CALS 479 CHICANO/LATINO ART HISTORY (4)
An analysis of art as expressed in the historical culture of Chicanos and Latinos, from ancient times to the present. A cultural art history approach. Field trips. Includes a studio practicum when offered for 4 units. Satisfies Ethnic Studies in GE Area C1 (Ethnic Studies in the Fine Arts).

CALS 480 LATIN AMERICAN MIGRATION TO THE UNITED STATES (4)
This course provides a broad overview of international migration to the United States, paying particular attention to Latin American migrants. The course attempts to understand what life is like for Latinos involved in migration to and from the United States. Attention is given to the diversity of today’s Latin American migrants, their social origins, their adaptation experiences and exits, and contexts of incorporation. The course also analyzes the experiences of different Latin American immigrant groups in the state of California.

CALS 495 SPECIAL STUDIES (1-4)
Independent study on a special topic for upper-division students. Prerequisite: completion and approval of a special studies form. May be repeated for credit.

CALS 499 INTERNSHIP (1-4)
An internship in Chicano and Latino Studies must combine: 1) service in a school or an agency where activity is related to the Latino community; 2) the selection of a topic for observation and study; 3) preparation of a bibliography and a reading list related to the internship activity; 4) a term paper that reflects both the internship work experience and appropriate research. The internship must be proposed and arranged ahead of time with the professor in CALS who will supervise the internship. Prerequisites: senior-level standing and completion of most CALS core classes. This course may be repeated once for credit.

CALS 595 SPECIAL STUDIES (1-4)
Directed study for graduate students. Prerequisite: completion and approval of a special studies form.

Communication Studies (COMS)

COMS 160A HUMANITIES LEARNING COMMUNITY (4)
COMS 160 A/B is a year long course, which features weekly lectures and small seminars. It constitutes a Humanities Learning Community (HLC) for any first-year student. The learning objectives of the HLC will satisfy A3 (Critical Thinking) and C3 (Comparative Perspectives and/or Foreign Languages) GE Areas.

COMS 160B HUMANITIES LEARNING COMMUNITY (4)
COMS 160 A/B is a year long course, which features weekly lectures and small seminars. It constitutes a Humanities Learning Community (HLC) for any first-year student. The learning objectives of the HLC will satisfy A3 (Critical Thinking) and C3 (Comparative Perspectives and/or Foreign Languages) GE Areas.

COMS 162A HUMANITIES LEARNING COMMUNITY MEDIA LITERACY (4)
COMS 162 A/B is a year long course, which, features weekly lectures and small seminars. It constitutes a Humanities Learning Community (HLC) for any first-year student. The learning objectives of the HLC will satisfy A3 (Critical Thinking) and C3 (Comparative Perspectives and/or Foreign Languages) GE Areas.

COMS 162B HUMANITIES LEARNING COMMUNITY MEDIA LITERACY (4)
COMS 162 A/B is a year long course, which, features weekly lectures and small seminars. It constitutes a Humanities Learning Community (HLC) for any first-year student. The learning objectives of the HLC will satisfy A3 (Critical Thinking) and C3 (Comparative Perspectives and/or Foreign Languages) GE Categories.

COMS 200 PRINCIPLES OF MEDIA COMMUNICATION (4)
An introduction to the history of mass communication, the mechanics of the mass communication industries, and theories of mass communication as a social, cultural, and political phenomenon.

COMS 201 VIDEO PRODUCTION (4)
A course for beginning video students. Assignments include: creation of skits and music videos; and conducting interviews using DV camcorders. Students also do a final creative project of their own.

COMS 202 METHODS OF MEDIA CRITICISM (4)
A survey of ways to analyze mediated texts, with a focus on film, television, magazines, music, news, and advertising. Methods and concepts include semiotics, structuralism, ideology, psychoanalysis, feminism, and postmodernism.

COMS 210 WEB AND PRINT JOURNALISM (4)
Introduction to a wide range of writing styles and formats, from hard news to features. Students learn to write for newspapers, magazines, television, radio, and the internet.

