department in the College of Letters and Science, in which case you may earn a letter grade for your work.

PHYSICS READING PROJECTS

Reading projects to be arranged between the student and Physics faculty. A *Proposal for Reading Project* form must be completed, signed by the instructor, and turned in to the CCS Office before an enrollment code may be issued and you may register for the class. **A completed, signed proposal must be turned in by the end of the second week of the quarter.** Necessary forms are available in the CCS Office.

For this quarter, the following Creative Studies faculty MAY be available for Independent Reading Projects: *Sathya Guruswamy* or *Tengiz Bibilashvili*. If you have an opportunity to do research with a UCSB faculty person who is not in Creative Studies, please check with your CCS Physics advisor before getting appropriate forms from the CCS office. You may then set up the course through Creative Studies (as above), or you may wish to inquire about doing the project as a “199” Independent Studies course through the instructor’s department in the College of Letters and Science, in which case you may earn a letter grade for your work.
Fall 2013 Course Offerings

PHYSICS CS 15A, 1              EC# 39537

Experimental Physics

Sign up for one lab section or the other (Wednesday OR Friday - NOT BOTH!)
Course Web Page: http://www.physics.ucsb.edu/~phys13/
This is the first quarter of a year long class designed to help you learn to do experimental physics
research. In the first quarter, you will investigate three systems experimentally. It will be up to you to
decide what to measure, how to measure it, and what the data mean. Each of you will work alone on
your own experiments, and write a short paper about each one.

The quarter will be divided into three equal periods, and you will sign up for which experiment you want
to do during each period. The experiments will be:
1. Attenuation of a laser beam by copper sulfate solutions.
2. The period of a pendulum.
3. Flow through small diameter tubes.
You will have access to the classroom at all times for self-directed work on the experiments. Each week
you will meet with the instructor to go over your progress and get some guidance.

The second and third quarters will cover computer control of experimental apparatus and mechanical
design and fabrication. The preparation provided by this class has helped many students get summer
positions in research labs on campus and elsewhere.

A lab fee will be assessed to your BARC account.

Required Texts:

Taylor, J.  An Introduction to Error Analysis University Science Books
ISBN 13: 9780935702750

Optional Texts:

Williams, R.  The Non-Designer's Design Book Peachpit Press
ISBN 13: 9780321534040

Instructor:  John Martinis
Time:  Wednesday, 2:00 pm - 2:50 pm (Lecture)
       Wednesday, 3:00 pm - 5:50 pm (Lab)
Place:  Broida Hall, Rm. 6334
Experimental Physics

Sign up for one lab section or the other (Wednesday OR Friday - NOT BOTH!)

Course Web Page: http://www.physics.ucsb.edu/~phys13/
This is the first quarter of a year long class designed to help you learn to do experimental physics research. In the first quarter, you will investigate three systems experimentally. It will be up to you to decide what to measure, how to measure it, and what the data mean. Each of you will work alone on your own experiments, and write a short paper about each one.

The quarter will be divided into three equal periods, and you will sign up for which experiment you want to do during each period. The experiments will be:
1. Attenuation of a laser beam by copper sulfate solutions.
2. The period of a pendulum.
3. Flow through small diameter tubes.
You will have access to the classroom at all times for self-directed work on the experiments. Each week you will meet with the instructor to go over your progress and get some guidance.

The second and third quarters will cover computer control of experimental apparatus and mechanical design and fabrication. The preparation provided by this class has helped many students get summer positions in research labs on campus and elsewhere.

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Taylor, J.  An Introduction to Error Analysis  University Science Books
ISBN 13: 9780935702750

Optional Texts:

Williams, R.  The Non-Designer's Design Book  Peachpit Press
ISBN 13: 9780321534040

Instructor: John Martinis
Time: Wednesday, 2:00 pm - 2:50 pm (Lecture)
      Friday, 3:00 pm - 5:50 pm (Lab)
Place: Broida Hall, Rm. 6334
PHYSICS CS 31, 1    EC# 39594

Newtonian Mechanics

This course is required for CCS Physics freshmen.


Note: All enrolled students must attend both the lecture and weekly assigned problem session.

Required Texts:

Kleppner and Kolenkow  
An Introduction to Mechanics  
McGraw Hill

ISBN 13: 9780521198219

Resnick, Halliday, and Krane  
Physics, Volume 1 (5th edition)  
Wiley

ISBN 13: 9780471320579

Feynman, Leighton and Sands  
The Feynman Lectures on Physics, Vol. I  
Basic Books

ISBN 13: 9780465024933

Instructor:  
Tengiz Bibiliashvili (Lecture)  
TBA (Problem Sessions)

Time:  
Tuesday and Thursday, 3:30 pm - 4:50 pm (Lecture)  
Wednesday, 1:00 pm - 2:50 pm (Problem Session I)  
Wednesday, 3:00 pm - 4:50 pm (Problem Session II)

Place:  
Bldg. 387, Rm. 103 (Lecture)  
Bldg. 387, Rm. 104 (Problem Sessions)
PHYSICS CS 34, 1        EC# 39602

Electromagnetism


Prerequisite: Physics CS 33 or equivalent, vector calculus and consent of instructor.

Note: All enrolled students must attend both the lecture and weekly assigned problem session.

Required Texts:

Resnick, Halliday, & Krane        Physics, vol. 2        Wiley
ISBN 13: 9780471401940

Purcell        Electricity and Magnetism        McGraw-Hill
ISBN 13: 9781107013605

Feynman        The Feynman Lectures in Physics Volume II        Basic Books
ISBN 13: 9780465024940

Instructor:        Sathya Guruswamy (Lecture)
TBA (Problem Session)

Time:        Tuesday and Thursday, 3:30 pm - 4:50 pm (Lecture)
Thursday, 1:00 pm - 2:50 pm (Problem Session I)
Thursday, 10:00 am - 11:50 am (Problem Session II)

Place:        Bldg. 387, Rm. 104 (Lecture)
Bldg. 387, Rm. 103 (Problem Sessions)
Winter 2014 Course Offerings

College of Creative Studies
Winter 2014
Course Offerings

ART
Perspective Workshop

The CCS Perspective Colloquium will offer students a chance to meet once a week on Thursday from 2 to 4pm and discuss linear perspective. I will lead the colloquium such that the focus will be academic formulas used to make linear perspective and practice drawing linear perspective. Drawing linear perspective takes practice as an activity, the same way as putting in golf would, because of the factor of physical control. The perspective colloquium is a great opportunity for art majors to hone their skills, and great for all majors to learn an important drawing technique.

Instructor: Student Leader: Evan Lange
Faculty Advisor: Hank Pitcher
Time: Thursday, 2:00 pm - 3:50 pm
Place: Bldg. 494, Rm. 120
This class is about developing a personal response to the tradition of painting the nude. We will discuss historical and contemporary artists that the class is interested in and look for techniques, principals and archetypes that are relevant to the individuals and the class as a whole. We paint for at least 3 hours each class from the model, who will hold one pose. We have easels. Paint and canvas/panel is up to the student. There are no restrictions regarding size or medium. We work the first day.

Methods and materials will be discussed in relations to individual practice.

You will work outside of class on the paintings that you start in class.

You are expected to own a copy of *The Nude*, by Sir Kenneth Clark, and read it regularly. Additionally, you are expected to study historical and contemporary artists that can inform your studio practice. Bring reproductions of paintings you are studying to class each meeting for discussion.

Appearance and the picture plane are similar, they are both 2 dimensional - this is the basic meanings for the creative process. - Hans Hoffman

*The space between the extreme poles inside and outside the foot called the ankle or ankle bone a b is equal to the space between the mouth and the inner corner of the eye.* - Taken from *The Notebooks of Leonardo da Vinci* edited by Jean Paul Richter, 1880.

**Required Texts:**

Clark, Sir Kenneth  
*The Nude*

**Instructor:** Hank Pitcher  
**Time:** Thursday, 9:00 am - 12:50 pm  
**Place:** Bldg. 494, Rm. 120
Life Drawing

A professional style drawing class and a formal critique. First we draw from the model for 3 hours and then we critique for 1 hour. Serious students at all levels are welcome. CCS art majors are encouraged to repeat this class every quarter.

In addition to their own studio practice, many professional artists draw from life regularly throughout their careers. These artists often gather once a week to share a model and work together. (this is not exclusive to figurative artists; this includes abstract painters, poets, musicians, and other artists who value the discipline and discovery particular to this activity.)

There is no group assignment. The goal is to develop individual practice. Each artist works on her own problems with the understanding that there is value to seeing the process and progress of others. This class adds a formal critique at the end to aid students in understanding and articulating the principles and practice of drawing the bude.

The model will keep the same pose for each 3-hour session. Please note that students wishing to do “gesture” drawings may move around the room to have different poses to draw. Each week each student is required to bring in a sketch or reproduction of a pose they would like to draw.

Materials: There is no restriction on size or medium except that the work be monochromatic. (Red chalk on white paper is monochromatic, red chalk on green paper is polychromatic.) There are drawing boards in the classroom and basic white drawing paper is provided if requested. Students are encouraged to experiment with different materials to suit their practice.

Two units for attending all 10 classes and completing 10 drawings.

Additional units may be awarded for work done outside of class. This includes drawing and research. Additional units will be determined by the UC standard of one unit representing 3 hours of work per week, or 30 hours of work per quarter.

All Students should spend at least two hours per week reading about and studying the history and tradition of figure drawing in relation to their own interests and goals. I recommend that every student own a copy of The Nude, by Sir Kenneth Clark. New and used copies and easy to get online. We will discuss your research during critique.

Instructor: Hank Pitcher
Time: Tuesday, 9:00 am - 12:50 pm
Place: Bldg. 494, Rm. 120
Painting

This class is open to CCS Art majors at any level and to others by consent of the instructor. Through a combination of prescribed assignments and open-ended understanding of the language(s) of painting and help them make the paintings they want to make.

Instructor: Dan Connally
Time: Tuesdays, 1:00 pm - 3:50 pm
Place: Bldg. 494, Rm. 120
ART CS 105, 1 EC# 00836

Introduction to Letterpress Printing

In a world in which we are inundated with countless words, letterpress printing reminds us again of a certain level of commitment for the words we choose to frame and fix within the space of the page. This course will introduce the student to letterpress printing focusing on the methods and technology for setting metal type and printing using the letterpress. There will also be an emphasis on analyzing the design of print works to better understand how compositional elements, such as, text, image, color, scale, texture, blank space and more, interact visually within the space of the page.

Enrollment is limited to 10 students.
Beginnings students must be able to attend both class and lab.
CONTACT INSTRUCTOR FOR ADD CODE: ekstrom@arts.ucsb.edu

Required Course Reader at Alternative Copy on campus.

Instructor: Linda Ekstrom
Time: Wednesday, 1:00 pm - 4:50 pm (class)
      Thursday, 6:00 pm - 7:50 pm (lab)
Place: Bldg. 494, Rm. 107 (Print Shop)
Winter 2014 Course Offerings

ART CS 112, 1     EC# 00968

Exploring Truth, Fiction, & Autobiography - Art & Life Intertwined

Exploring the blurring boundaries in our own lives between truth and fiction, real and imagined, and art and life. Students will conceive and implement several autobiographical writings, performances, works, interactions, tasks, or activities. Experimentation with media, location and concept is encouraged.

Instructor: Kip Fulbeck
Time: Monday, 1:00 pm - 3:50 pm
Place: Bldg. 494, Rm. 136
Humor and Subversion in the Visual Arts

This class will explore the use of humor in contemporary art. We will look at the legacy of the trickster, jester, and fool in the light of its kinship with the artist. Why do we laugh? How does an image or object become comic? And what is humor's relationship to power and subversion in recent practice? Course work will include individual and collaborative projects in a range of media and writings by George Bataille, Bruce Nauman, Rosalind Krauss, Lewis Hyde, and David Foster Wallace.

Instructor: Stephanie Washburn
Time: Thursday, 1:00 pm - 4:50 pm
Place: Bldg. 494, Rm. 136
Collective Efforts

This interdisciplinary course focuses on the collaborative process in various spatial art forms. Group Dynamics that will be explored include: Partnerships (two participants), Groups (three or more participants), Teams, and Digital groups (social media, crowd sourcing, etc.)

Course goals are to emphasize leadership, resourcefulness, encouraging students to source and share skills and ideas, and to cultivating an active creative community.

Instructor: Ryan Bulis
Time: Friday, 12:00 pm - 3:50 pm
Place: Bldg. 494, Rm. 136
BIOLOGY

BIOLOGY READING PROJECTS

Reading projects to be arranged between the student and biology faculty. A Proposal for Reading Project form must be completed, signed by the instructor, and turned in to the CCS Office before an enrollment code may be issued and you may register for the class. A completed, signed proposal must be turned in by the end of the second week of the quarter. Necessary forms are available in the CCS Office.

For this quarter, the following Creative Studies faculty MAY be available for Independent Reading Projects: Kathy Foltz, Armand Kuris, John Latto, Bruce Tiffney, Claudia Tyler or Robert Warner. If you have an opportunity to do research with a UCSB faculty person who is not in Creative Studies, please check with your CCS Biology advisor before getting appropriate forms from the CCS office. You may then set up the course through Creative Studies (as above), or you may wish to inquire about doing the project as a “199” Independent Studies course through the instructor’s department in the College of Letters and Science, in which case you may earn a letter grade for your work.

BIOLOGY LABORATORY PROJECTS

Laboratory projects to be arranged between the student and biology faculty. A Proposal for Laboratory Project form must be completed, signed by the instructor, and turned in to the CCS Office before an enrollment code may be issued and you may register for the class. A completed, signed proposal must be turned in by the end of the second week of the quarter. Necessary forms are available in the CCS Office.

For this quarter, the following Creative Studies faculty may be available for Independent Laboratory Projects: Kathy Foltz, Armand Kuris, John Latto, Bruce Tiffney, Claudia Tyler or Robert Warner. If you have an opportunity to do research with a UCSB faculty person who is not in Creative Studies, please check with your CCS Biology advisor before getting appropriate forms from the CCS office. You may then set up the course through Creative Studies (as above), or you may wish to inquire about doing the project as a “199” Independent Studies course through the instructor’s department in the College of Letters and Science, in which case you may earn a letter grade for your work.
Applied Rationality

We’ve all had times when we wanted to accomplish something, but had to work against your own brain to carry out the task. This class will teach modern findings in psychology and neuroscience to help you better understand how your brain works, so you can work with (or against!) it to better further your goals. We can work to help you with physical skills like exercise, musicianship, and job applications, or more abstract skills like reading faces more accurately, becoming more empathetic, or training yourself to enjoy an activity you currently dislike. Gain tools to become better at being you - however you define that.

