Schedules, portion control, financial management, quantity food production management: production

122. Food Service Systems Management
  Lecture—3 hours; independent study—1 hour. Prerequisite: Food Science and Technology 100B and 101B. Restricted to upper division Clinical Nutrition students. Introduces core principles of food service management, including quantity food preparation, institutional equipment, receiving and storage, service, menu planning, merchandising, and safety. Students will earn food safety certification. —S. (S.) Frank

120L. Quantity Food Production Laboratory (2)
  Laboratory—6 hours. Prerequisite: course 120. Laboratory experience in quantity food production and service. —F. (F., S.) Frank

122. Food Service Systems Management
  Lecture—3 hours. Prerequisite: Agricultural and Resource Economics 112, course 120. Principles of quantity food production management: production schedules, portion control, financial management, layout and equipment planning, evaluation of alternative systems, and computer applications. —W. (W.) Frank

192. Internship (1-12)
  Internship—3-36 hours. Prerequisite: one upper division course in Food Service Management and consent of instructor. Work experience on an off campus in practical aspects of food service management, supervised by a faculty member. (P/NP grading only.)—Steinberg

197T. Tutoring in Food Service Management (1-2)
  Discussion/laboratory—3 or 6 hours. Prerequisite: Dietetics or related major; completion of the Food Service Management course in which tutoring is done. Tutoring of students in food service management, assistance with discussion groups or laboratory sections; weekly conference with instructor in charge of course; written evaluations. May be repeated if tutoring a different course. (P/NP grading only.)—Steinberg

198. Directed Group Study (1-5)
  (P/NP grading only.)—Steinberg

199. Special Study for Advanced Undergraduates (1-5)
  (P/NP grading only.)—Steinberg

Forensic Science (A Graduate Group)

Robert H. Rice, Ph.D., Chairperson of the Group
Group Office, 1909 Galileo Ct., Suite B
Davis, CA 95618; 530-747-3922; http://forensicscience.ucdavis.edu

Forensic Science (A Graduate Group)

Related Courses. See Nutrition.

Courses in Food Service Management (FSSM)

120. Principles of Quantity Food Production (4)
  Lecture—3 hours; independent study—1 hour. Prerequisite: Food Science and Technology 100B and 101B. Restricted to upper division Clinical Nutrition students. Introduces core principles of food service management, including quantity food preparation, institutional equipment, receiving and storage, service, menu planning, merchandising, and safety. Students will earn food safety certification. —S. (S.) Frank

120L. Quantity Food Production Laboratory (2)
  Laboratory—6 hours. Prerequisite: course 120. Laboratory experience in quantity food production and service. —F. (F., S.) Frank

122. Food Service Systems Management (3)
  Lecture—3 hours. Prerequisite: Agricultural and Resource Economics 112, course 120. Principles of quantity food production management: production schedules, portion control, financial management, layout and equipment planning, evaluation of alternative systems, and computer applications. —W. (W.) Frank

192. Internship (1-12)
  Internship—3-36 hours. Prerequisite: one upper division course in Food Service Management and consent of instructor. Work experience on an off campus in practical aspects of food service management, supervised by a faculty member. (P/NP grading only.)—Steinberg

197T. Tutoring in Food Service Management (1-2)
  Discussion/laboratory—3 or 6 hours. Prerequisite: Dietetics or related major; completion of the Food Service Management course in which tutoring is done. Tutoring of students in food service management, assistance with discussion groups or laboratory sections; weekly conference with instructor in charge of course; written evaluations. May be repeated if tutoring a different course. (P/NP grading only.)—Steinberg

198. Directed Group Study (1-5)
  (P/NP grading only.)—Steinberg

199. Special Study for Advanced Undergraduates (1-5)
  (P/NP grading only.)—Steinberg

For their own track. The FOR seminar course in the fall quarter is required for new students. The FOR spring seminar course will be taken in any spring quarter before graduation. Students must also take one additional seminar course in another department or program.

Preparation. Appropriate preparation is an undergraduate degree in physical or natural sciences, engineering or a closely related field with a GPA of 3.000 or higher. Examples include Biochemistry, Chemistry, Molecular Biology, Biology, Genetics, and Engineering Physics. Students must complete at least one year each of general chemistry, organic chemistry, general physics, math through calculus and a class in statistics. Other recommended courses include general biology, biochemistry and genetics.