COMS 240 PUBLIC RELATIONS (4)
An overview of the history, structure, and organization of public relations. Students also learn the basic public relations tactics of writing, presentation, event organization, and web communication.

COMS 265 RADIO AND AUDIO PRODUCTION (4)
History of broadcasting; evolution of broadcast technology; introduction to basic theories and techniques of radio broadcasting. Overview of radio station organization, programming, and operation. Experience in radio program development and production techniques.

COMS 273 SYRCE: TOPICS IN COMS (4)
This course examines seminal moments in history that shaped the future of news reporting by identifying key tropes in the encoding and decoding of content. The course critiques traditional values, ethics and philosophies in order to portray the truth of the times as viewed through the lens of mediated communications. Satisfies GE Area C2. Only one course numbered 273 in the Arts & Humanities will be considered for credit. Prerequisite: completion of GE Category A2 (Engl 101 or ENGL 100B) required.
COMS 275 21st Century Television As Art (4)
This course explores the “New Golden Age” of TV that arguably began with The Sopranos and which may, perhaps, be considered “art.” Students will weigh relevant social and technological changes, study debates over subjectivity, taste, and cultural hierarchies, and assess what might distinguish these new shows from TV of old. Non-Majors Need Dept. Approval.

COMS 301 MEDIA THEORY AND RESEARCH (4)
Intermediate-level study of the key research events that contributed to the development of communication theories, government policy, and the emergence of communication as an academic discipline. Prerequisites: COMS 200, 202, and COMS majors with junior-level standing.

COMS 302 MEDIA ETHICS AND LAW (4)
The course will examine controversial ethical issues related to the media including sensationalism, bias, and deception. It will also cover how the media is regulated, as well as legal issues related to the First Amendment, libel, privacy, copyright, confidentially, obscenity, the right to a fair trial, advertising law the Freedom of Information and Open Meetings Acts. Prerequisites: COMS 200, 202, and COMS majors with junior-level standing.

COMS 320 SELECTED TOPICS IN COMS (4)
Intensive study of various topics and trends in the mass media, including advertising, propaganda and persuasion; children and the media; technical and scriptwriting; environmental and international communication; and film. May be repeated for additional credit with new subject matter. Course restricted to COMS majors.

COMS 321 INTERNATIONAL COMMUNICATION (4)
Course develops a basic understanding of current issues related to the field of international communication. Surveys readings and videos on global media (MTV, CNN, ESPN, theme parks, video games, advertising, media campaigns for social change, computer hackers, Sesame Street, etc.). Overseas job and volunteer opportunities discussed.

COMS 322 BROADCAST JOURNALISM (4)
Introductory class on the art and craft of Journalism, print, video, and radio, by career professionals. Designed to give students a taste of real world media experience.

COMS 323 HEALTH SCIENCE AND ENVIRONMENTAL JOURNALISM (4)
Course will focus on research, reporting skills to produce magazine articles, or video/radio documentaries on health, science, and the environment. Other assignments include press releases, profiles, and memos. Lecture, videos, and field trips help to critique news, public relations, advertisements, PSAs, campaigns, film, television, music, and the internet on related issues. Junior-level standing required.

COMS 324 SCRIPTWRITING FOR TV (4)
Course focuses on fundamentals of writing professional-level scripts for video, television, and film productions. Assignments include lab work and homework producing scripts and storyboards for Public Service Announcements (PSAs), commercials, news packages, documentaries, corporate and educational training programs, and dramatic screenplays.

COMS 325 NEW MEDIA (4)
This course introduces students to new communication technology, its influence on society, and how to write for the new media environment. This course will focus on examining new communication technologies including the different ways in which these technologies are used, the theoretical models that are relevant to new communication technology as well as the practical applications and implications of new communication technology on communication.

COMS 326 ADVANCED PRESENTATION TECHNIQUES (4)
Course involves intensive self-evaluation of both verbal and non-verbal elements of presentation. Interviews, group communications, and presenting with multimedia are covered. Theories of communication are discussed as they relate to presentation styles. Junior-level standing required.

COMS 327 MEDIA AND CHILDREN (4)
Students learn about the latest research in child development, media design, and marketing. Students then apply these ideas to the creation of a media message for a specific age group. Junior-level standing required.

