CHEM 446 Metabolic Biochemistry (3)
Lecture, 3 hours. A study of bioenergetics and the metabolism of biological molecules including carbohydrates, lipids, nucleic acids, and proteins. This course is only offered in the spring. Prerequisites: CHEM 335B or CHEM 232; CHEM 445 or BIOL 130; and a foundation in kinetics and thermodynamics, or consent of instructor.

CHEM 492 Chemistry Seminar Series (1)
Invited speakers from universities and industry will present on current topics in the chemical and biochemical fields. May be repeated; does not count towards the major.

CHEM 494 Undergraduate Research (1-6)
Under supervision by the Chemistry faculty, students will participate in individual investigations of student- or faculty-initiated chemical problems. May be taken only by petition to the Chemistry Department. May be repeated. Prerequisite: consent of instructor.

CHEM 495 Special Studies (1-3)
Investigation of existing information on a specific or general topic of interest to the student. Prerequisites: consent of instructor; upper-division standing in chemistry or closely related science. May be repeated for credit up to 8 units.

CHEM 496 Selected Topics in Chemistry (1-6)
A study of an advanced topic in chemistry. May be repeated for credit with new subject matter. Prerequisites: CHEM 335A and 335B; may vary by subject matter.

CHEM 497 Research Seminar (1)
Laboratory, 3 hours. Capstone course for B.A. and B.S. degrees. The course will focus on techniques involved in the preparation and delivery of technical seminars. This final project will be a formal oral presentation to the Chemistry department on a research paper from the chemical literature or the student's undergraduate research project. Instruction includes the appropriate coverage of the selected topic, use of the chemical literature, and the preparation and use of PowerPoint, graphic, and web-based applications to create an informative talk. Prerequisite or corequisite: CHEM 401 required, or consent of instructor.

CHEM 499 Internship (1-4)
Chemistry field experience in industrial, hospital, or similar laboratory settings. Enrollment by prior arrangement with supervising faculty member and community sponsor. Please see department advisor for details. Three hours of work per week for each unit of credit. Internship assignments may be paid. Cr/NC only. May be repeated.

Chicano and Latino Studies (CALS)

CALS 165A Humanities Learning Community (4)
CALS 165 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 along with meeting Ethnic Studies requirements.

CALS 165B Humanities Learning Community (4)
CALS 165 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 along with meeting Ethnic Studies requirements.

CALS 219 The Latino Experience (3)
A survey of the Chicano and Latino experience in the United States. The course serves as an introduction to Chicano and Latino studies through the social sciences in order to explain the individual’s status and place within the group and society. This includes how Chicanos, Latinos and other Latinas/os have adapted to the various cultural, social, economic, and political elements of U.S. society as compared to other groups. Satisfies the Ethnic Studies requirement in GE Area D1 (Individual and Society).

CALS 220 Latino/o Arts and Humanities (4)
This course considers how individuals and communities define and are defined by their cultural practices by focusing on the ways these dynamics play out in Latino/o communities. It surveys Latino/o contributions to literature, drama, theater, cinema, mass media, popular and fine art, music, and dance and considers how these contributions reflect and challenge the nature and meaning of race and ethnicity in the United States. This course satisfies the C3 and Ethnic Studies GE requirements.

CALS 225 Spanish for Bilinguals (4)
This course is designed to systematically develop a confidence in native speakers’ ability to write and communicate effectively in the Spanish language. The class will be conducted entirely in Spanish. Prerequisite: native fluency in Spanish. Satisfies GE Area C3 (Comparative Perspectives and/or Foreign Languages). This course does not satisfy the GE Ethnic Studies requirement.

CALS 225L Language Laboratory/Field Work (1)
At least two hours per week of practice in the language laboratory or in an approved fieldwork setting such as a Spanish-speaking organization, community agency, or bilingual classroom. Cr/NC only. Prerequisite: concurrent enrollment in CALS 225.

CALS 273 Latinos and Performance: Critical and Creative Readings (4)
This course explores the relationship between identity and performance, reading and rendition, the interaction between the skills of close reading, embodied reading, and possible productions of these readings on the page, stage or screen. This course is part of the University’s Second Year Research and Creative Experience (SYRCE) and its theme will vary from semester to semester. 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.

CALS 301 CALS Leadership and Mentoring (1)
A supervised, guided process where senior-level majors in CALS coach and mentor newly declared majors after having been coached by a senior student the previous semesters. Elective units. May be enrolled more than once.

CALS 310 Chicano/Latino Arts and Crafts Workshop (1)
Analysis of and workshop on providing Chicano Mexican and other Latino arts and crafts. Includes village and folk arts, with particular emphasis toward adapting these arts to the public school curriculum. Course projects require a public exhibit.
CALS 314 LITERATURE IN TRANSLATION (4)
This course is designed for students who have studied little or no Latin American literature previously, and are interested in exploring the rich and diverse make-up of a people of both indigenous and Hispanic background, to understand how it is a part of their everyday lives. Students will develop an understanding of regional areas through the readings, and study the manner in which writers from Latin America weaving struggles related to ethnicity, cultural traditions, and historical events into their creative works with a focus on important figures of Latin American narrative. Satisfies upper-division GE Area C2 (Literatures, Philosophies, and Values) and the Ethnic Studies requirement.

