THEA 449. London Theatre. 3 credits. Offered fall and spring.
Study of London theatre. Consideration given to current productions of classic and contemporary works. Emphasis on production elements including acting, directing, design, writing and economic considerations. Prerequisite: Semester-in-London students only.

THEA 450. The Open Studio: An Interdisciplinary Approach to Creative Arts. 3 credits.
Introduction to the interdisciplinary studio through discussion of the history of interdisciplinary art and exposure to contemporary examples from dance, theatre, music, creative writing, visual art, film and video. Emphasis on production of original work that evidences the use of another media or collaborative work by artists from different disciplines. Prerequisites: Permission of the instructor(s) and advanced skill level in one or more of the creative arts.

THEA 452. Acting III: Contemporary Scene Study. 3 credits. Offered fall.
Study of advanced acting technique through the analysis, discussion and presentation of contemporary scenes. Emphasis on developing tools to improve the pursuit of an intention, partnering and moment-to-moment work. Prerequisite: THEA 351 and permission of the instructor.

THEA 453. Acting IV: Approaches to Heightened Language. 3 credits. Offered spring.
Advanced study of script analysis and performance technique in multiple genres exploring heightened dramatic text. Exploration will be through individual and group assignments. Emphasis on practical tools including scansion, imagery work and the translation of text into active physical choices. Prerequisite: THEA 452 and permission of the instructor.

THEA 454. Advanced Music Theatre Performance. 2 credits. Offered spring.
Continuation of THEA 353 emphasizing more complex problems in music theatre performance including duets, trios, musical scenes. Prerequisite: THEA 353. Audition may be required.

THEA 455. Auditioning for Musical Theatre. 1 credit. Offered spring.
Advanced study of auditioning technique for the professional musical theatre. Emphasis on developing appropriate musical theatre audition repertoires. Unions, audition formats, performance opportunities, routes to a professional career, agents and managers will also be covered. Prerequisite: THEA 253. Audition may be required.

THEA 460. Auditioning and Professional Issues. 3 credits. Offered fall.
Study of advanced audition techniques for the stage. Emphasis on the selection, scoring and performance of monologues. Consideration of professional issues in regard to graduate-level study or professional work in performance. Prerequisite: THEA 453 or permission of the instructor.

THEA 466. Media Performance. 3 credits.
Study of the principles and techniques of dramatic performance for the camera and microphone. Emphasis on the adaptation of each student's performance ability to production and the recording and filming of narrative works. Consideration of the differing problems and potentials of stage, video and film presentations. Prerequisite: THEA 452 or permission of the instructor.

THEA/DANC 471. Stage Management. 3 credits.
Study and analysis of stage management. Consideration given to the methods and strategies for successful stage management for theatre, dance and other performances. Emphasis on developing management and organizational skills. Prerequisite: THEA 171.

THEA 473. Advanced Design and Rendering. 3 credits.
Advanced study in design for performance through theoretical production planning. Instruction in illustration and presentation methods necessary to communicate scenery, costume and lighting designs for performance. Emphasis is placed on the collaborative interaction between the production designers and the director or choreographer toward the creation of unified design.

THEA 481. Theory and Performance Studies. 3 credits. Offered spring.
Twentieth and 21st century theories and performance are studied and performance traditions outside of Europe are examined. Prerequisite: THEA 211.

THEA 485. American Theatre. 3 credits.
Study and analysis of the American theatre experience as presented in the dramatic literature of the country. Emphasis on basic American themes. Consideration of plays, playwrights and performers significant to the development of American theatre.

THEA 488. Experimental Theatre. 3 credits. Offered every other year.
Study of avant-garde theatre. Emphasis on motivating and guiding advanced students to a higher degree of aesthetic appreciation of the theatre. Consideration of the relationship of experimental theatre to the traditional theatre.

THEA 490. Special Studies in Theatre. 1-3 credits. Offered fall and spring.
An independent study for students to pursue individual research under the guidance of a faculty adviser. Prerequisites: Senior theatre majors in good standing and permission of the director.

THEA 495. Internship in Theatre. 3-6 credits. Offered fall and spring.
A faculty-arranged, prepared and monitored off-campus internship program designed to provide practical experience in theatre for students preparing for careers in those areas. Prerequisite: Permission of the director.

