

5020. Industrial Research. 2 hours. A study of industrial analytical techniques used to develop new products and new technologies, including the use of engineering software for design purposes.

5040. Analytical Methods for Engineering Technology. 3 hours. Procedures for confidently detecting variances from specification in manufactured products; applications of matrix manipulations for multivariate analysis, engineering applications of residues calculated from circular integrals, integration and differentiation of three-dimensional engineering functions.

5800-5810. Studies in Engineering Technology. 1–3 hours each. Organized classes specifically designed to accommodate the needs of students and the demands of program development that are not met by regular offerings. Short courses and workshops on specific topics, organized on a limited-offering basis, to be repeated only upon demand. May be repeated for credit.

5900-5910. Special Problems. 1–3 hours each. Open to graduate students capable of developing a problem independently.

5950. Master's Thesis. 3 or 6 hours. To be scheduled only with consent of department. 6 hours credit required. No credit assigned until thesis has been completed and filed with the graduate dean. Continuous enrollment required once work on thesis has begun. May be repeated for credit.

General Engineering Technology – see *Undergraduate Catalog*

Manufacturing Engineering Technology – see *Undergraduate Catalog*

Mechanical Engineering Technology, MEET

5030. Product Design and Development. 3 hours. Formal development of the process of designing a product, including ideas generation, engineering development, modeling and analysis, and project planning and management.

5100. Nontraditional Manufacturing Processes. 3 hours. Analysis of selected contemporary and emerging manufacturing/production processes utilizing high-level automation, productivity-enhancing technologies and/or specialty technologies; emphasis on process structure, organization, economics and application within the industrial environment.

5120. Computer-Integrated Manufacturing. 3 hours. (2;2) Computerization in manufacturing/production from an integrated systems perspective; emphasis on selected contemporary and emerging applications such as design/documentation, engineering analysis, process planning, machine tool programming, automated material handling and inspection, and factory networking.

5130. Product Reliability and Quality. 3 hours. Processes and techniques of assuring the quality of industrial products; reliability and maintainability, sampling probability and statistical process control; quality control management.

5150. Applications of Electron Microscopy and Failure Analysis. 3 hours. (2;2) Scanning and transmission electron microscopy applications in failure analysis will be discussed along with ductile, brittle, fatigue and corrosion related failure mechanisms. Applications of fracture mechanics, elevated temperature failures of welded and cast components will be discussed.

5800-5810. Studies in Engineering Technology. 1–3 hours. Organized classes specifically designed to accommodate the needs of students and the demands of program development that are not met by regular offerings. Short courses and workshops on specific topics, organized on a limited-offering basis, to be repeated only upon demand. May be repeated for credit.

5900-5910. Special Problems. 1–3 hours. Open to graduate students capable of developing a problem independently.

Nuclear Engineering Technology – see *Undergraduate Catalog*

English

English, ENGL

5000. Old English. 3 hours. A study of Old English grammar and phonology; the reading of selections from prose and poetry in West Saxon; a survey of the literature of the Old English period. Prerequisite(s): 12 semester hours in advanced English, including a course from Group D. See *Undergraduate Catalog* for Group D course listing.

5010. Beowulf. 3 hours. A study of *Beowulf*, its language and its place in the Germanic epic tradition; some attention to other heroic poetry. Prerequisite(s): ENGL 5000.

5030. Studies in Medieval Literature. 3 hours. A detailed study of the works of one or more of the major writers or literary genres of the medieval period in England, with a study of the major literary and social forces that helped to shape the cultural context of the period.

5100. Studies in British Literature of the Romantic Period. 3 hours. A detailed study of the work of one or more of the major Romantic poets, together with wide reading in the general literature of the period.

5140. Form and Theory: Poetry. 3 hours. Rhetorical criticism of poetry to show how poems achieve identification with the audience; emphasis on student mastery of critical analysis.

5145. Form and Theory: Prose. 3 hours. Rhetorical criticism of prose fiction to show how short stories and novels achieve effect.

5162. Creative Writing: Essay. 3 hours. A close analysis of the contemporary essay; writing of essays using rhetorical principles in conjunction with invention, humor and polemics. Prerequisite(s): by permission of the department.

5170. Rhetorical Theory. 3 hours. A consideration of rhetorical theory from the Greeks to modern times. Emphasis upon 20th-century advances and innovations. The relationship between literary criticism and rhetorical theory; persuasive techniques in literary discourse; the place of rhetorical theory in the teaching of writing.