Required Text:
Kahneman, D.  
Thinking, Fast and Slow

Instructor: Student Leader: Adam Rubin  
Faculty Advisor: Tony de Tomaso

Time: Tuesday, 2:00 pm - 3:50 pm
Place: Bldg. 494, Rm. 148
Introductory Biology: Evolution and Diversity

THIS COURSE IS DESIGNED AND REQUIRED FOR NEW CREATIVE STUDIES BIOLOGY MAJORS (incoming students to UCSB)

Lecture, field, and laboratory activities explore the evolutionary origin and diversification of life in a phylogenetic context, from Bacteria and Archaea to Plants, Fungi, and Animals.

This class is open to and required for first year CCS Biology students who have completed MCDB 1A.

Required Texts:
Sadava, Heller, Orions, Purves, and Hills *Life, the Science of Biology* Sinauer

Instructor: John Latto and Claudia Tyler
Time: Tuesday and Thursday, 11:00 am - 12:20pm
Place: Bldg. SSMS, Rm. 143
In 1976, a young zoology lecturer at Oxford University published his first book. Powerfully encapsulating a gene's-eye view of life, The Selfish Gene rapidly became deeply influential both within biology and associated disciplines, and in wider intellectual debate. Thirty years and over a million copies later, The Selfish Gene has come to be seen as one of the defining books of the twentieth century.

Melvin Bragg in 2006

In this graduate style seminar class we will read and discuss Richard Dawkins book The Selfish Gene. As well as discussing the concepts in the book, we will look at what had happened in the various areas of science in the 35 years since the book was written.

This class is not restricted to Biology majors but you will need some background in biology, and an interest in the topics, to get the most out of it.

If you have any questions about this class please contact me: latto@lifesci.ucsb.edu

Required Texts:

Dawkins, R.  
The Selfish Gene: 30th anniversary ed.  
Oxford University Press  
ISBN: 978-0199291151

Instructor: John Latto  
Time: Tuesday, 2:00 pm - 3:20 pm  
Place: Bldg. 494, Rm. 160B
Conducting Studies in Ecology: Marine and Coastal Habitats

Ecologists investigate the workings of the natural world, and most would agree that what makes ecology most exciting is direct involvement with the organisms and their habitat, by making first-hand observations. In this course students will learn how to design and carry-out studies in field ecology.

In this session we will focus on marine and coastal habitats as we learn how to identify patterns in nature, how to ask questions and develop hypotheses, how to collect and analyze data, and how to use library resources to support our investigations. At the end of the quarter students will design a group or independent project to address a question of their choosing, collect their own data, and present findings. The course consists of one 3-hour lab/field trip per week, plus a one-hour discussion. Normative number of units for this course is four.

Instructor: Claudia Tyler
Time: Tuesday, 1:00pm - 1:50pm  
Thursday, 1:00pm - 3:50pm
Place: Bldg. 494, Rm. 145
CHEMISTRY/BIOCHEMISTRY READING PROJECTS

Reading projects to be arranged between the student and chemistry/biochemistry faculty. A Proposal for Reading Project form must be completed, signed by the instructor, and turned in to the CCS Office before an enrollment code may be issued and you may register for the class. A completed, signed proposal must be turned in by the end of the second week of the quarter. Necessary forms are available in the CCS Office.

For this quarter, the following Creative Studies faculty MAY be available for Independent Reading Projects: Donald Aue or Leroy Laverman. If you have an opportunity to do research with a UCSB faculty person who is not in Creative Studies, please check with your CCS Chemistry/Biochemistry advisor before getting appropriate forms from the CCS office. You may then set up the course through Creative Studies (as above), or you may wish to inquire about doing the project as a “199” Independent Studies course through the instructor’s department in the College of Letters and Science, in which case you may earn a letter grade for your work.

CHEMISTRY/BIOCHEMISTRY LABORATORY PROJECTS

Laboratory projects to be arranged between the student and chemistry faculty. A Proposal for Laboratory Project form must be completed, signed by the instructor, and turned in to the CCS Office before an enrollment code may be issued and you may register for the class. A completed, signed proposal must be turned in by the end of the second week of the quarter. Necessary forms are available in the CCS Office.

For this quarter, the following Creative Studies faculty may be available for Independent Laboratory Projects: Donald Aue or Leroy Laverman. If you have an opportunity to do research with a UCSB faculty person who is not in Creative Studies, please check with your CCS Chemistry/Biochemistry advisor before getting appropriate forms from the CCS office. You may then set up the course through Creative Studies (as above), or you may wish to inquire about doing the project as a “199” Independent Studies course through the instructor’s department in the College of Letters and Science, in which case you may earn a letter grade for your work.
Winter 2014 Course Offerings

CHEMISTRY CS 10, 1    EC# 07260

Mathematics of Chemistry

This course is geared to give students a better grasp of fundamentals of linear algebra and calculus that the current curriculum provides. Students will be introduced to the concepts of linear vectors spaces, inner products, eigenstates, representation theory, Dirac notation, and the theory on linear operators, while having calculus reconstructed through a linear algebra formalism. Examples will be geared toward deepening their understanding of quantum mechanics, chemical kinetics, thermodynamics, and computational chemistry. The overall goal is to improve the fluency of students in mathematics, so they can discuss quantitative chemistry in the language best suited to it.

Instructor: Student Leader: Nathaniel Charest
Faculty Advisor: Leroy Laverman
Time: Tuesday and Thursday, 12:00 pm - 12:50 pm
Place: Bldg. 494, Rm. 148
Problem Solving in General Chemistry

This course is an adjunct to Chemistry 2B (honors general chemistry). Problem solving skills will be developed and supplemental lectures will reinforce key concepts. When appropriate, experiments in the upper division undergraduate laboratory will be performed to examine chemical concepts in a laboratory setting. All CCS students enrolled in Chemistry 2B are encouraged to enroll in this course.

Instructor: Leroy Laverman
Time: Tuesday and Thursday, 11:00 am - 11:50 am
Place: Bldg. 494, Rm. 148
Computer Programming and Organization

Topics in programming and the organization of computers, including algorithms, data and control structures, program design, searching and sorting, recursion, systems programming, register transfer language, and logic design.

This course is the second half of a two quarter sequence (CS1A/CS1B) designed to prepare students to take upper division courses in Computer Science, and participate in undergraduate research projects in Computer Science under the direction of CCS and College of Engineering Computer Science faculty.

In both quarters, the course is paired with CS1L, "Programming Lab", where students undertake individual and group programming projects to build and reinforce their skills and knowledge.

CS1B focuses on modern computer architectures from ground up. The goal is to develop a complete understanding of how hardware and software comes together, and how programming languages evolve as layered abstractions starting from logic gates. We cover the full spectrum of languages from instruction set architectures, to assembly, structured high-level, to object-oriented and scripting languages. We continue with language translation and foundational operating systems, and networking particularly as it relates to modern computer and communication architectures.

Although class space may be acquired via GOLD, final enrollment will be determined by the instructor.

Instructor: Murat Karaorman
Time: Monday and Wednesday, 6:00 pm - 7:20 pm
Place: Bldg. 494, Rm. 143
Programming Lab

This course is required for all freshmen (first-year) and lower division CCS Computer Science majors.

A hands-on project and assignment-based course that will be primarily taught in the CSIL Laboratory of the Computer Science Department. The principle emphasis of the course will be to gain strong practical and technical skills in C, C++, and Java programming, UNIX: shell, tools, utilities and programming environments. Further emphasis will be on algorithms, user interfaces, and software engineering principles.

The course is open to all CCS students who need additional training and practical insight that is needed to take upper division Computer Science Courses.

This is a variable unit credit course, 2-4 units. Units awarded will be based upon attendance, general homework assignments, and individual projects. Instruction will be 25% classroom, and 75% hands-on work in the CSIL Laboratory (approximately 3 lab hours per week).

Instructor: Murat Karaorman
Time: Monday and Wednesday, 7:20 pm - 8:50 pm
Place: Bldg. 494, Rm. 143
Research Seminar in Computer Science

The goal of this course is to prepare undergraduate students to engage in research in Computer Science.

Target audience(s):

* Students that want to get involved in research as an undergrad with a CS faculty member
* Students considering going on to grad school in CS CCS students preparing for their mid-residency review

Students will have the opportunity to both get a sense of the breadth of Computer Science research through attending Faculty Research Presentations, and participating in discussions about faculty research.

Students will attend a series of presentations by UCSB CS faculty members, each of which will present an overview of their research. Faculty members will be presenting these talks as a way of recruiting students into their own research labs. Students enrolled in the course will be expected to attend these talks, listen to the speakers, and be prepared to ask the presenter(s) at least one question after the talk about their research area, or about the process of doing research in Computer Science.

These presentations will occur Fridays from 1-2pm.

There will also be a 30 minute discussion (2-2:30pm) immediately following each of the faculty talks with the students from this course, and the instructor.

Students may earn 1 unit of lower division credit by participating in this part of the course provided they have arrive on time for the talks, have a reasonable attendance record and participate in the discussions.

Background needed to take this course:

Open to CMPCS, CMPSC, PRCMP, and PRCPs majors, and others by permission of the instructor.

This course is open, with permission of the instructor, to all UCSB students regardless of major or college, that have sufficient Computer Science preparation to be able to meaningfully participate in the course, and have a serious intention and capacity to do research in Computer Science. See "prerequisites" below for more information.

Questions?

Contact Phill Conrad at pconrad@cs.ucsb.edu

Special Instructions and/or Prerequisites:
Winter 2014 Course Offerings
Open to CMPCS, CMPSC, CMPEN majors, and others by permission of the instructor. (Computer Science Creative Studies, Computer Science Engineering, and Computer Engineering).

Ideally, students enrolling in this course will have completed one of the following:

- the first quarter of the College of Creative Studies CS program: CCS CS1A, 2 OR
- the following courses from the lower division of the College of Engineering: CS16, CS24, CS40

This course will be a stretch for all of us. We will be listening to talks about cutting-edge research that are aimed to a grad-student level audience. It will be over our heads a good bit of the time, and we will have to work very hard just to begin to understand what we are hearing.

If that sounds exciting, then this course may be right for you. If you are willing to work hard, and swim in the deep water, where you will often not be able to touch bottom, you are welcome. If not, then you should probably not enroll.

Instructor: Phill Conrad
Time: Friday, 1:00 pm - 2:20 pm
Place: Bldg. HFH, Rm. 1132
Research Methods in Computer Science

The goal of this course is to prepare undergraduate students to engage in research in Computer Science.

Target audience(s):

* Students that want to get involved in research as an undergrad with a CS faculty member
* Students considering going on to grad school in CS
* CCS students preparing for their mid-residency review

Students will have the opportunity to both get a sense of the breadth of Computer Science research, as well as exploring a single topic of their choice in some depth.

More specific goals include:

* being able to explain what makes some work publishable research, while other work is not
* being able to state research questions
* being able to explain the various ways in which CS research is published and disseminated (e.g. conferences and journals),
* developing and demonstrating the ability to perform a literature search
* developing and demonstrating a familiarity with various areas of research in CS, particularly those represented by CS faculty at UCSB

Course Activities:

(1) Faculty Research Presentations

A central component of the course will be attending a series of presentations by UCSB CS faculty members, each of which will present an overview of their research. Faculty members will be presenting these talks as a way of recruiting students into their own research labs. Students enrolled in the course will be expected to attend these talks, listen to the speakers, and be prepared to ask the presenter(s) at least one question after the talk about their research area, or about the process of doing research in Computer Science.

These presentations will occur Fridays from 1-2pm.

There will also be a 30 minute discussion (2-2:30pm) immediately following each of the faculty talks with the students from this course, and the instructor.

Students that are planning to only participate in this part of the course, and not the items below, should enroll in CMPSCCS 10 instead of CMPSCCS 140.

(2) Lecture/Discussion on Research Methods
Winter 2014 Course Offerings
In addition to the faculty lectures and the follow up discussion (1.5 hours per week), there is an additional 75 minute lecture/discussion each week.

These lecture/discussions will cover:
- how CS research is typically conducted
- typical roles of faculty, graduate students, undergrad researchers
- major areas of computer science (particularly those represented at UCSB)
- how to find a research topic
- how to find a faculty advisor
- how to do a literature survey (annotated bibliography)
- how to distinguish between projects that are, and are not publishable
- how to prepare a technical paper that can be submitted for publication
- how to give a talk in Computer Science

There may also be some discussion of CS content, as needed—e.g. if a large proportion of the students in the class need a tutorial on some topic (e.g. Networks, AI, Compilers) in order to understand some of the papers or talks, we may take some class time for this as well.

These lecture/discussions support the assignment component of the course, described below.

Participating in this discussion along with the Friday discussion is sufficient to earn 2 units in the course.

(3) Assignments

Student may earn additional units for the course (beyond the 2 units earned by participating in items 1 and 2 above), by completing one or more of the following assignments.

(a) a literature survey/annotated bibliography on some topic of interest
(b) giving an oral presentation on one (or more) papers of interest to the student
(c) preparing a proposal for a particular research project, both in written and oral form, with a problem statement, proposed work, and survey of related work.

Normal workload: Students can expect to earn 4 units total if they:
- complete at least one literature survey ("a" above)
- make at least two oral presentations ("b" above) in an successful manner
- attend and participate in the lectures/discussions

Students completing more than this may be eligible for up to 6 units; students who only partially complete the above list may earn between 1-3 units.

These assignments may be "staged"—that is, smaller components of each of these may have earlier due dates than the overall finished product. Students will be expected to respect these due dates. In each of the cases above, the topic must be approved by the instructor in advance.

Background needed to take this course
Winter 2014 Course Offerings
Open to CMPCS, CMPSC, CMPEN majors, and others by permission of the instructor. (Computer Science Creative Studies, Computer Science Engineering, and Computer Engineering).