THEA 499. Honors in Theatre. 1-3 credits. Offered fall and spring.
Repeatable to a maximum of six credits. Offered fall and spring. Students enrolled for three credits are required to attend class meetings of THEA 441.

Vocational Education

College of Education

VOED 383. Curriculum and Instructional Procedures in Vocational Education. 3 credits.
The study and development of techniques and methods to provide vocational education instruction to secondary school students. Competencies to be developed will include planning for instruction, applying different methodologies and assessing student performance and progress. The relationship of vocational education to other curricular areas will also be addressed.

VOED 490. Special Studies in Vocational Education. 1-3 credits.
In-depth examination of selected topics that are current and relevant in the field of vocational education. Offered with the approval of the program director. Course may be repeated for credit when the content included changes.

Women's and Gender Studies

Cross Disciplinary Studies

WMST 200. Introduction to Women's and Gender Studies. 3 credits.
Cross disciplinary introduction to theories and scholarship in Women's Studies. Examines the social construction of gender, how gender affects access to opportunity, and the experiences and contributions of women throughout history. Provides a foundation for subsequent work in the Women's Studies minor.

WMST 300. Special Topics in Women's Studies. 3 credits. Offered fall and spring.
Examination of selected topics of importance to the field of women's studies.

WMST/JUST 341. Gender and Justice. 3 credits. Offered fall.
This course is an interdisciplinary examination of the causes, structure and consequences of gender oppression. Consistent with the social justice track of the major, notions of fairness, justice and equality with respect to gendered social, political and economic relations will be examined.

WMST/SOCM 348. Communication and Gender. 3 credits.
Study of theories and research regarding the influence of gender in various human communication contexts, both public and private. Emphasis on the critical analysis of existing theory and empirical research and the potential competent uses of communication for social change. Prerequisite: Any 100-level GCOM course.

WMST/PHIL 350. The Philosophy of Feminism. 3 credits.
An intermediate-level examination of philosophical problems in feminist theory and feminist contributions to philosophy.

WMST/ENG 368. Women's Literature. 3 credits.
A study of literature by women.

WMST/ENG 370. Queer Literature. 3 credits.
An exploration of texts and issues in literature written by and about gay and lesbian writers, including critical and theoretical issues as well as questions of canon. Text studied may include fiction, poetry, drama, essays and memoirs written primarily, but not exclusively, in the 20th century.

WMST 400. Issues and Research in Women's Studies. 3 credits.
The capstone seminar for the Women's Studies minor. Focuses on readings in feminist philosophy, history and literature. Students will engage in research in critical issues affecting women's lives. Prerequisites: WMST 200 and nine hours in the Women's Studies minor.

WMST/SOCM/WRTC 420. Feminist Rhetorics. 3 credits.
Surveys key women figures in classical and contemporary rhetorical traditions and challenges the strategies used to historicize this tradition from feminist perspectives. Explores diverse feminist rhetorical discourses informed by race, sexual orientation, ethnicity and social class. Prerequisite: Junior or senior standing.
WMST/ENG 466. Studies in Women's Literature. 3 credits. Advanced study of women's literary achievements in several cultural and historical contexts. May be focused by theme. Prerequisite: ENG 367 or ENG 368.

WMST/ISAT 485. Gender Studies in Science. 3 credits.
An interdisciplinary course that looks at the scientific process, science practitioners and science students through the lens of gender analysis. Students read literature, lead discussions, perform experiments and analyze both micro and macro processes to address the effects of educational systems on the preparation and careers of scientists, the influence of politics and culture on scientific inquiry, and the effects of critiques grounded in gender analyses on understanding the scientific process.

WMST 490. Independent Studies in Women's Studies. 3 credits.
Designed to give capable students in women's studies an opportunity to complete independent study under faculty supervision. Prerequisite: Admission by recommendation of the instructor and permission of the program coordinator.

WMST 492. Internship in Women's Studies. 1-3 credits.
Provides the student with practical experience in employing and refining women's studies concepts in a public or private agency, under faculty supervision. Prerequisite: Nine hours of women's studies courses, including WMST 200.

WMST 495. Special Topics in Women's Studies. 3 credits.
In-depth examination of selected topics of current importance to the field of women's studies. Offered only with approval of the program coordinator and dean of the College of Arts and Letters. May be repeated for credit when course content changes. Prerequisite: WMST 200 or consent of instructor.