CALS 339 LATINOS AND THE U.S. LABOR MARKET (3–4)
This course is designed as an overview of major theories, trends, and debates on the topic of Latinos and labor market inequality in the United States. Topics include urban poverty, discrimination in employment, how jobs and workers are matched, and overarching issues as globalization and place affects the labor force. Particular attention is given to the interaction between race and class as determinants of the life chances of minorities and specifically Latinos in the United States. Satisfies upper-division Ethnic Studies in GE Area D1 (Individual and Society).

CALS 350 LATINO CULTURAL STUDIES (4)
This course focuses on the theoretical debates that have shaped the field of Chicano and Latino studies. We will explore the relationship between dominant racial formations and cultural production.

CALS 352 CHICANO/LATINO PHILOSOPHY (4)
This course addresses the development of Chicano/a and Latino/a thought from a materialist perspective. We will endeavor to contextualize the rise of different attitudes, definitions and worldviews concerning Chicano/Latino identity and politics within the specific historical conditions in which they developed. Satisfies Ethnic Studies and upper-division GE Area C2 (Literatures, Philosophies, and Values).

CALS 365 CHICANO/LATINO THEATRE (2)
A review of the development of drama in literary Chicano/Latino culture from a variety of sources: anthropological, sociological, and historical as well as contemporary developments. Course includes a workshop leading to the performance of a term play, along the lines of the Teatro Campesino. May be repeated once for credit.

CALS 366 MEXICAN FOLK AND TRADITIONAL DANCE (1–2)
An introduction to folk and traditional dances of Mexico; this is a performance course requiring active student involvement. Basic steps and three to five ballet folklórico dances will be taught, leading to a public performance. Dances include Norteno, Jarabes de Jalisco, Jarochos de Veracruz, and one or more indigenous dances. May be repeated once for credit.

CALS 368 CHICANO/LATINO MUSIC (4)
This course explores Chicano/Latino musical practices with a special focus on their historical origins. The social, cultural, and political significance of Chicano/Latino musical forms will also be addressed in this class. The class will acquaint students with Chicano/Latino musical traditions and an understanding of their significance within a multicultural society. Satisfies Ethnic Studies and upper-division GE Area C1 (Fine Arts).

CALS 374 LATINO LITERATURE (4)
A course designed to identify, analyze, and appreciate current literary themes and forms in works focusing on the experiences of Latinas/os in the United States. The course includes analyses of distinct ethnic, national, racial, regional, and gendered voices through the study of novels, short stories, essays, poetry, and plays. Satisfies upper-division GE Area C2 (Literatures, Philosophies, and Values) and the Ethnic Studies requirement.

CALS 393 CHICANO/LATINO CINEMA (4)
An introduction to Chicano/Latino cinema, its history, and its relationship with the film industry in Hollywood and in Latin America. Special attention will be given to the emergence of Latina/o-produced films, tracing the evolution of alternative aesthetic, and narrative strategies. Satisfies Ethnic Studies and upper-division GE Area C1 (Fine Arts).

CALS 395 COMMUNITY INVOLVEMENT PROGRAM (CIP) (1–4)
Provides students with practical experience in school classrooms, various ethnic community organizations, and health and social service agencies, including recreation programs, day care centers, and senior citizen centers. One unit is equivalent to 30 hours of volunteer work per semester. Units are not applicable to the CALS major. Meets field experience requirements for the CALS waiver program. May be repeated for credit.

CALS 398 MEDIa (1–2)
Movimiento Estudiantil Chicano de Aztlán involves students in experimental projects that will orient them to problems faced by the Chicano/Latino student community and the greater Hispanic community in the campus service area. May be repeated for credit.

CALS 400 SELECTED TOPICS IN CHICANO STUDIES (1–4)
Offered occasionally, based on student interest and faculty availability: Chicano/ Latino Art Workshop, Chicano Perspectives on Mexican History, Chicana, Feminisms, La Frontera: Border Studies, and Economics and the Chicano Small Business Development: Chicano/Latino Community. May be repeated once for credit with a different topic.

CALS 403 CHICANO/LATINO YOUTH AND ADOLESCENTS (3–4)
General psychological principles and theories of growth and human development as they apply to Chicano/Latino youth. Course will focus on Latino adolescents and their adjustment to the life cycle and American society and its impact on the self, peer group relations, family life, and other sources of conflict. Satisfies Ethnic Studies and upper-division GE Area E.

CALS 405 THE CHICANO/LATINO FAMILY (3–4)
Examines the Latina/o family in a psychological and sociological context. The role of international and internal migration and acculturation on Latino family structure and functioning, contemporary gender roles and sexualities, variations in family structure, race and class identity, and the impact of economic and cultural dislocation are examined. Family violence, addiction, mental and physical health, family resilience, and coping strategies are also examined. The class is designed to prepare students to work in social service environments (including family and individual therapy, public policy, social welfare, health services, community advocacy, and education), with applicable understandings of the contemporary Latino family.