5200. Studies in British Literature of the Victorian Period. 3 hours. A study of the works of one or more of the major British writers of the Victorian period and of the intellectual and philosophical interests of the time.

5250. Studies in British Literature of the Eighteenth Century. 3 hours. An appraisal of a significant group of writers or a literary genre of either the Restoration or the 18th century, together with attention to the historical, intellectual and social background.

5260. Studies in Nineteenth-Century British Literature. 3 hours. A detailed survey of the works of the Romantic and Victorian periods, with a general consideration of social and intellectual interests of the time.

5400. Studies in Shakespeare. 3 hours. An intensive study of selected plays and a consideration of some of the literary problems connected with Shakespeare's life and work.

5410. Studies in the British Renaissance. 1–4 hours. A study of the works of one or more major authors of the 16th and 17th centuries and of the intellectual, philosophical and religious life of the time.

5420. Creative Writing: Poetry. 3 hours. A study of the principles of poetic composition in traditional forms as well as free verse. Format includes lecture and workshop. Prerequisite(s): consent of the department.

5490. Studies in the Twentieth-Century British Novel. 3 hours. A detailed study of the writings of one or more major 20th-century British novelists, with consideration of relevant social and intellectual interests of the time.

5500. Studies in American Literature from the Beginning to 1800. 3 hours. A survey of the writings of major Colonial and Federalist American authors and a general consideration of the social and intellectual interests of the time.

5510. Studies in American Literature, 1800 to 1865. 3 hours. A detailed study of the writings of major authors and a general consideration of the social and intellectual interests of the time.

5520. Studies in American Literature, 1865 to 1914. 3 hours. A detailed study of the writings of major authors and a general consideration of the social and intellectual interests of the time.

5530. Studies in American Literature, 1914 to the Present. 3 hours. A detailed study of the writings of major authors and a general consideration of the social and intellectual interests of the time.

5540. Studies in Twentieth-Century British Literature. 3 hours. A detailed study of the complete writings of one or more major 20th-century British authors, with consideration of relevant social and intellectual interests of the time.

5550. Studies in the Teaching of Composition. 3 hours. Survey of current scholarly opinion concerning objectives and methods of instruction in written composition; supervised planning of the English curriculum, with special attention to problems related to teaching composition; development through practice of criteria for evaluating student composition. May be repeated for credit as topics vary. Either ENGL 5550 or ENTW 5550 is required for all new teaching fellows (offered every fall).

5560. Studies in the Teaching of Literature. 3 hours. Survey of current scholarly opinion concerning objectives and methods of teaching literature; supervised planning of the English curriculum, with special attention to problems related to the teaching of poetry, drama, prose fiction and prose non-fiction.

5570. Studies in the Teaching of the English Language. 3 hours. Survey of current scholarly opinion concerning objectives and methods of teaching grammar, vocabulary, semantics, usage and other aspects of language; supervised planning of the curriculum with special attention to problems related to the teaching of the English language in its spoken and written forms.

5600. Studies in European Literature. 3 hours. Study of a major period or movement in continental European literature; extensive reading in literature in translation and research in literary history and development, with emphasis upon relations to British and American literature.

5630. Semiotics. 3 hours. An introduction to the study of signs as signifiers of meaning in various genres.

5700. Classical Background of English and American Literature. 3 hours. A study of Greek and Latin literature in translation, with emphasis upon works that have strongly influenced English and American literature; research in literary and linguistic influences.

5710. Studies in Folklore. 3 hours. An introduction to the types of folklore, with emphasis upon cultural phenomena as reflected in tales, legends, proverbs and folk songs, and upon folklore motifs as bases for formal literature. Techniques of collecting, comparing and analyzing folklore.

5750. Bibliography and Methods of Research in Literature. 3 hours. An examination of the basic materials available for research in British and American literature; study of the conventions of presentation of material in scholarly writing; consideration of types of bibliography, problems in textual analysis and criticism, and methods of research in literary history and literary criticism.

5760. Scholarly and Critical Writing. 3 hours. Examination of the writing strategies entailed in preparing successful term papers, theses, dissertations and publishable articles.