Writing, Rhetoric and Technical Communication

School of Writing, Rhetoric and Technical Communication
WRTC 100. Reading and Writing Workshop. 3 credits. Offered fall.
An introduction to writing process and structure in a workshop setting. This is an elective course for students who want to select an introductory-level college writing course before taking WRTC 102.

WRTC 103. Critical Reading and Writing. 3 credits. Offered fall and spring.
The course emphasizes the process of constructing a focused, logical, coherent, well-supported thesis or point of view. The students will employ research and formal documentation to produce writing stylistically appropriate to its audience, purpose and occasion. The course also places emphasis on editing for clarity and control of conventions. Instruction in writing and research includes critical analysis of primary and secondary sources through a series of reading and writing assignments. Students are prepared to use reading and writing in their personal, academic and civic lives. WRTC 103, or its equivalent, fulfills the General Education Cluster One writing requirement and is a prerequisite for all WRTC courses numbered 200 or above. Formerly GWRT 103.

WRTC 200. Introduction to Studies in Writing, Rhetoric and Technical Communication. 3 credits. Offered fall and spring.
WRTC 200 introduces students to the field of writing, rhetoric, and technical communication. Emphasis is placed on the history of writing as a technology. Primary topics include the role of rhetoric in academic, professional, and public writing contexts; writing for digital environments; and writing for and designing print and online publications. Prerequisite: GWRTC 103 or equivalent or permission of instructor.

WRTC 210. Introduction to Technical and Scientific Communication. 3 credits. Offered fall and spring.
Introduction to the central components of technical and scientific communication, including technical summaries, definitions, descriptions, instructions, reports, correspondence and proposals. Examines the processes of planning, researching, producing and revising technical and scientific communications attuned to specific audiences and directed by clearly defined purposes. Prerequisite: GWRTC 102, GWRTC 103 or equivalent.

WRTC 211. Written Argumentation. 3 credits. Offered fall and spring.
An advanced course in the development and analysis of argumentative strategies across a range of academic, professional and popular writing contexts. Emphasis will be given to classical and contemporary rhetorical theory as applied to the cultural, historical, disciplinary and professional bases for written communication. Prerequisite: GWRTC 102, GWRTC 103 or equivalent.

WRTC 220. Rhetorical Traditions. 3 credits. Offered fall and spring.
An introduction to historical rhetoric and its relationship to reading, writing, and speaking in modern contexts. Emphasis will be placed on defining rhetoric — its traditions, terms, and enduring realms of influence. Prerequisite: GWRTC 102, GWRTC 103 or equivalent.

WRTC 230. Research in Technical and Scientific Communication. 3 credits. Offered fall and spring.
Introduction to research methodologies used in technical and scientific communication, covering techniques for collecting information or data through primary and secondary sources. Includes evaluation of information from print and online sources for accuracy, usefulness and credibility, as well as the skillful integration of source material into reports. Fulfills the College of Arts and Letters writing-intensive requirement for the major. Prerequisite: WRTC 200, WRTC 210, WRTC 211 or 220, or permission of instructor.

WRTC 240. Professional and Technical Editing. 3 credits. Offered fall and spring.
Introduction to the central responsibilities of editors when guiding a document through the editorial process, including establishing the need, purpose and scope of a document; developing levels of edit; copyediting; conducting substantive edits; determining document design; editing graphic aids; collaborating with authors; and proofreading. Prerequisite: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, or permission of instructor.

WRTC 250. Ethical and Legal Issues in Technical and Scientific Communication. 3 credits.
Study of the ethical and legal issues confronted by technical communicators in a range of fields. Examines the role of ethics in the field, the nexus of ethics and the law, ethical theories and critical thinking in moral reasoning, falsification of information or data, ownership of information, confidentiality, copyright and trademark laws, conflicts of interest, and causes of unethical behavior. Prerequisite: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, or permission of instructor.

WRTC/ENG 290. Intermediate Composition. 3 credits. Offered fall and spring.
This course stresses the argumentative and persuasive essay as well as grammar and usage. Prerequisites: GWRTC 103 or equivalent and junior or senior standing, or permission of instructor.