CALS 426 CHICANO/LATINO SOCIOLINGUISTIC (4)
A seminar that examines the role language plays in structuring the social interactions of Latino populations. The class includes an overview of multiple varieties of Spanish and English, and explores issues such as language maintenance, policy planning, and bilingual education. Satisfies GE Area C3 (Comparative Perspectives) and the Ethnic Studies requirement.

CALS 432 LATINAS/Os AND GLOBALIZATION (4)
This class will explore the effect that late-stage capitalist globalization has upon Latino workers. How do changes in the world economic system, including the advent of global free trade regions (NAFTA, FTZs) affect the composition and opportunities open to Latino populations in the United States? Examines the development of transnational economic and cultural networks as a result of globalization. Satisfies the Ethnic Studies requirement in GE Area D5 (Contemporary International Perspectives).
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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Course Description</th>
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<tbody>
<tr>
<td>CALS 442</td>
<td>RACE, CLASS, AND GENDER AMONG LATINOS (4)</td>
<td>A course centered on the institutional, cultural, and psychological components of race, class, and gender relations among Latinos and their effect on different communities. Institutional inequality, questions of assimilation and identity, attitudes, and effects of inequality on community activism and politics will be explored.</td>
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<tr>
<td>CALS 445</td>
<td>CHICANO/LATINO HISTORY (4)</td>
<td>An analysis of Chicano/Latino history, from the exploration and settlement of the Southwest to the present. To include an examination of such themes and topics as: the Chicano heritage, the Mexican War and Treaty of Guadalupe Hidalgo, the land question, social banditry and other forms of resistance, the Chicano in the 20th century, and contemporary Chicano/Latino issues, organizations, and movements.</td>
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<tr>
<td>CALS 450</td>
<td>CHICANO/LATINO CHILDREN’S LITERATURE (3-4)</td>
<td>An analysis of children’s literature written about and for Chicano/Latino children both in the U.S. and abroad. Students will review and analyze the literature for style and content. Includes the study of nontraditional literature collections from the Spanish-speaking community. Prerequisite: functional Spanish language skills.</td>
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<tr>
<td>CALS 451</td>
<td>LATINA/O HUMANISMS (4)</td>
<td>A comparative analysis of the nature and meaning of race and ethnicities in the United States from its origins in Latin America to its cultural manifestations and social concepts. Discussion and study will be focused from interdisciplinary perspectives. Satisfies GE Area C3 (Comparative Perspectives) and Ethnic Studies categories. Prerequisite: upper-division standing.</td>
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<tr>
<td>CALS 456</td>
<td>SOCIOLOGY OF EDUCATION/LATINOS AND EDUCATION (4)</td>
<td>This course introduces students to some key theoretical and empirical work in the sociology of education and Latinos. Because this is such a large field of research, the course will focus on the question of stratification and how systems of schooling maintain or alleviate inequality among Latino communities. We will examine classical approaches to schooling; schools as organizations; schools and their effects on social mobility; class, race, and gender stratification in achievement and attainment; tracking/ability grouping; theories and empirical work on social and cultural capital; school choice; and cross-national expansion of education. Our readings will cover both qualitative and quantitative studies in the field. Note: restricted to upper-division students. Prerequisite: CALS 458.</td>
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<tr>
<td>CALS 458</td>
<td>CALS RESEARCH AND METHODOLOGY (4)</td>
<td>This course introduces students to advanced research theories and methodologies. Students will develop and refine their research and information literacy competencies as they complete a semester-long original research project. This course can be substituted for AMCS 480 Research and Methodology.</td>
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<tr>
<td>CALS 460</td>
<td>CROSS-CULTURAL MATH AND SCIENCE FOR TEACHERS (3)</td>
<td>Taught in bilingual format, this course helps prospective teachers prepare for the classroom, providing linguistic and cultural depth and strategies in basic science areas and math concepts including number systems and problem-solving, metrics, geometry, probability, and statistics. Prerequisites: functional Spanish language skills and completion of GE math and science (GE Areas B1 and B2) requirements.</td>
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<tr>
<td>CALS 474</td>
<td>MAJOR AUTHORS IN CHICANO AND LATINO LITERATURE (4)</td>
<td>A detailed study of representative authors, genre, period, or region, in consideration of socio-economic, political, and cultural contexts. Requires critical discussion in class, annotated bibliography, and senior-level term paper. Not in core.</td>
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<tr>
<td>CALS 480</td>
<td>LATIN AMERICAN MIGRATION TO THE UNITED STATES (4)</td>
<td>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.</td>
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<tr>
<td>CALS 495</td>
<td>SPECIAL STUDIES (1-4)</td>
<td>Independent study on a special topic for upper-division students. Prerequisite: completion and approval of a special studies form. May be repeated for credit up to 8 units.</td>
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<td>CALS 499</td>
<td>INTERNSHIP (1-4)</td>
<td>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.</td>
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<tr>
<td>CALS 595</td>
<td>SPECIAL STUDIES (1-4)</td>
<td>Directed study for graduate students. Prerequisite: completion and approval of a special studies form.</td>
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