Ideally, students enrolling in this course will have completed one of the following:

- the first quarter of the College of Creative Studies CS program: CCS CS1A, 2 OR
- the following courses from the lower division of the College of Engineering: CS16,CS24,CS40

Completion of CS 130A and CS138 are also very helpful—students with this background will potentially get more out of the course. However, if you don't have that background, don't let that stop you if you are very interested—the course can be repeated for additional units.

Students that have not completed at least CCS CS 1A/1L/2, CS16/24/40 with strong comprehension of the material—or have equivalent background—should probably not enroll.

This course will be a stretch for all of us. We will be listening to talks and reading papers about cutting-edge research. It will be over our heads a good bit of the time, and we will have to work very hard just to begin to understand what we are reading.

If that sounds exciting, then this course may be right for you. If you are willing to work hard, and swim in the deep water, where you will often not be able to touch bottom, you are welcome. If not, then you should probably not enroll.

Questions?

Contact Phill Conrad at pconrad@cs.ucsb.edu

Instructor: Phill Conrad
Time: Monday, 3:00 pm - 4:20 pm (Lecture)
     Friday, 1:00 pm - 2:20 pm (Faculty Presentations)
Place: Bldg. 494, Rm. 143 (Lecture)
       Bldg. HFH, Rm. 1132 (Faculty Presentations)
Winter 2014 Course Offerings

INTERDISCIPLINARY STUDIES
Symmetry and Aesthetics in Contemporary Physics

Symmetry and the search for broken symmetries guide our understanding of the Laws of Physics; symmetry and asymmetry are also at the heart of our aesthetic experiences in the arts, and are significant in biology and neuroscience. In this interdisciplinary seminar we will question why mathematics is (or should be) a language of nature, investigate the ways in which space-time and matter interact, visualize physics concepts through the arts, and explore the nature of our own thinking. We will analyze works by theoretical physicists, study artists who have attempted to express Einstein's theories on canvas, and interrogate the ways in which 21st century physics is pushing the limits of human imagination. We will meet artists and scientists who are blending art, math, music, and computer science in their research.

Required Texts:

Zee, A.  
_Fearful Symmetry: The Search for Beauty in Modern Physics_  
Princeton  
ISBN: 978-0691134826  
2007 ed., with forward by Sir Roger Penrose  
University Press

Instructor: Jatila van der Veen
Time: Friday, 1:00 pm - 3:50 pm
Place: Bldg. 494, Rm. 160B
Intermediate Poetry Workshop

The class work of this course largely consists of the discussion and critique of the poems submitted by you, the students. The course is conducted then, in the traditional Writing Workshop method, that is, your poems with copies for the entire class and myself, will be turned in on assigned class dates and then discussed and critiqued the following class or classes. Critique, discussion, suggestions, even praise, are all aimed at revision, at helping the poet improve the poem and move on to the next draft of the poem. Re-writing finally makes the writing.

I will take your writing seriously and I expect you to do the same. Good will should accompany specific written and oral criticism aimed toward revision. You will need to spend a good deal of time writing and revising as well as a good deal of time reading and critiquing work of fellow students/writers.

The course's aim is to have you improve as poets, readers, and critics of creative work. While all of us have varying talents and gifts, any student who works seriously should be able to show improvement in his/her writing and critical skills.

This workshop best serves poets familiar with the workshop format and who have a specific critical vocabulary which they use in offering suggestions to fellow workshop participants for the next draft of poems under consideration. It is also assumed that the student writer is an active reader of contemporary poetry--anthologies and individual volumes.

In 10 weeks, we can hope for a further improvement in language skills and strategy, in accurate working critical vocabulary, and in awareness of the basic elements of poetry and of the level and variety of contemporary poetry being written today. You are writing poetry for serious readers of poetry and for other poets who are looking for the best in the craft of language and imagination--clarity as well as invention. Our texts and examples will be a great help if you spend time with them. While one function of the workshop is to provide mutual writerly support for each other, another is to offer the most considered and exact critique possible to help the writer in the re-writing process. A good/accomplished poem is the result of many re-writes. We hope to help you improve your skills and craft as a poet and also obtain a clearer idea of what a finished and publishable poem might be.

Writing assignments that focus on the essential elements of poetry writing, basic strategies of composing, and aspects of Voice in contemporary poetry will be assigned. There will be no assignments in traditional prosody/inherited forms. The emphasis in this course of 10 weeks is for you to continue to find your own voice, your own authentic language, and to begin to gain a sense of clear, appropriate, and imaginative diction and imagery. I want you to continue to develop a sense of the line in poetry and a sense of natural music in your own poems. For the most part, the subjects of your poems will be of your own choosing.

Five poems minimum are required for the course. You may turn in a poem each week if you choose. You must revise at least three of these poems for your final folder. In your folder keep all copies of your writing upon which I have commented and clip revisions on top. (Note: a thoroughly revised poem may be re-submitted to the workshop as a "new" poem.)

Required Texts:

Levine, P. New Selected Poems, 8th or 9th ed. Knopf
Instructor: Christopher Buckley
Time: Monday, 4:00 pm - 6:50 pm
Place: Bldg. 494, Rm. 160B
Short Takes: Prose Poems, Memoir Briefs, Flash Fiction

A reading and writing course focused on three closely related sub-genres dependent on brevity, with emphasis on extensive consideration of professional examples, workshop attention to student efforts in the three forms, and consultation with the instructor. Each member of the group will offer several scheduled presentations of work to be gathered later into a final term-portfolio.

Required Texts:

Lehman, D. (ed.)  
*Great American Prose Poems : From Poe to the Present*  
Scribner  
ISBN-10: 0743243501  

Hazuka, T., et al (eds.)  
*Flash Fiction: 72 Very Short Stories*  
Norton  
ISBN-10: 0393308839  

Kitchen & Jones (eds.)  
*In Brief: Short Takes on the Personal*  
Norton  
ISBN-10: 0393319075  
ISBN: 9780393319071

Instructor: Barry Spacks  
Time: Monday and Wednesday, 9:00 am - 10:20 am  
Place: Bldg. 494, Rm. 160B
The Short Story: Cathedrals, Misfits, Bigfoot, and Forking Paths

This seminar will focus on the short story in all of its possible incarnations. Students will explore a broad canvas of styles, approaches, and subjects through extensive reading and their own writing.

Classes will include discussions on readings, exercises to spark writing, workshop of drafts, and group-led lecture. You are expected to attend every workshop to participate in all its activities, to do the required readings and individual and group assignments, and to write. By the end of the seminar, each student will produce numerous pieces of writing, including one “complete” story.

Readings will include a variety of stories, as well as essays on the genre. Sample authors include: Denis Johnson, Kim Addonizio, Sherman Alexie, Donald Barthelme, Ron Carlson, Michael Chabon, Gish Jen, Doris Lessing, Walter Mosely, Muriel Spark, Raymond Carver, Flannery O’Connor, Jorge Luis Borges, and many more.

Instructor: Robert Krut
Time: Tuesday and Thursday, 11:30 am - 12:50 pm
Place: Bldg. 494, Rm. 160B
Advanced Screenwriting (Screenwriting II)

Screenwriting is an ever-expanding medium, and yet, in an age of constant visual stimulation, it remains a relatively untapped tool for young writers. Combining both written and visual storytelling, the screenplay is a unique genre because unlike other writing styles it is comprehensive, intended for a specific audience and has its own language and format. Screenplay, which functions as storytelling at its most basic and stripped level, relies on character, conflict, setting and theme to convey larger truths of the human experience.

Screenwriting II will offer students opportunity to apply and practice both the creative and technical elements of screenwriting: theme, story, structure, character, conflict, dialogue and format. The course will focus on completion of an original script, utilizing in class writer’s workshop and independent study to draft and revise pages. Students are encouraged to begin the quarter with a developed idea, complete log line and character sketch, and at least 30 pages of text.

Instructor: Randall Shulman
Time: Tuesday and Thursday, 1:00 pm - 2:20 pm
Place: Bldg. 494, Rm. 143
LITERATURE CS 102, 5    EC# 29082

Writing For New Media

The history, theory, and practice of writing for new media, including blogs, vlogs, flash fiction, flash poetry, graphic novels, webisodes, poetry videos, music videos, video game scenarios, professional writer’s web design, viral ads, internet documentary, youtube videos (short films, comedy sketches, etc.), installation art/videos, environmental media, fan fiction, web comics, zines, etc. We will also look at the business of writing for new media, i.e. how one gets a job in these various genres/businesses – from journalism (Buzz Feed, Huffington Post, et al.) to Narrative Magazine to Poetry Foundation videos, to Electronic Arts (where we may visit during the quarter) etc. etc.

Students will complete a 25 - 30 page portfolio of new media scripts in any genre/genres and present an oral report of a new media genre of your choice. Also, students will post different new media interests on our Writing for New Media (facebook) web site.

Required Texts:

Riley, J.  How Strange it is to Be Anything At All  World Palace Press
ISBN: 0985026006

Instructor:  Paul Lobo Portuges
Time:  Tuesday and Thursday, 4:00 pm - 5:50 pm
Place:  Bldg. SSMS, Rm. 2303
This course will explore the many ways that poetry and music speak to each other, both in theory and practice. We will read theoretical works from the nineteenth and twentieth centuries about poetics and music aesthetics, and listen to songs, poems, and instrumental music, primarily from the Romantic period. Throughout the course, we will try to answer these questions: What can we say about the meaning of music? How do words and music go together? How can insights into music and poetry help us create our own poems, songs, and compositions? Reading and listening assignments will include poems by Goethe, Wordsworth, Hölderlin, Schiller, and Shelley; music by Mozart, Beethoven, and Schubert; and essays by Hoffman, Hegel, Adorno, and Hollander, among others. Assignments will include both academic and creative options, and aspiring poets, composers, critics, librettists, and musicologists are all welcome.

Required Texts:

Gilbert, M.  
*German Essays on Music: Theodor W. Adorno, Ernst Bloch, Thomas Mann, and others (German Library)*  
Continuum  
ISBN: 978-0826407214

Hollander, J.  
*Rhyme’s Reason: A Guide to English Verse*  
Yale Univers. Press  
ISBN: 978-0300088328

Hölderlin, F., tr. Hamburger, M.  
*Selected Poems and Fragments*  
Penguin  
ISBN: 978-0140424164

**Instructor:** Jim Donelan  
**Time:** Tuesday and Thursday, 9:30 am - 10:50 am  
**Place:** Bldg. 494, Rm. 143
Every quarter various poets, novelists, short story writers, journalists, playwrights, cartoonists, editors, publishers, filmmakers, and critics will present their work at the weekly CCS Literature Symposium. Students who attend all 10 meetings will receive 1 unit of college credit. If you miss the first day of symposium on Wednesday, April 1st, you must talk to Caroline Allen in order to remain enrolled for credit. The symposium is open to the community. Students who are not enrolled in the class are welcome to come to symposia that interest them.

**Important Etiquette:** Students should be in the Old Little Theatre no later than 4 o'clock. Students should sit in the first half of the seating area—no back row sleepers or doers of crossword puzzles! Do not leave before the end of the symposium. Our readers come here to give you the best of themselves. Please be courteous and attentive.

*If you need special assistance due to a disability, please call 893-2364.*

Instructor: Caroline Allen  
Time: Wednesday, 4:00 pm - 5:15 pm  
Place: The Old Little Theater
The Best of Both Worlds: Reading the Novella

No longer the oft ignored middle child of the literary world, the novella, long called neither this nor that, is now both this and that. It combines the compression and energetic burst of a short story with the robustness and generosity of the novel, allowing scenes to breathe and moments to linger without rambling or becoming bloated. Moving beyond the most obvious examples (*The Old Man and the Sea, Of Mice and Men, Metamorphosis, Siddhartha*—if you haven’t read these yet, please do yourself a favor), students in this course will read several novellas, both classics of the form and more modern examples, and write both analytically and creatively about the readings—perhaps writing their own novella, if inspired by the reading list. Please be prepared to read constantly; this will include examples from Leo Tolstoy, Philip Roth, Truman Capote, Herman Melville, Edith Wharton, Kate Chopin, Gabriel Garcia Marquez, Joyce Carol Oates, Annie Proulx, Sandra Cisneros, Thomas Mann, James Joyce, Justin Torres, Banana Yoshimoto, and several others.

**Required Texts:**

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<tr>
<th>Author</th>
<th>Title</th>
<th>Publisher</th>
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<tr>
<td>Tolstoy, L.</td>
<td><em>The Death of Ivan Ilyich</em></td>
<td>Vintage</td>
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<td>ISBN-10: 0307951332</td>
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<td>Roth, P.</td>
<td><em>Goodbye, Columbus</em></td>
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<td>Capote, T.</td>
<td><em>Breakfast at Tiffany’s</em></td>
<td>Vintage</td>
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<td>Melville, H.</td>
<td><em>Bartleby, the Scrivener</em></td>
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<td>Joyce, J.</td>
<td><em>The Dead</em></td>
<td>Coyote</td>
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<td>ISBN-10: 0979660793</td>
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<td>Mann, T.</td>
<td><em>Death in Venice</em></td>
<td>Ecco</td>
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<td>ISBN-10: 0060576057</td>
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<td>Marquez, G. G.</td>
<td><em>Chronicle of a Death Foretold</em></td>
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<td>ISBN-10: 140003471X</td>
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<td>James, H.</td>
<td><em>Daisy Miller</em></td>
<td>Barnes &amp; Noble Classics</td>
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Winter 2014 Course Offerings
ISBN-10: 1593081057

Duras, M.  
ISBN-10: 0375700528  
*The Lover*  
Pantheon

Cisneros, S.  
ISBN-10: 0679734775  
*The House on Mango Street*  
Vintage

Conrad, J.  
ISBN-10: 149235080X  
*Heart of Darkness*  
Tree of Wisdom

Greene, G.  
ISBN-10: 0671019090  
*The Tenth Man*  
Washington Square Press

Camus, A.  
ISBN-10: 0679720200  
*The Stranger*  
Vintage

Torres, J.  
ISBN-10: 0547844190  
*We the Animals*  
Mariner Books

Proulx, A.  
ISBN-10: 1857029402  
*Brokeback Mountain*  
Fourth Estate

Oates, J. C.  
ISBN-10: 0452269865  
*Black Water*  
Plume

Murdoch, I.  
ISBN-10: 0393050076  
*Something Special: A Story*  
W. W. Norton & Company

**Instructor:** Ellen O’Connell  
**Time:** Monday and Wednesday, 2:00 pm - 3:20 pm  
**Place:** Bldg. 494, Rm. 160B
Ben Jonson eulogized his contemporary, William Shakespeare, for being “not of an age, but for all time.” The cultural brand that is Shakespeare, both in terms of the study of his work and the reformulation of his plays in popular media, including film, music, and graphic novels, has adopted Jonson’s remark as its defining ethos. But in what sense is he for all time? What is Shakespeare for us? And what have his works been for centuries of readers, spectators, and directors? This course will partially examine the history of Shakespeare’s afterlives and will study some of his plays in relation to their reincarnation in Restoration revisions and twentieth-century film adaptations. We will not, however, study these works strictly in terms of their forward trajectory. Rather, we will also read them in relation to their source material, the narratives of which in some cases hardly differ from Shakespeare’s own versions. Studying Shakespeare in this context will allow us to address two further and interrelated questions: 1) what do we mean by authorship; and 2) what specifically does Shakespeare’s original genius consist of?