WRTC 295. Introduction to Popular Writing. 3 credits. Offered fall and spring.
This course provides a theoretical and practical overview of the growing field of popular writing. Students will analyze a broad range of genres -- including reviews, commentaries, profiles, blogs, and ads -- from a broad range of publications, including newspapers, magazines, and the Web, with the goal of acquiring a critical understanding of the rhetorical aims and practices of popular writing. Prerequisite: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, or permission of instructor.

WRTC 310. Studies in Literacy. 3 credits. Offered fall and spring.
An advanced research and writing course designed to explore the important role that literacy plays in society. Students will examine the concept of literacy through historical, political, sociological, educational and cross-cultural lenses. Prerequisites: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, or permission of instructor.

WRTC 311. Rhetorical Analysis. 3 credits.
Study of how writers and editors structure the semantics and syntax of language to achieve rhetorical objectives. Emphasizes extensive textual analysis and application of effective rhetorical principles. Prerequisite: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, or permission of instructor.

WRTC 320. Writing in the Public Sphere. 3 credits. Offered fall and spring.
Students will conduct a rhetorical examination of written texts that influenced and brought about change in the public sphere. Prerequisite: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, or permission of instructor.

WRTC 322. Making a Difference: Service Learning Writing. 3 credits. Offered fall.
Using readings and community service, this course explores political and social activism at the community level through writing and rhetoric. Combines theory and writing with hands-on service projects. Prerequisites: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, or permission of instructor.

WRTC 325. Rhetoric of the Personal Narrative. 3 credits. Offered fall or spring.
Examination of the rhetorical elements of personal narrative. Students will read examples of personal narratives ranging from essays to longer memoirs and autobiographies, in order to examine questions related to purpose, audience, voice, and style. Discussion will include what makes a piece of writing personal, what makes it a narrative, and what makes it effective. Prerequisite: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, or permission of instructor.

http://www.jmu.edu/catalog/11
WRTC 330. Intercultural Technical and Scientific Communication. 3 credits.
Introduction to effects of culture on technical and scientific communication, both in print and online, including a consideration of audience, context, language, page or screen design, graphics and use of color. Examines basic models of culture used in intercultural communication and cultural communication considerations, teamwork and translation issues. Prerequisite: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, or permission of instructor.

WRTC 331. Technology, Literacy and Culture. 3 credits. Offered once a year.
An advanced research and writing course that explores the intersections of technology, literacy and society. Students will examine the influences of past, present and future technological innovations on our practices as readers and writers. Students may have the opportunity to compose in hypertext and multi-media environments. This course is writing-intensive. Prerequisite: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, or permission of instructor.

WRTC 335. Writing Place. 3 credits. Offered once per year.
This course examines the relationship between language and location by analyzing print and virtual rhetorics of the social and natural environment. Students will learn about the rhetorical tradition of place-centered expression and the importance of place in society. Prerequisite: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, or permission of instructor.

WRTC 340. Teaching Writing. 3 credits. Offered fall and spring.
The course introduces students to the major philosophies, theories, and pedagogies of teaching writing. Special attention is devoted to such practical matters as understanding and developing effective writing assignments, methods of responding to student texts in-progress and evaluating writing. Prerequisite: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, or permission of instructor.

WRTC 341. Composing Processes. 3 credits. Offered fall or spring.
Students will learn current composing theories through reading and responding to the major theorists in the field. Students will study the foundational principles of writing processes as applicable to pedagogical, academic, and professional contexts. Prerequisite: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, or permission of instructor.

WRTC/SCOM 343. Contemporary Rhetorical Theory and Practice. 3 credits. Offered once a year.
A research-infused course that familiarizes students with the major theories, trends and figures in contemporary rhetoric. Students will study the foundational principles of contemporary rhetorical theory and their applications in academic, professional and civic contexts. Prerequisites: GWRTC 103 or equivalent and junior or senior standing, or permission of instructor.

WRTC 345. Tutoring Writing. 3 credits. Offered fall and spring.
This writing-intensive course integrates the theory and practice of tutoring writing in academic settings and is suited for preparing tutors and teachers who will use writing across the disciplines. The course includes an internship in a campus writing center and provides students opportunities to develop as writers, scholars and professionals. Students will be eligible for, but not guaranteed, employment in a university writing center. Prerequisite: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, or permission of instructor.