5800. Studies in Literary Genres. 3 hours. A study of the historical development of one or more literary genres in American, English, continental or world literature, with attention to major practitioners in the genre and to the historical and literary influences on the form.

5810. Studies in Literary Criticism. 3 hours. A study of one or more major strains of critical emphasis, with special attention to those that have been influential in the 20th century.

5820. Creative Writing: Prose Fiction. 3 hours. A study of the principles of prose fiction as exemplified in published and unpublished works. Emphasis on writing for specific subgenres and methods of preparation and submission of work. Workshop format is employed. Prerequisite(s): by permission of the department.

5825. Screenwriting. 3 hours. A study of the principles of dramatic composition as applied to writing for the motion picture or television screen.

5890. Studies in the American Novel, 1914 to the Present. 3 hours. A detailed study of the writings of one or more major American novelists and a general consideration of the social and intellectual interests of the time.

5900-5910. Special Problems. 1–3 hours each. Conference course open to advanced students capable of doing independent research under the direction of the instructor. Registration permitted only when other graduate courses are not available and only upon the recommendation of the instructor and the consent of the department chair. A maximum of 3 semester hours credit is allowed for each course.

5920-5930. Research Problems in Lieu of Thesis (Original Scholarly Papers). 6 hours each. (0;0;6) Courses each require the composition of an original scholarly paper in the field of linguistics and/or English as a second language. Prerequisite(s): consent of department.

5950. Master's Thesis. 3 or 6 hours. To be scheduled only with consent of department. 6 hours credit required. No credit assigned until thesis has been completed and filed with the graduate dean. Continuous enrollment required once work on thesis has begun. May be repeated for credit.

5960-5970. English Institute. 1–6 hours each. For students accepted by the university as participants in special institute courses. May be repeated for credit but not to exceed 6 hours in each course.

6020. Seminar in Old and Middle English Language or Literature. 3 hours. A study in depth of a single writer, a group of writers, a literary genre or a literary fashion of the period; consideration of the cultural context of the literary work.

6200. Seminar in British Literature, 1500–1660. 3 hours. A study in depth of a single writer, a group of writers, a literary genre or a literary fashion of the period; consideration of the cultural context of the literary work.

6250. Seminar in British Literature, 1660–1780. 3 hours. A study in depth of a single writer, a group of writers, a literary genre or a literary fashion of the period; consideration of the cultural context of the literary work.

6410. Seminar in British Literature, 1780 to the Present.

3 hours. A study in depth of a single writer, a group of writers, a literary genre or a literary fashion of the period; consideration of the cultural context of the literary work.

6500. Seminar in American Literature to 1865. 3 hours. A study in depth of a single writer, a group of writers, a literary genre or a literary fashion of the period; consideration of the cultural context of the literary work.

6530. Seminar in American Literature, 1865 to the Present.

3 hours. A study in depth of a single writer, a group of writers, a literary genre or a literary fashion of the period; consideration of the cultural context of the literary work.

6590. Seminar in the Novel. 3 hours. A study in depth of a single novelist, a group of novelists, a literary genre or literary fashion of the period; consideration of the cultural context of the literary work.

6900-6910. Special Problems. 1–3 hours each. Conference course open to doctoral candidates doing independent research under the direction of the instructor.

6941-6942-6944. Directed Research. 1-12 hours each.

Doctoral research of an independent nature. May be repeated for credit.

6950. Doctoral Dissertation. 3, 6 or 9 hours. To be scheduled only with consent of department. 12 hours credit required. No credit assigned until dissertation has been completed and filed with the graduate dean. Doctoral students must maintain continuous enrollment in this course subsequent to passing qualifying examination for admission to candidacy. May be repeated for credit.

Linguistics, LING

5020. Studies in Historical Linguistics. 3 hours. Introduction to the study of language as it changes over time. Prerequisite(s): LING 4040 or 5040 or consent of instructor.

5040. Principles of Linguistics. 3 hours. General introduction to the core systems of the languages of the world, focusing on phonetics, phonology, morphology, syntax and semantics. Prerequisite(s): LING 3060 or consent of department.

5060. Second Language Acquisition. 3 hours. Covers a broad range of issues concerning the acquisition of second languages. Topics include L1-L2 differences, child-adult L2 differences, the teachability of grammar and models of L2 acquisition. Prerequisite(s): LING 5040 or consent of instructor.