**Required Texts:**

Shakespeare, W. *The Merchant of Venice* Penguin Classics
The Pelican Shakespeare (2000)
ISBN: 978-0140714623

Shakespeare, W. *Othello* Penguin Classics
The Pelican Shakespeare (2001)
ISBN: 978-0140714630

Shakespeare, W. *King Lear* Penguin Classics
The Pelican Shakespeare (1999)
ISBN: 978-0140714660

Shakespeare, W. *Coriolanius* Penguin Classics
The Pelican Shakespeare (1999)
ISBN: 978-0140714739

Marlowe, C. *The Jew of Malta* Bloomsbury
3\(^{rd}\) New Edition (2009)
ISBN: 978-0713677669

**Instructor:** Pavneet Aulakh
**Time:** Monday and Wednesday, 11:30 am - 12:50 am
**Place:** Bldg. 494, Rm. 143
Alan Stephens published eleven books in his life-time, taught in the English department at UCSB and helped to found the College of Creative Studies. His collected works have become available in a long-awaited new edition edited by his son and published by Dowitcher press. Having received a Stegner fellowship in 1956 he studied with Yvor Winters disciple Alan Swallow, a strict metrical formalist. He broke away from the Winters influence early, with, as he call “Deep and enthusiastic readings” of William Carlos Williams’ free verse. His poems include a sonnet sequence (Running at Hendry’s), a narrative about the White River Massacre of 1879 (White River Poems), long and short meditations that look like descriptions of nature (Tree Meditations), as well as epigrams, satires on academia, and a great translation of Sophocles. The poems of D. H. Lawrence and William Carlos Williams were important to Stephens, so we'll read them partly in relation to his poetry and partly as an introduction to two great modernist poets.

PLEASE BRING THE COLLECTED POEMS OF ALAN STEPHENS TO CLASS ON THE FIRST DAY.

Required Texts:

Stephens, A.  
*The Collected Poems of Alan Stephens*

Stephens, A.  
*The Selected Poems of Alan Stephens*

Stephens, A.  
*Running at Hendry’s*

All books by Alan Stephens are available online at the Alan Stephens page. They may be ordered there through Dowitcher Press. Or they can be downloaded for free in PDF. I suggest that you order them in paperback before the beginning of the quarter.

Lawrence, D.H.  
*The Selected Poems of D. H. Lawrence*  

ISBN-10: 0140585400  

ed. Tomlinson, C.  
*Selected Poems: William Carlos Williams*  
New Directions  
(1985)

ISBN-10:081120958X  

Instructor:  
Caroline Allen

Time:  
Monday and Wednesday, 1:00 pm - 2:20 pm

Place:  
Bldg. 494, Rm. 143
Winter 2014 Course Offerings

LITERATURE CS 113, 1       EC# 29314

Reading Like a Writer

After mastering the techniques of the writing craft for themselves, most accomplished writers have realized they now read new works of other writers with a new focus, both critical and appreciative of technique and thematic scope. They are often motivated as well to return to formative works from significant writers of the past.

This course will challenge the emerging writer student to engage in a close reading of five significant works selected to demonstrate how close reading is a trampoline to creative energy and the understanding of the dynamics of fiction and nonfiction in ways that will lead them to publication and scholarship.

This course offers the students a ten-week guided tour via lecture, discussion, and written assignments of the dramatic and thematic potentials resident in contemporary narrative.

Required Texts (please get the trade paper edition of all of the following):

Austen, J.  
*Persuasion*  
Penguin

Barnes, J.  
*Flaubert’s Parrot*  
Knopf/Random House

Donoghue, E.  
*Room*  
Little, Brown

Francis, Scott (ed)  
*Novel and Short Story Writers’ Markets 2014*  
Writers’ Digest Books

James, H.  
*The Portrait of a Lady*  
Penguin

Llosa, M. V.  
*Aunt Julia and the Script Writer*  
Farrar, Straus, and Giroux

Smiley, Jane  
*Thirteen Ways of Looking at a Novel*  
Knopf/Random House

Instructor:    Shelley Lowenkopf
Time:  Tuesday and Thursday, 6:00 pm - 7:20 pm
Place:  Bldg. 494, Rm. 160B
American Humor: Cultural Transgression and Transformation from Faulkner to Dave Chappelle

In this course, we'll explore aspects of American humor as a tool for social change. Humos is a difficult subject to quantify because of its subjective nature; what's funny to me might be insulting to you; the very essence of transgressive and transformative humor is to unsettle the status quo. Essentially it is subversive. I've chosen broadly, from texts that use humor, black or otherwise, to disguise a more direct protest. We'll observe how humor advances political positions. Is it always a tool of the disenfranchised or the marginalized? Is political humor the opposite of propaganda? Is there status quo political humor?

Required Texts:

Faulkner, W.: The Collected Faulkner

Ellison, R.: Invisible Man

Allen, W.: Without Feathers

Allen, W.: Getting Even

Stahl, J.: I, Fatty

Phillips & Tervalon: Cocaine Chronicles

Instructor: Jervey Tervalon
Time: Thursday, 4:00 pm - 6:50 pm
Place: Bldg. 494, Rm. 143
The Curious Art of Science

Though C. P. Snow’s contention that the arts and sciences represent two distinct and opposed cultures with competing world-views has lost some of its currency, we often still continue to think of the sciences and arts in binary terms. Whereas the former embody a world of solid facts, the latter is governed by the creative imagination. This course, however, will test this presumption by studying the works of early proponents of experimental science, including those of Francis Bacon, Galileo, and Newton, alongside the poetry, drama, and novels of their seventeenth and eighteenth-century peers. Supplementing our readings with recent scholarship that studies science from a sociological perspective, we will consider the curiosity that drives the pursuit of scientific knowledge and the poesis, or making, that underwrites it. Moreover, in reading Christopher Marlowe, John Donne, Ben Jonson, John Milton, and Jonathan Swift together with some of the writers that helped bring modern science into being, we will not only examine the complex ways in which more conventionally “literary” artists responded to the ambitions of the “new science,” but also how the latter helped to redeem curiosity as an intellectual virtue common to both artists and scientists.

Required Texts:

Galilei, G.  
_Sidereus Nuncius, or The Sidereal Messenger._
University of Chicago Press  
ISBN: 978-0226279039

Marlowe, C.  
_Doctor Faustus: With the English Faust Book_
2005 Ed.  
Hackett Pub Co  
ISBN: 978-0872207295

Jonson, B.  
_The Alchemist and Other Plays: Volpone, or The Fox; Epicene, of The Silent Woman; The Alchemist; Bartholomew Fair (Oxford’s World Classics)_  
2009 (Reissue Edition)  
Oxford University Press, USA  
ISBN: 978--199537310

Instructor: Pavneet Aulakh  
Time: Monday and Wednesday, 10:00 am - 11:20 am  
Place: Bldg. 494, Rm. 143
Zen and American Poetry

How should one live? How does one really taste the fullness of being? How does one deepen one’s joys and respond more gracefully (and perhaps humorfully) to the various blows of fate? What does it mean to “live in the moment”? How is meditation similar to the attention required of the poet? These are some of the questions (big questions, no doubt!) we will humbly explore in this class Zen and American poetry.

We will start by reading two classes introductions to Zen; then we will explore various American poets who embody Zen in their lives and work.

Please be prepared to read deeply, participate in classroom discussions, write two substantial essays, write some poetry, and try a little meditation.

Required Texts:

Suzuki, S.  
*Zen Mind, Beginner’s Mind*  
Shambhala  
ISBN: 978-1590308493

Watts, A.  
*The Way of Zen*  
Vintage  
ISBN: 978-0375705106

Aitken, R.  
*The Dragon Who Never Sleeps*  
Parallax  
ISBN: 978-0938077602

Gilbert, J.  
*The Great Fires*  
Knopf  
ISBN: 978-0679747673

Oliver, M.  
*New and Selected Poetry, Vol. 2*  
Beacon Press  
ISBN: 978-0807068878

Instructor: Teddy Macker  
Time: Tuesday and Thursday, 2:30 pm - 3:50 pm  
Place: Bldg. 494, Rm. 143
MATHEMATICS
This is the second part of a sequence of two courses about mathematical problem solving for freshmen. These courses are aimed for students who know some mathematics, who enjoy mathematics, and would like to spend some time solving intriguing, mysterious, interesting, fun, ... problems.

In this course we will focus first on different problem-solving techniques such as: how to prove theorems by contradiction and using symmetries, extreme principle, invariants, coloring, parity,... to solve problems from different areas of mathematics. In the second part of this course, we will focus on problems related with particular branches of mathematics such as Graph Theory, Abstract Algebra, Analysis, Geometry, Game Theory, Number Theory, etc.

Instructor: Maria Isabel Bueno Cachadina
Time: Tuesday and Thursday, 3:30 pm - 4:50 pm
Place: Bldg. 494, Rm. 164B
Advanced Linear Algebra II

This course is required for all CCS Mathematics students.

This is the second part of an upper-division sequence on Linear Algebra. In this course, we will cover the following topics: Determinants; eigenvalues, eigenvectors and diagonalization; Jordan canonical form and minimal polynomial; and inner product spaces.

The language and concepts of matrix theory and, more generally, of linear algebra have come into widespread usage in the social and natural sciences, computer science, and statistics. In addition, linear algebra continues to be of great importance in modern treatments of geometry and analysis. If time permits, we will illustrate the power of the subject through a variety of applications.

Required Texts:
Friedberg, Insel, and Spence

*Linear Algebra, 4th ed.*

Prentice Hall
ISBN: 0-13-008451-4

Instructor: Maria Isabel Bueno Cachadina
Time: Monday, Wednesday, and Friday, 11:00 am - 12:20 pm
Place: Bldg. 494, Rm. 164B
Selected Topics in Discrete Mathematics

This course will explore a number of topics in discrete mathematics; specific concepts will include design theory, error-correcting codes, geometry, finite fields, and many others.

**Instructor:** Padraic Bartlett  
**Time:** Monday, Wednesday, and Friday, 10:30 am - 11:50 pm  
**Place:** Bldg. 494, Rm. 160B
Introduction to Real Analysis

This course constitutes a rigorous introduction to the elements of analysis. It will cover sequences, accumulation points, Bolzano-Weierstrass etc., and then move to limits of functions, continuity, differentiability, and compact sets (Heine-Borel etc.).

Required Texts:

Gaughan, E. D.  
*Introduction to Analysis, 5th ed.*  
American Math. Soc.  
ISBN: 978-0-8218-4787-9

Instructor: Birge Huisgen-Zimmerman  
Time: Monday, Wednesday, and Friday, 12:30 pm - 1:50 pm  
Place: Bldg. 494, Rm. 164B
Complex Analysis

This is the first of a two-quarter introductory course on complex analysis. Complex analysis is an old and beautiful subject, and is also extremely useful. We will explore its analytic and geometric sides, balancing theory and computation.

Topics will include complex numbers, differentiability of functions of one complex variable, the Cauchy-Riemann equations, Cauchy’s Theorem, the Cauchy Integral consequences, etc.

**Required Texts:**

Marsden, J. & Hoffman, M. *Basic Complex Analysis, 3*th ed. Freeman
ISBN-10: 071672877X

**Instructor:** Thomas Sideris
**Time:** Tuesday and Thursday, 2:00 pm - 3:20 pm
**Place:** Bldg. 494, Rm. 164B
MUSIC COMPOSITION
MUSIC COMPOSITION CS 101, 1       EC# 37457

Individual Instruction in Composition

One on one instruction in music composition, with an emphasis on music in the notated tradition. Priority given to CCS Music Composition Majors. All others require the permission of the instructor to enroll **prior to registration.**

Students should come by Old Little Theater 154B to sign up for a lesson time prior to the first day of classes.

Information: leslie.hogan@ccs.ucsb.edu

Instructor: Leslie Hogan
Time: To Be Arranged
Place: Bldg. 494, Rm. 154B
Individual Instruction in Composition

Individual instruction in music composition. Weekly schedule to be arranged with the instructor.

Permission of Instructor Required to Enroll. haladyna@music.ucsb.edu

Instructor: Jeremy Haladyna
Time: To Be Arranged
Place: Music Bldg., Rm. 0313
Readings in New Music 2014: Ten Star-Studded Studio Sessions

THIS COURSE IS A ***REQUIRED*** COURSE FOR CCS MUSIC COMPOSITION MAJORS, WHO MUST ENROLL IN AT LEAST ONE UNIT'S CREDIT. AVAILABLE TO OTHER UNDERGRADUATES STUDYING COMPOSITION ON A SPACE-AVAILABLE BASIS.

In the first analysis, the course concerns itself with READING. That is, it provides an opportunity to try out your music with real musicians and conductor in a studio setting. Just occasionally, when things work well, the result can be an adequate recorded performance, invaluable for graduate school applications, competitions, and for personal archiving. Creative Studies funding is annually set aside to rent the studio and so that we may hire the best musicians in the orbit of the university for these readings. This year we continue in the UCSB Sound Recording facility, second floor, Kerr Hall, thanks to the good offices of the staff of Instructional Development.

*Participants should bring take-away media with them to each class session: flash drive, USB port drive, or CD-R/RW.*

Recording services will only be contracted for those CCS and L&S undergraduate music majors who *officially enroll* and who *attend class regularly.* CCS Music Majors are REQUIRED to enroll in the class for at least one unit, and may only be excused with the permission of the faculty advisor.

