910. Modeling for Natural Resources Management
Spring, Fall of odd-numbered years. 3(3-2) Interdepartmental with Resource Development.
P: AEC 829. Simulation and optimization models for developing resource management strategies. Decision and policy analysis.

922. Theory of Resource and Environmental Economics
Spring, Fall of even-numbered years. 3(3-0) Interdepartmental with Agricultural Economics, Resource Development, Park and Recreation Resources, and Economics. Administered by Agricultural Economics.

930. Advanced Forest Genetics
Fall of odd-numbered years. 2(1-2) Interdepartmental with Agriculture, Crop and Soil Sciences.
P: HRT 819 or HRT 836. Applications of genetics, plant breeding, and biotechnology to the improvement and preservation of diversity of tree species.

941. Quantitative Genetics in Plant Breeding
Spring, Fall of even-numbered years. 3(3-0) Interdepartmental with Crop and Soil Sciences, and Horticulture.
P: CSS 450, S'IT 464. Theoretical genetic basis of plant breeding with emphasis on traits exhibiting continuous variation. Classical and contemporary approaches to the study and manipulation of quantitative trait loci.

943. Techniques of Analyzing Unbalanced Research Data
Spring, Fall of even-numbered years. 3(3-0) Interdepartmental with Animal Science, Crop and Soil Sciences, Horticulture, and Fisheries and Wildlife. Administered by Animal Science.
P: SIT 464. R: Open only to graduate students in the College of Agriculture and Natural Resources. Linear model techniques to analyze research data characterized by missing and unequal number of observations in classes. Simultaneous consideration of multiple factors. Estimable comparisons. Hypothesis testing. Computational strategies. Variance and covariance components. Breeding values.

976. Multivariate Methods in Agriculture and Natural Resources
Spring, Fall of even-numbered years. 3(3-0) Interdepartmental with Animal Science, Crop and Soil Sciences, and Fisheries and Wildlife.
P: SIT 422, MTH 314. R: Open only to graduate students in the College of Agriculture and Natural Resources and in the Interdepartmental Graduate Specializations in Ecology and Evolutionary Biology. Application of multivariate methods to research problems. Hotelling's T-test, profile analysis, discriminant analysis, canonical correlation, principal components, principal coordinates, correspondence analysis, and cluster analysis.

999. Doctoral Dissertation Research
Fall, Spring. Summer. 1 to 24 credits. A student may earn a maximum of 90 credits in all enrollments for this course.
P: Open only to Ph.D. students in Forestry.

FRENCH

Department of Romance and Classical Languages
College of Arts and Letters

101. Elementary French I
Fall, Spring. 4(4-1)
P: No previous experience in French or designated score on French placement test. Not open to students with credit in FRN 150. Practice in using and understanding French to develop listening, speaking, reading, and writing skills. Pronunciation, grammar, vocabulary, and cultural topics.

102. Elementary French II
Fall, Spring. 4(4-1)
P: FRN 101 or designated score on French placement test. R: Not open to students with credit in FRN 150. Further practice in using and understanding French to develop listening, speaking, reading, and writing skills. Pronunciation, grammar, vocabulary, and cultural topics.

150. Review of Elementary French
Fall, Spring. 3(3-1)
P:FRN 102 or FRN 150 or designated score on French placement test. Intermediate-level review and development of aural comprehension, speaking, reading, and writing skills. Topics in the cultures of the French-speaking world.

201. Second-Year French I
Fall, Spring. 4(4-0)
P: FRN 102 or FRN 150 or designated score on French placement test. R: Approval of department. Special projects arranged by individual student and a faculty member in areas supplementing regular course offerings.

202. Second-Year French II
Fall, Spring. 4(4-0)
P: FRN 201.

203. Independent Study
Fall, Spring. 1 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course.
P: Approval of department. Special projects arranged by individual student and a faculty member in areas supplementing regular course offerings.

320. Grammar and Composition
Fall, Spring. 3(3-0)

322. French Phonetics
Fall, Spring. 3(3-0)
P: FRN 202 or designated score on French placement test. Analysis of French pronunciation for listening and speaking.

340. Introduction to Reading French Literature
Fall, Spring. 3(3-0)
P: FRN 202 or designated score on French placement test. Close reading and interpretation of French drama, poetry, fiction, and other prose forms.

350. The Contemporary French Scene
Fall. 3(3-0)
P: FRN 220, FRN 340. Institutions, history, arts, and major sociopolitical issues of France and its former colonies from 1945 to the present, with an emphasis on the Fifth Republic; class conducted in French.

355. French Literature in English Translation
Fall of even-numbered years. 3(3-0)
P: Open to freshmen. Representative works and themes of French literature.

400. Reading French for Graduate Students
Fall, Spring. 3(3-0)
P: Open to graduate students needing a reading knowledge of the language.

410. Survey of French Literature I
Fall. 3(3-0)
P: FRN 320, FRN 340. French literature from the Middle Ages to the Enlightenment.

420. Survey of French Literature II
Spring. 3(3-0)
P: FRN 320, FRN 340. French literature from the Enlightenment to the present.

455. French Linguistics
Fall. 3(3-0)
P: FRN 320, FRN 330, LIN 401 or LIN 401. Key issues in French linguistics and contrastive structures of French and English.