Graduate Advisers. Cassandra Calloway (Forensic Science Graduate Program; Environmental Toxicology), You-Lo Hsieh (Division of Textiles and Clothing), Christopher J. Jenkins (Forensic Science Graduate Program; Biochemistry and Biotechnology), Donald Land (Chemistry), Terence Murphy (Plant Biology), Ben Sacks (Population Health & Reproduction/Canal Diversity and Conservation Laboratory-Center for Veterinary Genetics). Donald D. K. Rovani (Mechanical & Aeronautical Engineering), Moshe Rosenberg (Food Science and Technology), Matt Wood (Environmental Toxicology)

Courses in Forensic Science (FOR)

Graduate

200. Fundamental Concepts in Forensic Science (3)
  Lecture—2 hours; fieldwork—0.25 hours; lecture/laboratory—0.25 hours; seminar—0.5 hours. Overview of forensic science and problem definition, strategies for problem solving, analytical tools, and professional and ethical considerations. (F. (F.) Sensabaugh)

205. Microscopy and Microanalytical Methods in Forensic Science (3)
  Lecture—2 hours; laboratory—1 hour. Prerequisite: consent of instructor. Restricted to students enrolled in the M.S. in Forensic Science Program; a minimum of one year each of general chemistry, organic chemistry, calculus, & physics. Introduction to optical and electron microscopy. Transmission, diffraction, reflection and absorption; polarized light and polarizing microscopy. Light microscopy; digital image recording, SEM analysis of gunshot residues, paints, glass. EDS, XRF analysis, signal-to-noise ratios, minimum detectable levels and homogeneity. Offered in alternate years. —S. (S.) Neumann

207. Advanced Spectroscopy Methods in Forensic Science (3)
  Lecture—3 hours. Restricted to Forensic Science Graduate Program or consent of instructor. Discuss, evaluate and integrate advanced molecular spectra/structure, Infrared Spectroscopy, such as chemical applications of spectroscopic methods, vibrational, rotational spectra; electronic spectra, photoelectron spectroscopy generated by various analytical instruments used in forensic science community. Offered in alternate years. —F. (F.) Wood

210. Personal Identification Methods in Forensic Science (3)
  Lecture—3 hours. Prerequisite: restricted to students enrolled in the M.S. Forensic Science Program or consent of instructor. Methods for identifying individuals from evidence collected at crime scenes, suspects or victims, using DNA and documentary proof during the trial, concepts of relevancy, hearsay and opinion rule, examination of expert witnesses, impeachment of Kelley-Fry and Daubert decisions & court testimony. —W. (W.) Chamberlain, Maucieri

215. Forensic Fire and Arson Investigation (3)
  Lecture—3 hours. Prerequisite: open only to students enrolled in the M.S. Forensic Science Program or by consent of the Forensic Science Program Director. Principles and techniques of scientific investigation of fires and related crimes, offer perspective and tour of forensic science laboratory. Focuses on decisionmaking in fire/arsen investigation. Offered in alternate years. —(S.) DeHaan

216. Technical Writing in Forensic Science (3)
  Lecture—2 hours; extensive writing or discussion—1 hour. Prerequisite: open only to the instructor required for all students not enrolled in the Forensic Science program. Restricted to graduate standing in the Forensic Science program. How to write clear, credible forensic science reports and scientific articles, that (a) serve the ends of the justice system, (b) meet their readers’ varying needs and (c) reflect well on the author. —F. (F.) Neumann

220. Analysis of Toxicants (3)
  Lecture—3 hours. Prerequisite: coursework in organic chemistry. Principles of microanalysis of toxicants. Theoretical considerations regarding separation, detection and quantitative determination of toxicants using chemical and instrumental techniques. (Same course as Environmental Toxicology 220.) —F. (F.) Zhang

221L. Forensic Science Analytical Instrumentation (2)
  Lecture/discussion—1 hour; laboratory—3 hours. Methodology and instruments used for the analysis of substances of interest in the discipline of Forensic Science. Practical experience with modern instrumental techniques & methodologies used in the advanced forensic science laboratory. Limited to students accepted in the Forensic Science Graduate program or subject to the approval of the instructor if the student has the appropriate chemistry, calculus and physics courses required of students in the graduate forensic science program. —F. (F.) Land

240. Homicide Crime Scene Investigation (3)
  Lecture—2 hours; laboratory—3 hours. Restricted to Forensic Science Masters Program Students; enrollment is limited to 15 students per class. Processing and evaluating complex homicide scenes. Functions and activities of police agencies. Recognition, documentation, identification, and collection of evidence. Event sequence reconstruction. Evidence collection, preservation, report writing. Courtroom presentation. —F. (F.) S. Hopkins

263. Forensic Computer Science Investigations (3)
  Lecture—3 hours. Prerequisite: graduate student; consent of instructor. Restricted to students in the Forensic Science Graduate Program unless approved by instructor. Discuss the threats to the security of any kind of evidence that is captured, transmitted, or stored digitally and develop critical thinking and basic knowledge of computer forensic issues in the evaluation of digital evidence. —S. (S.)