Sessions are scheduled from 1pm to 4:00 PM beginning Tuesday, January 7th and ending Tuesday, March 18th. Each session must be completed in the time allotted, with no run-over.

Come prepared to the first class on 7 January with the following:

*solo piano pieces. We'll record as many as we can. If possible drop off your piano pieces to Jeremy or Leslie in advance of the first class meeting. SESSION ONE is partly a WORKING session!*  
*list of pieces you would like to have recorded, arranged in priority order. Include full instrumentation and an accurate duration. It is highly recommended that you place finished works at the top and that works-in-progress should be a lesser priority. We already need percussion lists, if applicable!  
*performance materials if available. The sooner we have them, the better your recording will be. We need one copy of your score and all the parts. Have another copy of the score and parts available at the session in case of emergency.*

Instructors: Jeremy Haladyna, Leslie Hogan  
Instruc. Dev.: Mark Ramos  
Time: Tuesdays, 1:00 pm - 3:50 pm  
Place: Bldg. Kerr Hall Sound Recording Studio, Rm. 2110
Music and Food

A seminar exploring the relationship between music and food, whether literal or metaphorical. Topics of exploration will be collectively determined in the context of the class, but will certainly include such as these:

- Is there a music that is "as American as apple pie?" What makes it so?
- Is there a music equivalent to the *amuse bouche*?
- How is a concert program like a menu? Or is it more like a *prix fixe* meal?

Other activities in the course will include learning to write program notes, whether of one work or a note that connects works thematically. Students will each complete a final project and do a presentation on it. Topics and formats of the project will be determined in consultation with the instructor.

Instructor: Leslie Hogan
Time: Monday and Wednesday, 1:00 pm - 2:20 pm
Place: Bldg. 494, Rm. 154
Vernacular Harmony

The course Vernacular Harmony provides a critical and cumulative assessment of the harmonic conventions cultivated by twentieth century composers of American vernacular music. By vernacular, I refer principally to folk, blues, jazz and jazz derived styles, and their precursors. Such styles include ragtime, blues, and music of most American musicals, country music, gospel music, post-1950 popular commercial styles, reggae, and the twentieth century jazz styles. While these styles differ in major ways it is the assertion of the instructor that they are all governed by a common harmonic language.

Specifically, the aims of the course are: 1) to introduce a theoretical system that explicates American vernacular harmonic practices from the late nineteenth century until now in a logical yet practical and intelligible manner; 2) to show the theoretical (creative) possibilities suggested by these practices that may not heretofore have been extensively explored; 3) to illustrate, via musical examples and subsequent analysis, that vernacular harmonic conventions can and should be taught as one harmonic theory; and 4) to present, when possible and appropriate, vernacular harmony in a manner that illuminates its derivative and analogical relationships to traditional European harmonic practices, and concurrently, to explicate the differences that exist between the two traditions.

Required Texts:

Stewart, E. Vernacular Harmony University Readers

Instructor: Earl Stewart
Time: Tuesday and Thursday, 11:00 am - 12:20 pm
Place: Bldg. 494, Rm. 154
PHYSICS

PHYSICS LABORATORY PROJECTS

Laboratory projects to be arranged between the student and physics faculty. A Proposal for Laboratory Project form must be completed, signed by the instructor, and turned in to the CCS Office before an enrollment code may be issued and you may register for the class. A completed, signed proposal must be turned in by the end of the second week of the quarter. Necessary forms are available in the CCS Office.

For this quarter, the following Creative Studies faculty MAY be available for Independent Laboratory Projects: John Martinis. If you have an opportunity to do research with a UCSB faculty person who is not in Creative Studies, please check with your CCS Physics advisor before getting appropriate forms from the CCS office. You may then set up the course through Creative Studies (as above), or you may wish to inquire about doing the project as a “199” Independent Studies course through the instructor’s department in the College of Letters and Science, in which case you may earn a letter grade for your work.

PHYSICS READING PROJECTS

Reading projects to be arranged between the student and Physics faculty. A Proposal for Reading Project form must be completed, signed by the instructor, and turned in to the CCS Office before an enrollment code may be issued and you may register for the class. A completed, signed proposal must be turned in by the end of the second week of the quarter. Necessary forms are available in the CCS Office.

For this quarter, the following Creative Studies faculty MAY be available for Independent Reading Projects: Sathya Guruswamy or Tengiz Bibilashvili. If you have an opportunity to do research with a UCSB faculty person who is not in Creative Studies, please check with your CCS Physics advisor before getting appropriate forms from the CCS office. You may then set up the course through Creative Studies (as above), or you may wish to inquire about doing the project as a “199” Independent Studies course through the instructor’s department in the College of Letters and Science, in which case you may earn a letter grade for your work.
Experimental Physics

This is the second quarter of a year-long class designed to help you learn to do experimental physics research. The second quarter will focus on how personal computers with multi-function data acquisition boards are used to control experiments and take data. The boards will be controlled using National Instruments LabVIEW software. After some initial exercises, you will write your own LabVIEW programs, which will use a data acquisition card to produce signals and to read time-dependent analog signals and convert them to digital format. You will then write a feedback control program that measures the temperature of a copper rod and changes the voltage applied to a heater so as to keep the temperature constant. Prior programming experience is not required. Please note, however, that the real purpose of the course is not to teach you LabVIEW! Instead, you will be expected to learn it by yourself, with an occasional bit of help. This is much closer to what will happen when you are working in a lab. Everyone in the lab who knows what they are doing will be too busy to teach you! As a second component to the course, we will take the time to explore a number of the research labs here on campus that might be of interest to you. Nothing beats working in a lab for letting you find out what doing physics is like (little resemblance to classes!), what going to graduate school would be like, and what use all this book learning really is (a lot actually). So, each of you will visit a couple of labs during the quarter and report back to the class on what you discovered.

A lab fee will be assessed to your BARC account.

Required Texts:

Essick, J.  
*Hands-On Introduction to LabVIEW for Scientists and Engineers*  
Oxford University Press

Moore, J.  
*Building Scientific Apparatus*  
Peachpit Press

Instructor: John Martinis

Time:  
Wednesday, 2:00 pm - 2:50 pm (Lecture)  
Wednesday, 3:00 pm - 5:50 pm (Lab)

Place: Broida Hall, Rm. 3332
Experimental Physics

This is the second quarter of a year-long class designed to help you learn to do experimental physics research. The second quarter will focus on how personal computers with multi-function data acquisition boards are used to control experiments and take data. The boards will be controlled using National Instruments LabVIEW software. After some initial exercises, you will write your own LabVIEW programs, which will use a data acquisition card to produce signals and to read time-dependent analog signals and convert them to digital format. You will then write a feedback control program that measures the temperature of a copper rod and changes the voltage applied to a heater so as to keep the temperature constant. Prior programming experience is not required. Please note, however, that the real purpose of the course is not to teach you LabVIEW! Instead, you will be expected to learn it by yourself, with an occasional bit of help. This is much closer to what will happen when you are working in a lab. Everyone in the lab who knows what they are doing will be too busy to teach you! As a second component to the course, we will take the time to explore a number of the research labs here on campus that might be of interest to you. Nothing beats working in a lab for letting you find out what doing physics is like (little resemblance to classes!), what going to graduate school would be like, and what use all this book learning really is (a lot actually). So, each of you will visit a couple of labs during the quarter and report back to the class on what you discovered.

A lab fee will be assessed to your BARC account.

Required Texts:

Essick, J.  
*Hands-On Introduction to LabVIEW for Scientists and Engineers*  
Oxford University Press

Moore, J.  
*Building Scientific Apparatus*  
Peachpit Press

Instructor:  
John Martinis

Time:  
Wednesday, 2:00 pm - 2:50 pm (Lecture)  
Friday, 3:00 pm - 5:50 pm (Lab)

Place:  
Broida Hall, Rm. 3332
PHYSICS CS 32, 1  EC# 41079

Mechanics and Waves


Must be a CCS Physics Major to register or otherwise must have instructor approval.

Required Texts:


Instructor: Tengiz Bibilashvili
Time: Tuesday and Thursday, 3:30 pm - 4:50 pm (Lecture)
       Wednesday, 1:00 pm - 2:50 pm (Problem Sessions)
       Wednesday, 3:00 pm - 4:50 pm (Problem Sessions)
Place: Bldg. 387, Rm. 103
Electromagnetism and Optics


Required Texts:

- Purcell, *Electricity and Magnetism*, Cambridge

Instructor: Sathya Guruswamy

Time: Tuesday and Thursday, 3:30 pm - 4:50 pm (Lecture)
      Thursday, 10:00 am - 11:50 am (Problem Sessions)
      Thursday, 1:00 pm - 2:50 pm (Problem Sessions)

Place: Bldg. PHELP, Rm. 1440 (Lecture)
       Bldg. HSSB, Rm. 1236 (Problem Sessions)
       Bldg. HSSB, Rm. 1228 (Problem Sessions)
Vector Analysis with Applications to Physics

Partial Differentiation. Power Series for functions of more than one variable. Surface and Volume integrals. Vector Fields - gradient, divergence, curl. Gauss’ theorem. Stoke’s theorem. Applications to Physics

Required Texts:

Optional Texts:

Instructor: Tengiz Bibilashvili
Time: Friday, 2:00 pm - 3:50 pm
Place: Bldg. 387, Rm. 103
Quantum mechanics will be developed using the path integral approach first introduced by R. P. Feynman in the course of his graduate studies at Princeton. He based his path integral concept from pioneering work by P.A.M. Dirac. The problem becomes one of applying a “least action” principle to quantum mechanics in such a way that classical mechanics can arise naturally as a special case of quantum mechanics when Planck’s constant is allowed to go to zero.

Topics will include (depending on time available):

- The action principles in classical mechanics.
- Application of the action principles.
- The double slit experiment revisited.
- The quantum mechanical amplitude. The classical limit.
- The path integral.
- Examples for calculating path integrals.
- Direct evaluation of path integrals.
- Derivation of the Schrödinger equation from the path integral for a particle in a potential.
- The path integral for quadratic lagrangians.
- Linear oscillator with time-dependent frequency.
- The Feynman propagator. Expansion in energy eigenfunctions.
- Simple applications of propagator functions.
- The trace of the time-development operator. The Feynman-Kac Formula.
- The path integral derived from the Schrödinger equation.
- The perturbation expansion. Path integral description. Introduction to Feynman diagrams
- The WKB Approximation to path integrals.

Instructor: Fransesc Roig
Time: Tuesday and Thursday, 9:30 am - 10:50 am
Place: Bldg. 494, Rm. 164B
Spring 2014 Course Offering

**ART**

Students enrolling in a CCS Art course on the list below will be charged a course materials fee after the add deadline. If a student drops the course after the add deadline they will still be charged the course materials fee.

Art CS 101
Art CS 102
Art CS 104
Art CS 105
Art CS 120
Art CS 125
Independent Research and Practice

Students will develop independent art projects with a research component. Each student will define their project, create a time line for production and meet weekly with the members of the course to allow for critique and influence as individual projects progress. Students will be expected to incorporate their research in the discussion of their work, and to provide reading material that the instructor will compile into a course reader. Emphasis will be placed on art production that addresses one or more of the following: the art multiple; work created in a limited edition; the development of a series of works; work that explores issues of replication in various ways, and more. This emphasis will serve as a cohesive factor between the individual explorations.

Students may work in any medium, however they must have experience with the materials and processes they plan to use. The goal of this course is to advance your work.

A fieldtrip to Los Angeles area galleries/museums will be included.

NOTE: For an approval code, students must contact instructor by email with a description of the project they plan to pursue. ekstrom@arts.ucsb.edu

FIRST CLASS MEETING:
Come with a clearly defined plan for your project to discuss with the group. Please bring either an artwork to give the group an idea of the way you work, or something visual that relates to the project you plan to develop.

Instructor: Linda Ekstrom
Time: Wednesday, 5:00pm - 7:50pm
Place: Bldg. 494, Rm. 136
Comics! Narrative in Art

From Batman to Naruto, from Calvin & Hobbes to Homestuck. An exploration of narrative as exemplified by comics. This colloquium will consider such topics as conveyance, cross-media influence, and sequence in popular culture. Students will learn how to read, discuss, and create comics and narratives. Colloquium will consist of lecture, discussion, and workshop, with a large degree of self-directed content.

Required Texts:

McCloud, S.  

Understanding Comics  
William Morrow Paperbacks

ISBN-10: 006097625X  

Instructor:  

Student Leader: Kevin Shintani
Faculty Adviser: Linda Ekstrom

Time:  

Wednesday and Friday, 5:00pm - 5:50pm

Place:  

Bldg. 494, Rm. 143
Life Drawing

A professional drawing class and a formal critique. First we draw from the model for 3 hours and then we critique for 1 hour. Serious students at all levels are welcome. CCS art majors are encouraged to repeat this class every quarter.

Most professional artists draw from life regularly throughout their careers. In addition to working on their own, artists often gather once a week to share a model and work together. (This is not limited to figurative, or even realist artists; this includes abstract painters, poets, singers, and other artists who value the discipline and discovery particular to this activity). There is no group assignment. The goal is to explore and “push” individual practice. Each artist is working on her own problems with the understanding that there is value to seeing the process and progress of others. This class adds a formal critique at the end to aid students in understanding and articulating the principles and practice of drawing the nude.

The Pose: The model will keep the same pose for each 3-hour session. Please note that students wishing to do “gesture” drawings may move around the room to have different poses to draw.

Materials: There is no restriction on size or medium except that the work be monochromatic. (Red chalk on white paper is monochromatic, red chalk on green paper is polychromatic) There are drawing boards in the classroom. Please do not remove or destroy them. The student purchases all other materials.

The campus bookstore has a good selection of materials for this class. Art Essentials in downtown Santa Barbara is the most complete art supply store in the area. Daniel Smith and Utrecht are good online places to get supplies.

Units: Two units for attending all 10 classes and completing 10 drawings. Additional units may be awarded for work done outside of class. This includes drawing and research. Additional units will be determined by the UC standard of one unit representing 3 hours of work per week, or 30 hours of work per quarter.

Research: All students should spend at least two hours per week reading about and studying the history and tradition of figure drawing in relation to their own interests and goals. I recommend that every student own a copy of The Nude by Kenneth Clark. New and used copies are easy to get on line. We will discuss your research during critique.

Required Texts:

Clark, K.  