5070. Bibliography and Methods of Research in Linguistics/ESL. 3 hours. Introduces new graduate students to the academic tools required for research in linguistics or ESL. Areas of focus include bibliographic reference and indexing sources, the structure of experimental writing, research design, corpus-based linguistic analysis and statistical analysis. Should be taken during first term/semester of study if possible.

5080. Teaching English as a Second Language. 3 hours. Current pedagogical theory affecting the teaching of English as a second language. Both theoretical and applied approaches are considered.

5090. Pedagogical English Grammar. 3 hours. Thorough study of the basics of English grammar (morphology and syntax) analyzed from traditional, descriptive and theoretical points of view. Emphasis on pedagogical problems.

5300. Phonology. 3 hours. Detailed study of phonology in terms of contemporary theories of linguistic analysis. Relates sound systems to phonetic universals and to other components of a complete grammar. Prerequisite(s): LING 4040 and 5040, or consent of instructor.

5310. Syntax. 3 hours. Detailed study of the morpho-syntax and semantics of English and selected non-Indo-European languages in terms of contemporary linguistic theory. Prerequisite(s): LING 4040 or 5040, or consent of instructor.

5320. Studies in Applied Linguistics. 3 hours. Application of the principles and findings of linguistic science to the solution of selected practical problems, particularly those related to pedagogy, such as linguistics and language teaching, ESL testing and research methodology. Prerequisite(s): consent of instructor. May be repeated for credit as topics vary.

5330. Sociolinguistics. 3 hours. Study of the relationship of language and society as shown in the following areas: the ethnography of speaking (analysis of discourse), language variation and social class, pidgin and creole languages, diglossia and multilingualism, ethnic varieties, language and sex, language policy and planning. Prerequisite(s): LING 4040 or 5040 or consent of instructor.

5340. Practicum in Teaching English as a Second Language. 3 hours. Practical experience in the design and implementation of ESL instruction, including actual practice in the teaching of English to speakers of other languages. Prerequisite(s): LING 4080 or 5080 or consent of instructor.

5350. Language Typology and Universals. 3 hours. Data-oriented comparison and classification of the languages of the world according to their morphological and syntactic characteristics (role relations, word order, causatives, relative clauses, comparison, etc.) Emphasis is on working through real data from many languages. Prerequisite(s): LING 4040 or 5040 or consent of instructor.

5360. Studies in Descriptive Linguistics. 3 hours. Intensive study of a selected topic on linguistic structure, such as psycholinguistics, sociolinguistics or typology. Prerequisite(s): consent of instructor. May be repeated for credit as topics vary.

5370. Linguistics and Composition. 3 hours. A linguistic and psycholinguistic analysis of the process and product of writing, including discourse analysis, the process of reading, the cognitive processes of writing and sociolinguistic variables.

5380. Linguistic Field Methods. 3 hours. Experience in the discovery of the phonology, morphology and syntax of a language through techniques of elicitation and analysis of data. Prerequisite(s): LING 4040 or 5040 or consent of instructor. May be repeated for credit.

5390. Psycholinguistics. 3 hours. Deals with a variety of formal cognitive mechanisms that are relevant to the knowledge and use of natural languages. Primary emphasis is on the modular view of the mind and its consequences for both L1 and L2 language acquisition. Prerequisite(s): LING 4040 or 5040 or consent of instructor.

5590. Linguistics and Literature. 3 hours. A study of theories and methods of interpretation in terms of contemporary linguistics. The course provides practical training in the application of linguistic methods to literary analysis. May be repeated for credit as topics vary.

5900-5910. Special Problems. 1–3 hours each. Conference course open to advanced students capable of doing independent research under the direction of the instructor. Registration permitted only when other graduate courses are not available and only upon the recommendation of the instructor and the consent of the department chair. A maximum of 3 semester hours credit is allowed for each course.

5920-5930. Research Problems in Lieu of Thesis (Original Scholarly Papers). 3–6 hours each. (0;0;3–6) Courses each require the composition of an original scholarly paper in the field of linguistics and/or English as a second language. Prerequisite(s): consent of department.

5950. Master's Thesis. 3 or 6 hours. To be scheduled only with consent of department. 6 hours credit required. No credit assigned until thesis has been completed and filed with the graduate dean. Continuous enrollment required once work on thesis has begun. May be repeated for credit.