268. Statistics in Forensic Science (3)
  Lecture—3 hours. Prerequisite: consent of instructor. Restricted to students enrolled in the M.S. in Forensic Science Program or by consent of Forensic Science Program Director. Statistics that are used by the forensic scientist, their limitations/applications in presenting evidential results, and the impact of DNA STR results, trace evidence correlation, fingerprint statistics, population sampling and the Bayes method. Offered in alternate years. —W. (W.)
277. Forensic Genetics; Next Generation Techniques and Applications (3)
Lecture—3 hours. Prerequisite: undergraduate courses in fundamental and applied principles of genetics, biochemistry, and molecular biology, or consent of instructor. Restricted to Forensic Science Graduate students and consent of instructor. Review organization/function of the human genome, recent developments, next generation sequencing techniques including the preparation of DNA samples, technology of the new generation sequencing assay formats and biochemical reactions. Will include quality control parameter, and bioinformatic approaches. Offered in alternate years.—F.

278. Molecular Techniques (3)
Lecture—3 hours. Prerequisite: graduate standing or consent of instructor. Recombinant DNA technology and its applications. [Same course as Environmental Toxicology 278.] Offered in alternate years.—F(J) Denison, Rice

280. Forensic DNA Analysis (3)
Lecture—3 hours. Prerequisite: coursework in genetics and molecular biology. Graduate standing; consent of instructor required for students not enrolled in the MS Forensic program. Foundation in theory and practice of forensic DNA analysis; past, present, and emerging technologies; legal and quality assurance issues; DNA extraction, DNA quantification, multiplex amplification of STR loci, capillary electrophoresis of amplified products, and analysis of STR typing data. [Same course as Environmental Toxicology 280.]—W(W) Von Beroldingen

281. Principles and Practice of Forensic Serology and DNA Analysis (3)
Lecture—2 hours; lecture/discussion—3 hours. Prerequisite: course/Environmental Toxicology 278 or course/Environmental Toxicology 280, or equivalent, and consent of instructor. Restricted to students enrolled in the M.S. in Forensic Science Program or by consent of Forensic Science Program Director. Comprehensive overview of forensic serology and DNA typing techniques and technologies. Strong emphasis on real-world applications, including preservation and tracking of biological evidence, detection and identification of bodily fluids, and methods to extract, quantify, and type human DNA. [Same course as Environmental Toxicology 281.]—S(J) Rodzen

283. Forensic Biology (3)
Lecture—3 hours; discussion—1 hour. Prerequisite: consent of instructor. Restricted to students enrolled in the M.S. in Forensic Science Program or by consent of the Forensic Science Program Director. Overview of the foundational concepts in forensic biology: chemistry and molecular biology of biological evidence, genetic basis of biological uniqueness, evolutionary basis of species differences, patterns and mechanisms underlying deterioration, and the legal/professional considerations associated with biological evidence.—W(W) Sensabaugh

284. Non-Human Forensic DNA—Theory and Casework Application (2)
Lecture—2 hours. Prerequisite: consent of instructor required for all students not enrolled in the MS Forensics program; upper division Molecular Biology and Genetics or its equivalent. Restricted to graduate standing; comprehensive understanding of plant and animal forensic biology in terms of sample collection, preservation, analytical methods, and of the invaluable lines of inquiry these forensic evidence may present. [Same course as Environmental Toxicology 284.] Offered in alternate years.—F.

289. Survey in Forensic Science (3)
Lecture—3 hours. Restricted to students enrolled in the M.S. in Forensic Science Program. Analytical methods and concepts in forensic science. Clandestine laboratories in California, crime scene management, examination and analysis of human hair, forensic ballistics/project trajectory reconstruction, shoe/tire print impressions, serial number restoration, forensic aspects of alcohol impairment, bloodstain pattern interpretation, microscopy of building materials, biological aspect of forensic science. May be repeated for credit when topics differ. Restricted to students enrolled in the M.S. in Forensic Science Program. [S/U grading only]—F(S, F, S) Hopkins

290. Seminar in Forensic Science (1-3)
Seminar—3 hours. Students will be exposed to topical areas in Forensic Science by presentations conducted by expert guest speakers. The seminar will also serve as a medium whereby the exiting students will present the research conducted as part of their thesis requirement. May be repeated for credit when topics differ. Restricted to students enrolled in the M.S. in Forensic Science Program. [S/U grading only]—F(W, S, F, S) Hopkins

290C. Graduate Research Conference in Forensic Science (1)
Independent study—1 hour. Restricted to students enrolled in the M.S. in Forensic Science Program. Individual and/or group conference on problems, progress and techniques in forensic science and research. May be repeated for credit when topics differ. Offered in alternate years. [S/U grading only]—F(W, S, F, S, W, S, F) Hopkins