The Nude

Instructor:  Hank Pitcher
Time:  Tuesday, 9:00am - 12:50pm
Place:  Bldg. 494, Rm. 120
Landscape Painting

This class is for all levels of students interested in painting the landscape. This includes nature and other things found outside (Isla Vista, monuments, etc.) The class will emphasize painting on location and we will paint together outside at least 5 times, but individual ideas and approaches will be encouraged.

Oil paint is standard, but other mediums are welcome as appropriate to the ideas and goals of the individual student. Students without previous experience painting outside can be very successful in this class, but they have to prepare themselves. This class is intended for art majors but interested students from other disciplines may enroll if they have some drawing and painting experience and are serious about the subject and the class.

If you do not have previous plein air experience, I recommend going to You Tube and searching “plein air painting, how to”. You will discover many videos, of varying quality. They are mostly amateur, and of questionable artistic merit, but they are valuable in that they show how different equipment and materials work. I also recommend reading the “how to” sections in books on landscape painting and researching on line. A very basic starting point would be a site like http://painting.about.com/od/landscapes/a/plein_air_paint.htm. Based on your research, purchase materials and work with them before class. I do not believe that there is one way to go about this.

My goal is to help you develop and expand your own ideas about landscape painting. There will be no “assignments.” There will be suggestions, recommendations, and feedback on the work you do. To know what you want to do, it is important that you research landscape painters, just as it is important that you research materials and methods.

REQUESTED PREREQUISITES:
If you are not a CCS student, please become familiar with the philosophy of the program and the pass-no record grading system before you decide to take this class. This information is available on the CCS website. Enrollment in all CCS classes is by consent of the instructor. If you are considering this class because you need units to graduate or you are looking for an “easy” class then this is not the class for you.

Instructor: Hank Pitcher
Time: Wednesday, 3:00pm - 5:50pm
Place: Bldg. 494, Rm. 120
Reading Painting

In this class we’ll read an eclectic assortment of texts - essays, artists’ statements and interviews - with an eye toward understanding the ways in which artists represent themselves and their work. We’ll also consider the critical writings of several artists. There will be weekly writing assignments. Enrollment is limited to Art majors but exceptions may be made for Literature students.

REQUESTED PREREQUISITES:
Must be Art majors with sophomore standing or above. Exceptions may be made for Literature students. Enrollment by consent of the instructor.

Instructor: Dan Connally
Time: Tuesday, 4:30pm - 5:50pm
Place: Bldg. 494, Rm. 164B
Play Thing

Plaything is an interdisciplinary course that focuses on sculpture as a support to other artistic mediums. Students will learn a variety of fabrication and new media techniques including sewing, model making, studio lighting, digital editing, set design, and general wood and metal fabrication. The aim of this class is for students to create sculptural forms that are deliberately crafted for performance, video, and photography.

Instructor: Ryan Bulis  
Time: Monday and Wednesday, 10:00am - 11:50am  
Place: Bldg. 494, Rm. 128 (Sculpture Yard)
Mobile Works

This course is for art students committed to a high production level in three-dimensions. Our instruction will begin with the parameters of site-specific proposals in general and on campus, introduction to technical drawing and proposal production, followed by actual implementation of chosen plans. Open to all media, but focusing on spatial/sculptural awareness, this course is designed to foster proactive involvement in finding an audience for artwork. Mobile Works is for students who exhibit initiative, thoroughness, reliability, and initiative.

Contact Jane Mulfinger with questions: mulfinger@arts.ucsb.edu

REQUESTED PREREQUISITES:
Some experience in 3D work.

Instructor: Jane Mulfinger
Time: Monday and Wednesday, 12:00pm - 1:50pm
Place: Bldg. ARTS, Rm. 0641
There is No Spoon: Metamodern Performance and Installation Art

This intensive workshop style course examines installation art, performance and the human subject as an artistic medium, and the incorporation of performative elements within installations and environments. Students will be challenged to create work that contributes to contemporary conversations and directly addresses recent developments in the field. The course will culminate in an exhibition of performance and installation that will be open to the UCSB community and potentially beyond.

Instructor: Elizabeth Folk
Time: Monday, 6:00pm - 9:50pm
Place: Bldg. 494, Rm. 136
BIOLOGY READING PROJECTS

Reading projects to be arranged between the student and biology faculty. A Proposal for Reading Project form must be completed, signed by the instructor, and turned in to the CCS Office before an enrollment code may be issued and you may register for the class. A completed, signed proposal must be turned in by the end of the second week of the quarter. Necessary forms are available in the CCS Office.

For this quarter, the following Creative Studies faculty MAY be available for Independent Reading Projects: Kathy Foltz, Armand Kuris, John Latto, Bruce Tiffney, Claudia Tyler or Robert Warner. If you have an opportunity to do research with a UCSB faculty person who is not in Creative Studies, please check with your CCS Biology advisor before getting appropriate forms from the CCS office. You may then set up the course through Creative Studies (as above), or you may wish to inquire about doing the project as a “199” Independent Studies course through the instructor’s department in the College of Letters and Science, in which case you may earn a letter grade for your work.

BIOLOGY LABORATORY PROJECTS

Laboratory projects to be arranged between the student and biology faculty. A Proposal for Laboratory Project form must be completed, signed by the instructor, and turned in to the CCS Office before an enrollment code may be issued and you may register for the class. A completed, signed proposal must be turned in by the end of the second week of the quarter. Necessary forms are available in the CCS Office.

For this quarter, the following Creative Studies faculty may be available for Independent Laboratory Projects: Kathy Foltz, Armand Kuris, John Latto, Bruce Tiffney, Claudia Tyler or Robert Warner. If you have an opportunity to do research with a UCSB faculty person who is not in Creative Studies, please check with your CCS Biology advisor before getting appropriate forms from the CCS office. You may then set up the course through Creative Studies (as above), or you may wish to inquire about doing the project as a “199” Independent Studies course through the instructor’s department in the College of Letters and Science, in which case you may earn a letter grade for your work.
Perceptions of Public Health: The Importance of Communicating Science

Communicating science well is vital when it concerns the formation of policy. This is particularly important in the field of Public Health, where scientific findings are necessarily closely related to creating policy. The field of Public Health is particularly remarkable as one which is especially prone to misinterpretation (both willful and accidental) and sensationalism, often at the expense of important policy.

In this course we will discuss three popular science works on the subject of public health, beginning with The Panic Virus, by Seth Mnookin, which addresses the impact of communication of scientific findings to the public, and the ways in which it can be misinterpreted and sensationalized. We will then turn our attention to two works concerning emerging diseases: The Hot Zone, by Richard Preston, and Spillover, by David Quammen. We will read and discuss these books with a focus on the clarity and accuracy of their portrayals of public health challenges, and the impacts of these portrayals.

No specific background is required for this course; non-Biology majors are welcome. This course may be taken for a maximum of two units.

Required Texts:

Quammen, D. 
ISBN: 978-0-393-06680-7

Mnookin, S. 
ISBN: 978-1-4391-5864-7

Preston, R. 

Instructor: Student Leader: Theora Tiffney
Faculty Adviser: Kathy Foltz
Time: Monday, 3:00pm - 4:20pm
Place: Bldg. 494, Rm. 160B
Walking Biology

“The pleasures, the values of contact with the natural world, are not reserved for the scientists. They are available to anyone who will place himself under the influence of a lonely mountain top - or the sea - or the stillness of a forest; or who will stop to think about so small a thing as the mystery of a growing seed.”
- Rachel Carson, Lost Woods (1954)

This field course is designed to introduce non-biologists (and biology freshmen) to the “wild” natural habitats around us. We will visit a diverse range of habitats in Santa Barbara, including oak woodlands, chaparral, coastal dune, salt marsh, sandy beach, rocky intertidal, and stream. In each of these natural communities we will observe patterns, learn about its natural history and discuss ecological and evolutionary questions. Advanced biology students interested in general field experience are also welcome. There will be several reading and writing assignments. Normative number of units for this course is 3.

Required Texts:
Lentz, J. E. A Naturalist’s Guide to the Santa Barbara Region. Heyday Books
ISBN: 978-1-59714-241-0

Optional Texts:
Schoenherr, A. A Natural History of California UC Press
ISBN 978-0520069220

Bakker, E. An Island Called California: An Ecological Introduction to Its Natural Communities, 2nd ed UC Press
ISBN 978-0520049482

Instructor: Claudia Tyler
Time: Thursday, 1:00pm - 3:50pm
Place: Bldg. 494, Rm. 136
Introductory Biology - Ecology and Physiology

This course introduces students to the fundamental concepts of ecology and physiology, integrating the two and combining them with evolutionary principles introduced in CCS Biol CS 20 to better understand the distribution and abundance of organisms. Students will be exposed to primary research literature and classic experiments.

REQUESTED PREREQUISITES
This class is open to and required for CCS Biology students who have completed MCDB 1A, and either BIOL CS 20 or EEMB 3.

Required Texts:
Sadava, Hillis, Heller, & Berenbaum  
*Life, the science of biology (10th edition)*  
Sinauer

Instructor:  
John Latto & Claudia Tyler
Time:  
Tuesday and Thursday, 11:00am - 12:20pm
Place:  
Bldg. 494, Rm. 143
Research Presentation

Science is not complete until it has been communicated. Whilst the traditional method of communication is the scientific paper, science is also communicated visually by the poster and orally in seminars and talks. Particularly for young scientists your first experiences of research presentation are more likely to be posters and papers. This class introduces students to some of the principles behind poster design, public speaking for a scientific audience and designing slides that accompany your talk. If you have your own research to present then this class can help you prepare a poster (eg for the Undergraduate Research Colloquium) or a talk (for a meeting).

Although this is listed as a Biology class all scientists are welcome since the principles apply across the science disciplines.

Instructor: John Latto
Time: Thursday, 2:30pm - 3:50pm
Place: Bldg. 494, Rm. 143
CHEMISTRY

CHEMISTRY/BIOCHEMISTRY READING PROJECTS

Reading projects to be arranged between the student and chemistry/biochemistry faculty. A Proposal for Reading Project form must be completed, signed by the instructor, and turned in to the CCS Office before an enrollment code may be issued and you may register for the class. A completed, signed proposal must be turned in by the end of the second week of the quarter. Necessary forms are available in the CCS Office.

For this quarter, the following Creative Studies faculty MAY be available for Independent Reading Projects: Donald Aue or Leroy Laverman. If you have an opportunity to do research with a UCSB faculty person who is not in Creative Studies, please check with your CCS Chemistry/Biochemistry advisor before getting appropriate forms from the CCS office. You may then set up the course through Creative Studies (as above), or you may wish to inquire about doing the project as a “199” Independent Studies course through the instructor's department in the College of Letters and Science, in which case you may earn a letter grade for your work.

CHEMISTRY/BIOCHEMISTRY LABORATORY PROJECTS

Laboratory projects to be arranged between the student and chemistry faculty. A Proposal for Laboratory Project form must be completed, signed by the instructor, and turned in to the CCS Office before an enrollment code may be issued and you may register for the class. A completed, signed proposal must be turned in by the end of the second week of the quarter. Necessary forms are available in the CCS Office.

For this quarter, the following Creative Studies faculty may be available for Independent Laboratory Projects: Donald Aue or Leroy Laverman. If you have an opportunity to do research with a UCSB faculty person who is not in Creative Studies, please check with your CCS Chemistry/Biochemistry advisor before getting appropriate forms from the CCS office. You may then set up the course through Creative Studies (as above), or you may wish to inquire about doing the project as a “199” Independent Studies course through the instructor's department in the College of Letters and Science, in which case you may earn a letter grade for your work.
Chemical Applications of Group Theory

This course will explore the use of group theory and symmetry as applied towards chemical systems and molecules. A basic introduction to the mathematics of group theory is given. Point groups and symmetry operations will be introduced and applied towards the normal coordinate analysis of molecular vibrations as well as the construction of molecular orbitals from symmetry adapted linear combinations of atomic orbitals.

Required Texts:

Bishop, D. \textit{Group Theory and Chemistry} Dover Press

Instructor: Leroy Laverman
Time: Monday and Wednesday, 10:00am - 10:50am
Place: Bldg. 494, Rm. 164B
Spring 2014 Course Offering

COMPUTER SCIENCE
Cloud Computing Fundamentals

The term cloud has long been used as a metaphor for the Internet. Servers connected to the cloud provide data and/or computing services to authorized clients using standard protocols. The cloud conceals a complex infrastructure which makes it relatively easy to develop client and the server applications that can be deployed anywhere geographically with high availability.

Cloud computing is a natural evolution of network computing, and encompasses many broad computing paradigms: distributed, grid, utility, on-demand, open source; Web services; P2P; Web 2.0, infrastructure as a service (IaaS), platform as a service (PaaS), software as a service (SaaS). Cloud computing is a paradigm of computing in which dynamically scalable and often virtualized resources are provided as a service over the Internet.

This is a variable-unit, advanced, hands on course. The course will start with lecture style covering of the evolutionary foundations of cloud computing and then focus on the emerging and still evolving state-of-the-art practices, tools, languages, protocols, infrastructures used for building cloud based applications and services. We will study and research existing cloud computing and storage infrastructures, such as Amazon's storage (S3) and computing (EC2, EBS) platforms. Guest speakers from industry and academia will cover various topics and technologies in the field.

Each student will work on a research paper or project and will receive 4-6 units based on the extent of work. Auditors will earn 1-2 units based on participation in class.

REQUESTED PREREQUISITES:
Completion of Lower Division Computer Science level CS proficiency.

Instructor: Murat Karaorman
Time: Monday and Wednesday, 6:00pm - 8:50pm
Place: Bldg. 494, Rm. 143
Serious Javascript

JavaScript is a programming language that used to get no respect---it was just for "special effects on web pages". Now, though, its a grown-up programming language with APIs for threading, 3-d graphics, digital sound synthesis, just to name a few, and server side frameworks such as Node.js.

In this class, we'll learn some basic professional JavaScript programming techniques including TDD with QUnit, web workers (multiple threads), JSDoc for JavaScript documentation, WebGL for graphics, and the Web Audio API, to name only a few. We'll learn about frameworks such as JQuery and Underscore.js.

We'll also use git and github extensively for version control and project management.

Then we will work on three specific projects: (1) Project Awesome, a quiz question generating framework, (2) Courseware for DPEAs C curriculum (3) Extending the sound capabilities of SNAP (a Scratch fork from UC Berkeley.)