465. Francophone Cultures and Civilizations
Spring. 3(3-0)

470. French Literature of the Middle Ages
Fall of even-numbered years. 3(3-0)
P: FRN 410, FRN 420. Major currents of the Middle Ages as reflected in the writings of representative authors of the period.

475. French Literature of the 18th Century
Spring of odd-numbered years. 3(3-0)
P: FRN 410, FRN 420. Literature reflecting major currents of the Renaissance and Reformation.

480. French Literature of the 17th Century
Fall of odd-numbered years. 3(3-0)
P: FRN 410, FRN 420. Literature reflecting major currents of the Baroque and classical periods.

485. French Literature of the 19th Century
Spring of even-numbered years. 3(3-0)
P: FRN 410, FRN 420. Literature reflecting major currents of the French Enlightenment.

470. French Literature of the 19th Century
Fall of even-numbered years. 3(3-0)
P: FRN 410, FRN 420. Literature reflecting major currents of nineteenth-century France.

French — Descriptions of Courses
475. **French Literature of the 20th Century**
Spring of odd-numbered years. 3(3-0)
P: FRN 410, FRN 420.
Literature reflecting major currents of the twentieth-century France.

480. **Literature of Quebec**
Fall of odd-numbered years. 3(3-0)
P: FRN 410, FRN 420.
Major works of Quebec literature from the seventeenth-century to the present.

485. **Francophone Literatures of the Third World**
Spring of even-numbered years. 3(3-0)
P: FRN 410, FRN 420.
Francophone literatures of West Africa, the Maghreb, Madagascar, the Caribbean, and Vietnam.

490. **Independent Study**
Fall, Spring. 1 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course.
R: Not open to freshmen and sophomores. Approval of department.
Special projects arranged by an individual student and a faculty member in areas supplementing regular course offerings.

491. **Special Topics in French**
Fall, Spring. 3(3-0)
R: Not open to freshmen and sophomores. Approval of department.
Special topics offering regular course offerings proposed by faculty on a group study basis.

801. **Methods of Research in French Literature**
Spring. 1(1-0)
Research tools in French literature.

805. **Evolution of the French Language**
Fall of even-numbered years. 3(3-0)
Diachronic examination of the phonological, morphological, and syntactic developments of French as it evolved from Latin.

806. **Topics in French Linguistics**
Spring of even-numbered years. 3(3-0)
A student may earn a maximum of 9 credits in all enrollments for this course.
Key issues in theoretical and applied French linguistics. Syntax, morphology, phonology, and semantics. Foreign language acquisition.

807. **Topics in the Development of French Culture**
Spring of odd-numbered years. 3(3-0)
A student may earn a maximum of 9 credits in all enrollments for this course.
French culture through the history of ideas, through the evolution of institutions, or through literature and the related arts.

810. **Studies in Medieval French Literature**
Spring of even-numbered years. 3(3-0)
A student may earn a maximum of 9 credits in all enrollments for this course.
Works of major writers of the French Middle Ages.

815. **Studies in 18th-Century French Literature**
Fall of odd-numbered years. 3(3-0)
A student may earn a maximum of 9 credits in all enrollments for this course.
Works of major prose writers and poets of the Renaissance and Reformation.

820. **French Literature of the 17th Century**
Spring of odd-numbered years. 3(3-0)
A student may earn a maximum of 9 credits in all enrollments for this course.
Works of major writers of the seventeenth century.

825. **Studies in 19th-Century French Literature**
Fall of odd-numbered years. 3(3-0)
A student may earn a maximum of 9 credits in all enrollments for this course.
Works of major writers of the French Enlightenment.

830. **Studies in 19th Century Literature**
Spring of even-numbered years. 3(3-0)
A student may earn a maximum of 9 credits in all enrollments for this course.
Major authors and selected topics in poetry, prose, and drama of the nineteenth century.

835. **Studies in 20th Century Literature**
Fall of odd-numbered years. 3(3-0)
A student may earn a maximum of 9 credits in all enrollments for this course.
Spiritual, intellectual, psychological, and aesthetic conflicts in texts with world-wide impact.

840. **French Quebecois Literature**
Spring of odd-numbered years. 3(3-0)
A student may earn a maximum of 9 credits in all enrollments for this course.
Leading figures, themes, and movements of Francophone literature outside France. The colonial period, Négritude, satiric, commitment and revolution, and problems of independence.

845. **Francophone Third World Literature**
Fall of odd-numbered years. 3(3-0)
A student may earn a maximum of 9 credits in all enrollments for this course.
Leading figures, themes, and movements of Francophone literatures outside France. The colonial period, Négritude, satire, commitment, revolution, and problems of independence.

890. **Independent Study**
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 9 credits in all enrollments for this course.
R: Approval of department.
Special projects, directed reading, and research arranged by an individual student and a faculty member in areas supplementing regular course offerings.

891. **Special Topics in French**
Fall, Spring, Summer. 3(3-0)
A student may earn a maximum of 9 credits in all enrollments for this course.
R: Approval of department.
Special topics supplementing regular course offerings proposed by faculty for graduate students on a group study basis.

899. **Doctoral Dissertation Research**
Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 24 credits in all enrollments for this course.
R: Approval of department.