COMS 328 AMERICA AT THE MOVIES (4)
An examination of the sociopolitical meanings and significance of American film from the silent era to the present. To better understand how films can potentially reflect and affect society, students read about American history and analyze dozens of films in their particular historical contexts.

COMS 329 “REALITY” TV AND FILM (4)
How is “reality” mediated in film and television? In this course students examine the truthfulness, ethics, and sociopolitical implications of such forms and genres as the documentary, neorealism, Dogme 95, tabloid talk shows, voyeurism/confession shows, crime shows, freak shows, and contest/game shows.

COMS 332 SCREENING VIOLENCE (4)
Violence in media and popular culture has been the subject of great concern and voluminous research for many years. In this course students examine the history, meaning, and real-world implications and effects of media violence, with a focus on film, television, literature, news, sports, comics toys, and video games.

COMS 333 COMMUNICATION, POWER, AND SOCIAL CHANGE (4)
How does power operate through communication to delay or to advance social progress? Analyze history, film, documentary, news, corporate PR, government propaganda, and cultural myth. Craft short messages from comic books to posters to radio or video spots. Design and get feedback for messages students create on issues of choice.

COMS 340 PUBLIC RELATIONS FIRM (4)
This is a hands-on class for students who are planning to work in the field of public relations. The class is run as a public relations firm with students working as consultants with clients to develop plans and projects for public relations campaigns. Prerequisite: Consent of Instructor Required. Open to Juniors, Seniors and Graduates only. Non major needs Dept. approval.

COMS 368 NEWSPAPER WRITING/EDITING (STAR) (4)
The faculty advisor offers a comprehensive evaluation — oral and written — of the most recent edition of the campus newspaper, the STAR. Instruction is provided on a wide variety of journalism topics, from editing and reporting to ethics and law. Students are required to read the STAR and the written evaluation by the advisor. May be repeated for up to 12 units.

COMS 369 SSU-TV (4)
This is an essential class for students who will work in the Broadcasting Industry. Students will learn about the history, structure, and operations of local broadcasting. Students will be expected to work in a specific department of SSU-TV during the semester. May be repeated for credit up to 12 units.

COMS 385 MEDIA LAB: RADIO (KSUN) (4)
A media lab to develop a range of skills in the production of radio programs. Work focuses on the production of live and prerecorded pieces for KSUN, SSU’s internet radio station (www.sonoma.edu/ksun). The lab also serves as the staff meeting of the radio station. May be repeated for up to 12 units.
COMS 402 SENIOR SEMINAR (4)
Students will share at least one critical analysis of a specific media message and complete a senior-level project/portfolio/study, which is the culmination of their major experience. Prerequisites: COMS 301 and 302; seniors only. Cannot be repeated for credit.

COMS 435 SEMINAR IN MASS MEDIA (4)
Seminar provides an opportunity to gain new insights into social problems through an intensive analysis of the role and impact of mass communication in contemporary society. Emphasis is on exploring, through a major research project, social issues that should be, but are not, fully covered by the mass media. Prerequisite: COMS 301, SOCI 300, SOCI 331, or consent of instructor. Cross-listed as SOCI 435.

COMS 460 TEACHING ASSISTANT IN COMMUNICATION STUDIES (1-4)
Intended to give students experience assisting instructors. Teaching Assistants help teach, do research, and tutor students in classes. Consent of instructor and department contract required. May be repeated for credit.

COMS 470 RESEARCH ASSISTANT IN COMMUNICATION STUDIES (1-4)
Intended to give selected students experience in the construction and implementation of a professor's research project. Consent of instructor and department contract required.

COMS 495 SPECIAL STUDIES (1-4)
Supervised study of a particular problem or area of interest in the media selected by the student in consultation with a sponsoring faculty member. Meetings will be arranged for discussions and progress evaluations. May be repeated for credit. Consent of instructor and Special Study 495 contract required.