Technical Writing, ENTW

5180. Professional Writing. 3 hours. The application of the principles of technical style to writing in specialized fields. Topics of special emphasis include writing in the fields of scientific, report and legal writing. May be repeated for credit as topics vary.

5185. Principles of Technical Writing. 3 hours. Practical application of technical and professional writing in industry, business and the sciences, using the workshop approach.

5190. Style and Technical Writing. 3 hours. A study of the principles of technical style with intensive practice in writing and analyzing technical prose.

5191. Technical Writing and the Computer. 3 hours. A study of the role of the computer in technical writing environments, with emphasis on writing software documentation. Analysis of the social, psychological and behavioral impact of computers in workplace settings; intensive study and practice in designing and writing various types of software documentation.

5195. Editing Technical Documents. 3 hours. A study of the rules governing technical editing. Intensive practice in editing technical, business, government and scientific documents.

5280. Designing Technical Documents. 3 hours. Study of the theory of designing effective technical documents. Intensive practice in applying the theory of designing technical documents in industry, business and the sciences.

5285. Technical Presentations. 3 hours. Practice in preparing and delivering technical information to technical and lay audiences and readers. Study of the theories that form the basis for preparing and delivering technical presentations.

5550. Studies in the Teaching of Technical Composition. 3 hours. Survey of current scholarly opinion concerning objectives and methods of instruction in written technical composition; supervised planning of the English curriculum, with special attention to problems related to teaching technical composition; development through criteria for evaluating student composition. May be repeated for credit as topics vary. Either ENTW 5550 or ENGL 5550 is required for all new teaching fellows (offered every fall).

5580. Theories in Composition. 3 hours. A study of composition theories, leading to the development of research techniques and compositional skills.

5640. Practicum in Technical Writing. 6 hours. An extensive independent writing project addressing a problem in business or industry. Students may develop the project while working on an internship. Prerequisite(s): completion of the required and elective courses and the minor.

5740. Research in Technical Writing. 3 hours. An examination of the basic materials available for research in technical writing; analysis and application of qualitative and quantitative methods of research in technical writing; evaluation of the application of research results within professional workplace settings; and practice in the conventions of reporting research results for publication.

5900-5910. Special Problems. 1–3 hours each. Conference course open to advanced students capable of doing independent research under the direction of the instructor. Registration permitted only when other graduate courses

are not available and only upon the recommendation of the instructor and the consent of the department chair. A maximum of 3 semester hours credit is allowed for each course.

5950. Master's Thesis. 3 or 6 hours. To be scheduled only with consent of department. 6 hours credit required. No credit assigned until thesis has been completed and filed with the graduate dean. Continuous enrollment required once work on thesis has begun. May be repeated for credit.

Ensembles, Music

see Music

Ethnomusicology, Music

see Music

Finance

see Finance, Insurance, Real Estate and Law

Finance, Insurance, Real Estate and Law

Business Law, BLAW

5050. Legal, Regulatory and Ethical Environment of Business. 1.5 hours. Introduction to the legal environment of business, with particular emphasis on managerial decision-making. Includes a study of the litigation process and constitutional law; selected areas of private and public law, including government regulation; international dimensions of the legal environment of business, business ethics and the social responsibility of business organizations. Business context is emphasized with a focus on individual and managerial decision-making in response to legal and ethical issues.

5400. Law for Accountants and Managers. 3 hours. A study of and practice in the technique of analyzing law problems and cases affecting accountants and managers. Topics include legal responsibility, business organizations, contracts, debtor-creditor relations, government regulation, uniform commercial code and property rights.

5600. Current Topics in Law. 3 hours. Designed to provide information on the legal environment of specified functional areas as required by need of functional areas and/or changes in the law. May be repeated for credit as topics vary.

5610. Legal Issues in Electronic Commerce. 3 hours. Part of the electronic commerce track in the MBA program. Examination of the emerging law, ethics and public policy applying to computer technology, the Internet, and electronic business and commerce. Prerequisite(s): BLAW 5050, or equivalent with approval of instructor.

5760. Insurance Law. 3 hours. Designed to lead the student into a study of fundamental legal doctrines and concepts applicable to the field of insurance. Includes contract law, parties to the contract, insurable interest, agency powers, waiver and estoppel, warranties, representations and concealments, the rights of the beneficiary and provisions controlling and limiting loss. Pertinent to the life-health and property-liability insurance areas.