NOTE WELL: This is NOT a "pitch your own JavaScript project" class. I repeat: It is NOT a "work on a project of your choosing" class--unless your choice is from the list above.

REQUESTED PREREQUISITES:
CMPCS major (CCS Computer Science), or permission of the instructor. CMPSC and CMPEN students that have taken CMPSC56 and have a 3.0 GPA or higher are welcome to ask for add codes.

Students must have a Windows, Mac or Linux laptop and must bring it to every class meeting.

Instructor: Phill Conrad
Time: Thursday, 4:00pm - 6:50pm
Place: Bldg. 494, Rm. 164B
Spring 2014 Course Offering

INTERDISCIPLINARY STUDIES
LITERATURE
Conquering Over Sin: Dualist Myth and Steinbeck’s *East of Eden*

To say that *East of Eden* is my favorite novel is a gross understatement. To say that it is a subtly crafted, delicately constructed Biblical allegory that paints a startling portrait of a place, a family, and a way of life, weaving together everything from Dualist philosophy to rolling California hillsides to Steinbeck’s memoirs to run-on sentences in order to create a narrative that both celebrates the inherent goodness of humanity and questions the very nature of its existence is probably pretty accurate. I might be biased, though.

As the novel centers around the story of Cain and Abel -- focusing on the critical Hebrew verb Timshel -- we will be reading it through the lens of several versions of that story that crop up in dualist traditions from around the globe. The reading will include creation myths from the Gnostic and Manichean traditions, Christian heretical traditions, and even Milton’s version of events in *Paradise Lost*. Let’s ask ourselves all the big ones. What is the nature of evil? Of goodness? What is it to be human and to strive for more? To go forth as imperfect creatures and conquer over our own ideas of sin?

**Required Texts:**

Steinbeck, J. *East of Eden* Penguin 20th Century Classics

**Instructor:** Student Leader: Gianna Stoddard  
Faculty Adviser: Ellen O’Connell

**Time:** Tuesday, 2:30pm - 3:50pm

**Place:** Bldg. 494, Rm. 143
Writing for Theatre

Writing for the stage and screen. This class will break down the components of writing a script. Students will write and edit their own monologues, dialogue, stage directions and more. The class will focus heavily on writing and editing work, so students should come prepared to share their writing and give feedback on other students' writing. Students should come prepared to read and hear your work aloud in front of others.

Instructor: Kendall Lynch
Time: Tuesday and Thursday, 9:30am - 10:50am
Place: Bldg. 494, Rm. 143
Literature Symposium

Every quarter various poets, novelists, short story writers, journalists, playwrights, cartoonists, editors, publishers, filmmakers, and critics will present their work at the weekly CCS Literature Symposium. Students who attend all 10 meetings will receive 1 unit of college credit. If you miss the first day of symposium on Wednesday, April 1st, you must talk to Caroline Allen in order to remain enrolled for credit. The symposium is open to the community. Students who are not enrolled in the class are welcome to come to symposia that interest them.

Important Etiquette: Students should be in the Old Little Theatre no later than 4 o’clock. Students should sit in the first half of the seating area—no back row sleepers or doers of crossword puzzles! Do not leave before the end of the symposium. Our readers come here to give you the best of themselves. Please be courteous and attentive.

If you need special assistance due to a disability, please call 893-2364.

Instructor: Caroline Allen
Time: Wednesday, 4:00 pm - 5:15 pm
Place: The Old Little Theater
Chaucer’s Canterbury Tales

In this course we will go on a spring-time “pilgrimage” with Chaucer and a sampling of his vividly imagined pilgrims who swap stories as they journey to Canterbury. Called “the well of English undefiled” by Edmund Spenser and the "father of English poetry" by Dryden, Chaucer and his tales will also allow us to travel back in time to familiarize ourselves not only with medieval England and culture, but also with the linguistic and poetic roots of the language that he helped to make our own.

Required Texts:

Chaucer, G.  
*The Canterbury Tales: Fifteen Tales and the General Prologue (Norton Critical Editions)*  
ISBN: 978-0393925876

Instructor: Pavneet Aulakh  
Time: Monday and Wednesday, 11:00am - 12:20pm  
Place: Bldg. 494, Rm. 143
RUMI

“The original words of Rumi are so deep, so perfect, so touching, that when one man repeats them hundreds and thousands of people are moved to tears. They cannot help penetrating the heart. This shows how much Rumi himself was moved to have been able to pour out such living words.”
- Hazrat Inayat Khan

“Perhaps the world’s greatest spiritual poet.”
- Jack Kornfield

“Rumi is one of the great souls, and one of the great spiritual teachers. He shows us our glory. He wants us to be more alive, to wake up... He wants us to see our beauty, in the mirror and in each other.”
- Coleman Barks

In this class we will read and grapple with and try to learn from Mowlānā Jalāloddin Balkhi, known in Persia as Jalāl ad-Dīn Muhammad Balkhī, and in the West simply as “Rumi.”

What can this Sufi mystic born on the eastern edge of the Persian Empire in 1207 teach us about our human experience? What wisdom can we glean from his vast and various body of work? What can we learn from his legendary relationship with his wild-man teacher, Shams of Tabriz? What does his great popularity (he’s said to be the most popular poet in America) say about what we’re presently needing and craving?

We’ll focus on Coleman Barks’ translations (the translator who, according to Robert Bly, released the poems from their “scholarly cages”) and read commentary on Rumi by Andrew Harvey, Coleman Barks, and Robert Bly, among others.

Please be prepared to read deeply, write two essays, and participate in class.

Required Texts:

*Essential Rumi, New Expanded Edition*  
Harper SanFrancisco  
ISBN-10: 0062509586  

*Rumi: The Big Red Book*  
HarperOne; Reprint ed.  
ISBN-10: 0061905836  

Instructor: Edward Macker  
Time: Tuesday and Thursday, 1:00pm - 2:20pm  
Place: Bldg. 494, Rm. 143
The Harlem Renaissance is a key moment in the development of modern African American culture and of modern art and culture generally. This course will look at this movement by reading some of its leading writers, listening to music from the “jazz age,” and by looking at film and visual art from the period. Writers we will read will include Langston Hughes, Jean Toomer, Georgia Douglas Johnson, Nella Larsen, Jessie Redmon Fauset, Angelina Weld Grimké, Louis Armstrong, and James Weldon Johnson. We will also listen to music from the era, including the earliest blues and jazz, with close listening to the music of Armstrong, as well as to that of Bessie Smith and Gertrude "Ma" Rainey.

Required Texts:

Armstrong, L.  
ISBN: 978-0306805448  
*Swing That Music*  
Da Capo

Cullen, C  
*Collected Poems.*  
Major Jackson Ed  
Library of America

Fauset, J. R.  
*Plum Bun: A Novel Without a Moral*  
Beacon Press

Honey, M.  
ISBN: 9780813538860  
*Shadowed Dreams: Women’s Poetry of the Harlem Renaissance 2nd ed.*  
Rutgers UP

Hughes, L.  
ISBN: 978-0826213396  
*Collected Works of Langston Hughes Vol. 1: The Poems*  
University of Missouri Press

Johnson, J. W.  
ISBN: 978-1-59853-113-8  
*The Autobiography of an Ex-Colored Man*  
Library of America

McKay, C.  
*Home to Harlem*  
Northeastern Univ. Press

Toomer, J.  
ISBN: 978-0-393-93168-6  
*Cane 2nd Ed.*  
W. W. Norton

Instructor:  
Geoffrey Jacques

Time:  
Monday and Wednesday, 12:30pm - 1:50pm

Place:  
Bldg. 494, Rm. 160B
The Dystopian Society in Popular Culture

This will be a course where we examine novels, graphic novels and film with an eye to how they critique and reset conventions of how society functions.

We will read the novels: Dracula, the Windup Girl, and Neuromancer, and the graphic novels: V for Vendetta, Walking Dead, Death of Speedy, and Maus. Also we will discuss “Blade Runner,” “Aliens,” “the Matrix” and the first season of the “Wire.” You will be required to write one analytical paper and two creative works.

Required Texts:

Stoker, B.  
*Dracula*

Bacigalupi, P.  
ASIN: B006TKP2B2  
*The Windup Girl*

Gibson, W.  
ASIN: B006TKP2B2  
*Neuromancer*

Moore, A.  
ASIN: B0064W65UM  
*V for Vendetta*

Hernandez, J.  
*Death of Speedy: Love and Rockets Vol. 7*

Spiegaleman, A.  
*Maus*

Instructor: Jervey Tervalon  
Time: Thursday, 4:00pm - 6:20pm  
Place: Bldg. 494, Rm. 143
The Radiance of the Domestic

In her essay "The Radiance of Jane Austen," Eudora Welty asserts that Austen "wrote from a perfectly solid and firm foundation and [that] her world is wholly affirmative... Jane Austen's ardent belief...[was] that the unit of everything worth knowing in life is in the family." Certainly both women focused tightly on the ironic and comic elements of the families of their times and regions, and within the scope of daily domestic life and concerns, a universe is revealed, that of the human heart. Students in this course will read novels by both masters, write both creatively and analytically, and be expected to present a topic and discuss all reading in class.

Required Texts:

Austen, J.                              Emma                              Norton
ISBN: 0393927644

Austen, J.                              Pride and Prejudice                Norton
ISBN: 0393976041

Austen, J.                              Sense and Sensibility              Norton
ISBN: 039397751X

Welty, E.                                Delta Wedding                       Mariner
ISBN: 0156252805

Welty, E.                                The Optimist's Daughter            Vintage
ISBN: 067972883X

Welty, E.                                Losing Battles                      Vintage
ISBN: 0679728821

Welty, E.                                The Golden Apples                   Mariner
ISBN: 015636090X

Instructor:  Ellen O'Connell
Time:       Monday and Wednesday, 9:30am - 10:50am
Place:      Bldg. 494, Rm. 143
The Beat Generation

This course will examine major works by the central figures of the Beat Generation-- Allen Ginsberg, Jack Kerouac, W.S. Burroughs, and Gary Snyder, Diane di Prima, Lawrence Ferlingetti as well as the artists, film makers, and journalists of the period. First we'll survey the literary/historical context in which these writers formed themselves, their visions and their styles. How do they continue important traditions, even as they rebel against them? We'll pay close attention to the differences as well as the similarities between these important writers, as well as influences on them (film, art, science, politics, etc.). Among other things, we'll examine their notions of spontaneity and authenticity, as well as the influence of various religions and social movements like Buddhism, Ghandi and non-violence, the Romantics, the BOMB, drugs, war, etc. In addition, we will study the art, film and other artistic endeavors of this interesting and important literary, social, and political generation.

Instructor: Paul Lobo Portuges
Time: Tuesday and Thursday, 4:00pm - 5:50pm
Place: Bldg. SSMS, Rm. 2303
Understanding and Writing Noir Fiction

Noir fiction explores and dramatizes the darker, more dangerous landscapes of human desire. In recent years, this terrain is often marked off with crime scene tape, but when it was finding its early audience in the eighteenth century, noir fiction meant castles, country estates, arranged marriages, the guilt of family secrets, and the tortured yearnings of the affluent.

This course sends the student on a studio tour of noir literature, beginning with the 1794 publication of Ann Radcliffe's "The Mysteries of Udolpho," with a side trip to Jane Austen's 1817 parody of it, "Northanger Abbey," demonstrating at once the rich literary potential residential in human desires, and the inexorable attraction of sexual tension.

Our tour ends with an iconic twenty-first century venture into the noir, Richard Price's "Lush Life."

Required Texts:

Braddon, M. L.
Lady Audley's Secret
Oxford Univ Press

Cain, J. M.
ISBN 9780752864365
The Postman Always Rings Twice
Orion

Chopin, K.
The Awakening
Norton

DuMaurier, D.
ISBN 9780575029941
Rebecca

Hammett, D.
ISBN 0-679-72261-0
The Red Harvest
Vintage/Black Lizard

O'Hara, J.
ISBN 10: 0099518325
Appointment in Samarra
Vintage

Price, R.
ISBN: 9780312428228
Lush Life
Macmillan

Instructor: Shelly Lowenkopf
Time: Tuesday and Thursday, 6:00pm - 7:20pm
Place: Bldg. 494, Rm. 160B
Visionary Literature

In this seminar, students will present literature that sees the world beyond our own—visionary writers. Through a mix of discussion, lecture, writing, and extensive reading, students will explore poets (Blake, Whitman, Ginsberg) and fiction writers (Borges, Philip K. Dick, Denis Johnson). Visionary is a broad term, and the course will explore it in many of its permutations: the way in which these writings open to spiritual, socio-political, and literary breakthroughs.

Required Texts:

Course Reader - Available at AS Notes beginning the first week of Spring quarter.

Instructor: Robert Krut
Time: Tuesday and Thursday, 12:30pm - 1:50pm
Place: Bldg. 494, Rm. 160B
Travelers, Tourists, Pilgrims, and Expatriates

We'll read books that deal with the interplay between personal identity, consciousness, geography, and politics. We'll discuss questions these books pose about home, travel, knowledge, colonialism, tourism, cross-cultural communication, history, personality, nationality, food, and writing. You will write essays that deal with your experiences of the books, as well as pieces about your own travels and travails (see this word's relation to travel).

In Rebecca Solnits' "Book of Migrations" she says, "Travel is also a psychic experiment. In different places, different thoughts emerge...I tried to use the subjective and personal not to glorify my mundane autobiography but as a case study in how on can explore the remoter reaches of the psyche by wandering across literal terrain."

Required Texts:

Maxwell, W.  
ISBN-10 067976156X  
The Chateau  
Vintage

Fisher, MFK  
ISBN-10 0-86547-392-7  
The Gastronomical Me  
North Pt. Press

Solnit, R.  
ISBN-10 1-85984-186-4  
A Book of Migrations  
Verso

Lewis-Krause, G.  
ISBN-10 1594487251  
A Sense of Direction  
Riverhead

Naipaul, V. S.  
ISBN-10 0679724885  
A Turn in the South  
Vintage

Dinesen, I.  
ISBN-10 0679724753  
Out of Africa  
Vintage

Gilbert, E.  
Best American Travel Writing  
ed. Elizabeth Gilbert  
Mariner Books

Instructor:  Caroline Allen  
Time:  Monday and Wednesday, 1:00pm - 2:20pm  
Place:  Bldg. 494, Rm. 143
Spring 2014 Course Offering
MATHEMATICS CS 103, 1
EC# 30163

Selected Topics in Discrete Math II

This course is a continuation of Selected Topics in Discrete Mathematics, and will cover various topics in discrete mathematics that were not hit in the winter quarter. Such topics may include enumerative combinatorics, set theory, flows and networks, and various other fields, but will vary depending on student interest and aptitude.