COMS 497 JOURNALISM FIELD STUDY (1-3)
Students will travel to the national journalism conference where they will attend educational seminars in all aspects of journalism from writing, to design photography, to media convergence. They will attend lectures and speeches by both nationally and internationally renowned journalists and scholars. To be taken with COMS 368. May be repeated for up to 3 units of credit.

COMS 499 MEDIA INTERNSHIP (1-4)
This class provides students with an opportunity to discover how to make an effective transition from the classroom to the workplace. For a semester, individuals work in a media firm, business, newspaper, radio, or TV station. On the job, students learn networking and negotiating skills. Assignments for class include: a resume, workplace lingo, self-evaluation, profile of supervisor, and album with photos and text that describe the experience. There is also an interview for a job. Seniors only. Consent of instructor, internship agreement form, and department contract required. Can be taken for up to 12 units only.

Computer and Engineering Science (CES)

CES 400 LINEAR SYSTEMS THEORY (3)
Lecture, 3 hours. Analysis of linear time-invariant systems, correlation, convolution, impulse response, complex variables, Fourier series and transform, sampling, filtering, modulation, stability and causality, feedback and control systems, Laplace and Z-transform, fast Fourier transforms. Prerequisite: MATH 241 or consent of instructor. Cross listed as MATH 430 and ES 400.

CES 430 PHOTONICS (3)
Lecture, 3 hours. Lasers, diode lasers and LED's, fiber optics, and optical radiation detectors. Prerequisites: a course in modern Physics (such as PHYS 314) and electromagnetism (such as PHYS 430). Cross-listed with PHYS 445 and ES 445.

CES 432 PHYSICS OF SEMICONDUCTOR DEVICES (3)
Lecture, 3 hours. Semiconductor materials, crystal structure and growth, energy bands and charge carriers, conductivity and mobility, metal semiconductor and p-n junctions, p-n junction diodes, bipolar junction transistors, field effect transistors, CCD's, and photonic devices and integrated circuits. Projects in photolithography, conductivity and contact resistance measurements, I-V and C-V characteristics of diodes, characterization of transistors may be assigned. Prerequisite: ES 230 or ES 314 or consent of instructor. Cross-listed as PHYS 475 and ES 432.

CES 440 INTRODUCTION TO NETWORKING AND NETWORK MANAGEMENT (3)
Lecture, 2 hours; laboratory, 3 hours. The ISO reference model, theoretical basis for data communications, data transmission theory and practice, telephone systems, protocols, networks, internetworks, with examples. Prerequisites: ES 440 or consent of instructor. Cross listed with ES 465.

CES 490 SELECTED TOPICS IN CES (1-3)
Special topics to introduce new emerging fields, provide foundation for advanced graduate level courses, or augment other courses in computer and engineering science. Prerequisite: consent of instructor.

CES 494 DIRECTED READINGS (1-3)
Independent study under a faculty member. The proposal must be approved by the graduate advisor if the course is to apply towards degree requirements. Prerequisite: consent of instructor.

CES 500 QUEUEING AND TRANSFORM THEORY (3)
Lecture, 3 hours. Review of probability theory, fundamentals of transform theory, Fourier and Z-transforms. Markovian and discrete time queueing systems, single and multi server queueing networks, and their applications. The course may require significant lab and/or project activity. Prerequisite: ES 314 or consent of instructor.

CES 506 OPERATIONS MANAGEMENT (3)
Production/operations management of manufacturing and service operations. Topics include forecasting and scheduling, material requirements planning, and quality assurance. Additional tools include inventory control, project management, and product development. Modern techniques such as Supply Chain Management, e-business, Just-in-Time, and Total Quality Management are illuminated. Cross-listed as BUS 516.

CES 510 INTELLIGENT SYSTEMS DESIGN (3)
Lecture, 3 hours. Introduction to adaptive systems: neural networks, genetic algorithms (GAs), fuzzy logic, simulated annealing, tabu search, etc. Specific topics include perceptions, backpropagation, Hopfield nets, neural network theory, simple GAs, parallel GAs, cellular GAs, schema theory, mathematical models of simple GAs, and using GAs to evolve neural networks. Prerequisites: ES 314 and CES 400, or consent of instructor.