293. Forensic Science Research Methodology (2)
Lecture—1.5 hour; extensive writing or discussion—0.5 hours. Restricted to students enrolled in the Graduate Forensic Science Program or by consent of the instructor. Introduction to identification, formulation, and solution of meaningful scientific problems encountered in the Forensic Science area including experimental design and/or theoretical analysis of new and prevailing techniques, theories and hypotheses. Students will present and defend their thesis research/journal article proposals. [S/U grading only]—W(W) Kimsey

298. Group Study in Forensic Science (1-5)
Restricted to students enrolled in the M.S. in Forensic Science Program. May be repeated for credit when topics differ. Offered irregularly. [S/U grading only]—F(W, S, F, S) Hopkins

299. Research in Forensic Science (1-12)
Prerequisite: consent of instructor. Restricted to students enrolled in the M.S. in Forensic Science Program. May be repeated for credit. [S/U grading only]—F(W, S, F, S) Hopkins

French
(College of Letters and Science)
Noah Guyon, Ph.D., Chairperson of the Department of French, 213 Sproul Hall, 530-752-1219, http://french.ucdavis.edu
Faculty
Jeff Fort, Ph.D., Associate Professor Claire Goldstein, Ph.D., Associate Professor Noah Guyon, Ph.D., Associate Professor Eric Russell, Ph.D., Associate Professor Julia Simon, Ph.D., Associate Professor Toby Warner, Ph.D., Assistant Professor
Emerti Faculty
Claude Abraham, Ph.D., Professor Emeritus Edward M. Bloomberg, Ph.D., Professor Emeritus Simone Clay, Ph.D., Lecturer Emerita Gerald Herman, Ph.D., Senior Lecturer Emeritus Margo R. Kaufman, Ph.D., Senior Lecturer Emeritus Manfred Kusch, Ph.D., Senior Lecturer Emeritus (Comparative Literature, French and Italian) Marshall Lindsay, Ph.D., Professor Emerita Maria I. Manoliu, Ph.D., Professor Emerita Michele Praeger, Ph.D., Professor Emerita Leslie Rabine, Ph.D., Professor Emerita (French, Italian, Women and Gender Studies) Ruth B. York, Ph.D., Senior Lecturer Emerita
The Major Program
The major program assures proficiency in all four of the language skills—speaking, understanding, reading, and writing—with students in an intellectual and cultural contributions of the French-speaking world through the study of its literature, traditions, and institutions.

The Program. The department encourages its students to work closely with an advisor in designing a major tailored to their needs and interests within the broad requirements prescribed by the program and to avail themselves of the guidance of an extern to their academic advisors. A substantial number of students with good preparation in French participate in the university’s very popular Education Abroad Program, which maintains centers in Bordeaux, France, and at the French Embassy in Washington, DC. Students may also participate in the UC Davis Study Abroad Program, which offers many opportunities for study in French-speaking countries and beyond.

Career Alternatives. Foreign language teachers, a cardiologist, a veterinarian, a naval commander at the Pentagon, a professor of Political Science, lawyers, sales representatives, journalists, a speech pathologist, a low professional translator, a senior applications programmer, travel agents, independent business owners, a senior museum curator, nurses, financial managers, stock brokers, and an industrial attaché for a French Trade Commission—all graduated with an A.B. in French from UC Davis. These represent only a small fraction of the career choices documented in a survey of department graduates.

A.B. Major Requirements:

Preparatory Subject Matter

French 1, 2, 3 (or the equivalent) 0.15
French 21, 22, 23 (or the equivalent) 0.15
Linguistics 1 or 4 .......................... 0.25

Depth Subject Matter

French 100 .................................. 0.25
Three French literature courses from among the following (at least one must be a pre-revolutionary literature; such courses are marked with an asterisk): 101, 102, 103, 119B, 119A, 119C, 119D, 120, 121, 124, 125, 130, 140, 141 .......................... 1.75
One French culture course from among the following: 107, 108, 127, 128, 129, 130, 133, 140, 141, 160, 161, 162, 163 .......................... 1.75


Total Units for the Major ................................................. 48-78

Major Adviser. T. Warner

Minor Program Requirements:

French 100 .................................. 0.25
One French literature course from among the following: 101, 102, 103, 115, 116, 117A, 117B, 118A, 118B, 119A, 119B, 119C, 120, 121, 124, 125, 130, 140, 141 .......................... 0.75
One French culture course from among the following: 107, 108, 127, 128, 129, 130, 133, 140, 141, 160, 161, 162, 163 .......................... 1.25
Two elective courses in French literature, language, or culture from among the following: 105, 109, 160, 161 .................................. 1.25

Honors Program. Candidates for high or highest honors in French must write a senior thesis under the direction of a faculty member. For this purpose, honors candidates must enroll in French 194H (4 units) and French 195H (4 units). Normally, a student will...