Instructor: Padraic Bartlett
Time: Monday, Wednesday, and Friday, 11:00am - 12:20pm
Place: Bldg. 494, Rm. 160B
Multidimensional Analysis - Differentiation

This is the first part of a sequence of two courses on Multidimensional Analysis, that is, the study of functions in several variables with vector values. In this first course, we will study the following topics: Elementary topology in $\mathbb{R}^n$, directional derivatives and the differential, the chain rule, maxima and minima, manifolds and Lagrange Multipliers, Taylor's formula, classification of critical points, the Multivariable Mean Value Theorem, the Inverse and the Implicit Mapping Theorems, Manifolds in $\mathbb{R}^n$.

This is a proof-based course that requires knowledge of calculus in one variable and Linear Algebra. It would be desirable that the student have taken a course on Real Analysis as well.

REQUESTED PREREQUISITES:
Advanced Linear Algebra and Intro to Real Analysis

Required Texts:
Edwards, C. H.  
*Advanced Calculus of Several Variables*  
Dover  

Instructor: Maria Isabel Bueno Cachadina
Time: Monday, Wednesday, and Friday 11:00am - 12:20pm
Place: Bldg. 494, Rm. 164B
Probability

This will be an introductory course on Probability Theory, with an emphasis on discrete probability. We will cover the basic formalisms of probability, discrete and continuous distributions, combinatorial methods, generating functions, conditioning, Law of Large Numbers and Central Limit Theorem. The latter part of the course will introduce the theory of stochastic processes including random walks and Brownian motion. Applications to Biology, Computer Science, Economics, Engineering, and Physics will be discussed.

Optional Texts:

Ghahramani, S.  
*Fundamentals of Probability with Stochastic Processes*  
Pearson Prentice Hall (2005)  
Third edition  
ISBN: 0-13-145340-8

**Instructor:**  
Tomoyuki Ichiba  
**Time:** Tuesday and Thursday, 9:00am - 10:20am  
**Place:** Bldg. 494, Rm. 164B
Special Topics - Complex Analysis

This course will be the second of two quarters on introductory complex analysis continuing from CS 120 in the winter quarter. Having established the basic properties of analytic functions, we will explore some of the many beautiful and surprising consequences such as Rouché's theorem, argument principle, mapping properties, harmonic functions, etc.

REQUESTED PREREQUISITES:
CS 120 with me from the Winter ‘14 quarter

Required Texts:
Hoffman, M. & Marsden, J.  
Basic Complex Analysis, 3rd ed.  
W. H. Freeman  
ISBN-10: 071672877X  

Instructor: Thomas Sideris  
Time: Tuesday and Thursday, 11:00am - 12:20pm  
Place: Bldg. 494, Rm. 164B
Spring 2014 Course Offering

MUSIC COMPOSITION
Individual Instruction in Music Composition

One on one instruction in music composition, with an emphasis on music in the notated tradition.

Students should come by Old Little Theater 154B to sign up for a lesson time prior to the first day of classes.

Information: leslie.hogan@ccs.ucsb.edu

REQUESTED PREREQUISITES:
Priority given to CCS Music Composition Majors.

All others require the permission of the instructor to enroll **prior to registration.**

Instructor: Leslie Hogan
Time: To Be Arranged
Place: Bldg. 494, Rm. 154
Composition Tutorial

Weekly meetings with the instructor on your original work in music composition.

REQUESTED PREREQUISITES
Fluency in musical notation and substantial background in composing
(This is considered a junior-level course, not a beginning course.)

At any given time, most if not all, course participants will be majoring in music composition, either through CCS or L&S.

Instructor: Jeremy Haladyna
Time: To Be Arranged
Place: Music Building, Rm. 0313
Image as Music

Throughout history, composers have taken inspiration from things seen, whether in nature, painting, sculpture, or everyday objects. In this century alone, that impulse has led to works as diverse as Gunther Schuller's Seven Studies on Themes of Paul Klee, Michael Torke's Javelin, and Claude Debussy's La Mer. In this seminar, students will explore ways of bringing the visual into their own music. We will examine works with a specific visual reference, including (whenever possible) the composers' own commentary on the creation of them. In addition, students will compose a series of short movements for chamber ensemble, in which gestures, textures, and lines are a direct response to a visual stimulus.

Instructor: Leslie Hogan
Time: Tuesday and Thursday, 12:30pm - 1:50pm
Place: Bldg. 494, Rm. 154
Vernacular Harmony II

The course Vernacular Harmony II provides a critical and cumulative assessment of the harmonic conventions cultivated by twentieth century composers of American vernacular music. By vernacular, I refer principally to folk, blues, jazz and jazz derived styles, and their precursors. Such styles include ragtime, blues, and music of most American musicals, country music, gospel music, post-1950 popular commercial styles, reggae, and the twentieth century jazz styles. While these styles differ in major ways it is the assertion of the instructor that they are all governed by a common harmonic language.

Specifically, the aims of the course are: 1) to introduce a theoretical system that explicates American vernacular harmonic practices from the late nineteenth century until now in a logical yet practical and intelligible manner; 2) to show the theoretical (creative) possibilities suggested by these practices that may not heretofore have been extensively explored; 3) to illustrate, via musical examples and subsequent analysis, that vernacular harmonic conventions can and should be taught as one harmonic theory; and 4) to present, when possible and appropriate, vernacular harmony in a manner that illuminates its derivative and analogical relationships to traditional European harmonic practices, and concurrently, to explicate the differences that exist between the two traditions.

Instructor: Earl Stewart  
Time: Tuesday and Thursday, 11:00am - 12:20pm  
Place: Bldg. 494, Rm. 154
Really Quite Vocal About Everything

This Spring course will hopefully have a renascent effect on every participant’s desire to write ingratiating music for the voice, alone and in combination. Students both get practice as well as examine a plethora of effective models.

What are the different voice types? Have you heard examples of a heroic tenor, dramatic soprano, basso profundo, and coloratura? Could you reasonably predict the effectiveness of using a given text based on its vowels and phrase structure? What is at the deepest essence of the human vocal response?

Taking its point of departure from the Gregorian plainchant of the Liber Usualis, which we will sing regularly as a limbering exercise, we’ll tackle progressively more adventuresome short practica, in reality steps toward discovering a personal approach towards a demanding subject.

This particular run of the course will also ready us for the challenge of writing musical theater (the musical notes portion) in Fall 2015, when CCS undertakes the TV Musical course for only the fifth time.

In addition to text setting and discussion of vowels and the problems they pose, we'll address sample choral textures and extended vocal techniques incorporated within compositions that really work. This will mean a tour that takes in everything from Faure's magically simple Messe Basse for womens voices to the newest Scandinavian choral literature by Nystedt, Rautavaara, and Sandstrom. Also, Satie's magical Socrate and in a more modernly minimalist vein: "Cry" by Giles Swayne for 24 amplified voices.

First taught, Spring 1999. Recommended for CCS and L&S Music Majors. Any other prospective entrants must be completely fluent in the notation of musical ideas, as there will be assignments that request notated music from students.

You must be willing to sing in class [no solos, so no worries there]. The more lustily you sing, the better.

Instructor: Jeremy Haladyna
Time: Monday and Wednesday, 1:00pm - 1:50pm
Place: Bldg. 494, Rm. 154
Composing Audiovisual Works

How can we speak about music using visual terms such as "color" or "texture?" How can musical terms such as "rhythm" and "harmony," apply to visual artwork?

Since the early 20th century, the search for a sound-image connection has inspired a broad range of composers and artists to create works with closely integrated sound and image. This course will give students the practical skills to create their own audiovisual works and the background to understand their historical and aesthetic contexts.

Lectures will examine historical precursors including the phenomenon of synaesthesia, the emergence of “visual music,” techniques of graphic notation, and more recent developments such as image sonification and music visualization. We will investigate contemporary media artists who build upon these past trends, while increasingly employing software to incorporate algorithmic and interactive approaches in their work.

Labs will consist of short assignments geared towards learning the software tools necessary for applying the processes and techniques covered in class. For the final project, students will create an interactive audiovisual work involving one or more of the topics discussed.

REQUESTED PREREQUISITES:
Since this an introductory course, all students are welcome to enroll. However, experience in music composition, visual art or computer science is strongly recommended.

Instructor: David Gordon
Time: Tuesday and Thursday, 3:00pm - 4:20pm
Place: Bldg. 494, Rm. 154
PHYSICS

PHYSICS LABORATORY PROJECTS

Laboratory projects to be arranged between the student and physics faculty. A Proposal for Laboratory Project form must be completed, signed by the instructor, and turned in to the CCS Office before an enrollment code may be issued and you may register for the class. A completed, signed proposal must be turned in by the end of the second week of the quarter. Necessary forms are available in the CCS Office.

For this quarter, the following Creative Studies faculty MAY be available for Independent Laboratory Projects: John Martinis. If you have an opportunity to do research with a UCSB faculty person who is not in Creative Studies, please check with your CCS Physics advisor before getting appropriate forms from the CCS office. You may then set up the course through Creative Studies (as above), or you may wish to inquire about doing the project as a “199” Independent Studies course through the instructor’s department in the College of Letters and Science, in which case you may earn a letter grade for your work.

PHYSICS READING PROJECTS

Reading projects to be arranged between the student and Physics faculty. A Proposal for Reading Project form must be completed, signed by the instructor, and turned in to the CCS Office before an enrollment code may be issued and you may register for the class. A completed, signed proposal must be turned in by the end of the second week of the quarter. Necessary forms are available in the CCS Office.

For this quarter, the following Creative Studies faculty MAY be available for Independent Reading Projects: Sathya Guruswamy or Tengiz Bibilashvili. If you have an opportunity to do research with a UCSB faculty person who is not in Creative Studies, please check with your CCS Physics advisor before getting appropriate forms from the CCS office. You may then set up the course through Creative Studies (as above), or you may wish to inquire about doing the project as a “199” Independent Studies course through the instructor’s department in the College of Letters and Science, in which case you may earn a letter grade for your work.
Experimental Physics

This is the third quarter of a year-long class designed to help you learn to do experimental physics research. The third quarter will focus on the design and construction of scientific apparatus. You will learn about materials, fasteners, and basic principles of mechanical design. You will have the opportunity to use a 3-D CAD (Computer Aided Design) program that will let you build parts in three dimensions and then obtain the requisite machine drawings from whichever views you choose. To put all this new knowledge to work, the class will design and build specialized research instruments and lecture demonstration equipment for use on campus.

Course Web Page: http://www.physics.ucsb.edu/~phys13/

A lab fee will be assessed to your BARC account

Required Texts:

Instructor: John Martinis
Time: Wednesday, 2:00 pm - 2:50 pm (Lecture)
      Wednesday, 3:00 pm - 5:50 pm (Lab)
Place: Broida Hall, Rm. 6334
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Course Web Page: http://www.physics.ucsb.edu/~phys13/

A lab fee will be assessed to your BARC account

Required Texts:
Moore, Building Scientific Apparatus Cambridge University Press

Instructor: John Martinis
Time: Wednesday, 2:00 pm - 2:50 pm (Lecture)
      Friday, 3:00 pm - 5:50 pm (Lab)
Place: Broida Hall, Rm. 6334
Waves, Kinetic Theory and Relativity


Note: All enrolled must attend both the lecture and one weekly assigned problem session.

This course is required for CCS Physics freshmen.

Prerequisite: Physics CS 32 and vector calculus, or equivalent and consent of instructor.

Required Texts:
Ohanian, . Modern Physics, 2nd edition Benjamin Cummings

Instructor: Tengiz Bibilashvili
Time: Tuesday and Thursday, 3:30 pm - 4:50 pm (Lecture)
       Wednesday, 1:00 pm - 2:50 pm (Problem Sessions)
       Wednesday, 3:00 pm - 4:50 pm (Problem Sessions)
Place:   PHELPS, Rm. 1444 (Lecture)
         Bldg. 387, Rm. 104 (Problem Sessions)
Quantum Physics


Prerequisites: Physics CS 34 and 35 or equivalent

Required Texts:

Ohanian, / Modern Physics, 2nd edition / Benjamin Cummings


Instructor: Sathya Guruswamy
Anthony Karmis (Problem Sessions)

Time:
Tuesday and Thursday, 3:30 pm - 4:50 pm (Lecture)
Thursday, 10:00 am - 11:50 am (Problem Sessions)
Thursday, 1:00 pm - 2:50 pm (Problem Sessions)

Place:
Bldg. 387, Rm. 104 (Lecture)
PHELPS, Rm. 1444 (Problem Sessions)
Field Painting with an Artist and a Botanist on the UC Reserves

SUMMER SESSION B

Art and science both require observation and understanding. In this Creative Studies class, an artist and a botanist/geologist will help you to examine the natural landscape with eye and brush. We will have demonstrations and brief lectures focused upon the biological, geological and artistic aspects of two of UCSB’s great Natural Reserves: Coal Oil Point and Sedgwick Reserve. The class camps two weekends at Sedgwick.

There will be THREE class meetings. Please see below for which weekends to reserve.

Note(s):
Enrollment Limited and by Instructor Approval Only.
For the weekend meetings, students must provide their own camping equipment art supplies. Meals will be provided.

Please Email Hank Pitcher at hankpitcher@gmail.com for an add code. When adding this course, you MUST sign up for 6-units. If you do not, you may be dropped.

A LAB FEE WILL BE CHARGED

Instructors: Hank Pitcher and Bruce Tiffney
Days and Times: Saturday, August 16th, 9:00am – 7:00pm (1st class)
Friday – Sunday, August 22nd – 24th (2nd class)
Friday – Sunday, August 29th – 31st (3rd class)
Places: Coal Oil Point, Cliff House (1st class)
Sedgwick Reserve (2nd & 3rd classes)
ART CS 101, 1  
EC# 16782

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         Sedgwick Reserve (2nd & 3rd classes)