WRTC 350. Science, Technology and Literature. 3 credits.
Exploration of the ongoing dialogue between science, technology and literature through the reading of literary responses to the effects of such technologies and resulting social phenomena as machine production, urbanization, quantum mechanics, computerization, genetic engineering and the alienation of the worker. Prerequisite: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, or permission of instructor.

WRTC/SCOM 351. Visual Rhetoric. 3 credits. Offered fall and spring.
A study of the rhetorical foundations of visual and verbal arguments in academic disciplines and popular culture. Students will analyze and produce print and visual arguments in a variety of rhetorical contexts. Prerequisites: GWRTC 103 or equivalent and junior/senior status or permission of the instructor.

WRTC 355. Digital Rhetoric. 3 credits.
A research and writing intensive course devoted to the theory and practice of rhetoric in digital environments. Students will examine current philosophies and approaches to digital and multimedia composing and develop multimedia, multi-genre, and interactive works. Prerequisite: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, or permission of instructor.

WRTC 380. Instructional Design and Training. 3 credits.
Introduction to principles of instructional design, especially as they are applied to technical and scientific training programs in the public and private sector. Emphasizes audience analysis, client relations, oral presentation skills, training tools, integration of visual aids and evaluation techniques. Includes both online and in-person approaches to training. Prerequisites: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, or permission of instructor.

WRTC 380. Writing as Leading. 3 credits.
Students will learn about contemporary leadership theories as they apply to writing and will apply these principles and techniques to their own writing. The course will explore how writers lead readers and how leaders employ writing and use writers to influence their audiences. Students will gain experience writing in typical leadership genres, such as the position paper and the op-ed piece. Prerequisite: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, or permission of instructor.

WRTC 395. Practicum. 1-2 credits per semester; repeatable up to 6 credits.
Students will engage in practical experience opportunities in the field of Writing. Rhetoric and Technical Communication. Students may apply no more than three practicum credit hours toward completion of WRTC major or minor requirements. Prerequisite: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, and permission of instructor.

WRTC/ENG 396. Advanced Composition. 3 credits. Offered fall and spring.
Extensive exercises in expository writing, with emphasis on rhetorical types of composition, designed to develop sophistication of style in the student's writing. Prerequisite: GWRTC 103 or equivalent and junior or senior standing, or permission of instructor.

WRTC 410. Government Writing. 3 credits.
Study of writing genres from a variety of fields within government. Examines the purposes, audiences and formats unique to government publications. Directs students in writing original and editing existing government documents. Prerequisite: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, or permission of instructor.

WRTC 411. Legal Writing. 3 credits.
Study of central components of legal writing, such as the use of legal search tools; representation of facts and evidence; statutory and secondary authority; legal periodicals; citation form, and drafting letters, memoranda, and case briefs. Addresses such key rhetorical elements of legal documents as clarity and conciseness of style, coherent and unified organization, level of diction, jargon, passive voice and errors in person. Prerequisite: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, or permission of instructor.

WRTC 412. Medical Writing. 3 credits.
Study of the theory and practice of writing about technical and scientific information in medical and health science fields. Examines the role of the medical writer in medical and health care professions, the ethical issues involved in medical writing, and writing clear and concise documentation. Emphasizes writing about medical practices for non technical audiences such as patients and their families. Prerequisite: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, or permission of instructor.

WRTC 413. Proposal Writing. 3 credits.
Study of the planning and writing of proposals with emphasis on informal (i.e., business) proposals. Covers proposal strategies that address central components of a successful proposal. Students work on real and client-based proposals. Prerequisite: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, or permission of instructor.

WRTC/SCOM/WMST 420. Feminist Rhetorics. 3 credits.
Surveys key women figures in classical and contemporary rhetorical traditions and challenges the strategies used to historicize this tradition from feminist perspectives. Explores diverse feminist rhetorical discourses informed by race, sexual orientation, ethnicity and social class. Prerequisites: GWRTC 103 or equivalent and junior/senior status or permission of the instructor.

WRTC 421. Studies in Cultural Rhetorics. 3 credits. Offered fall and spring.
This course will investigate the ways in which definitions of our identity (including class, gender, race and ethnicity, sexuality, nature, and religion, among others) acquire cultural significance through written and symbolic expression. Students will examine a variety of different "texts" from a range of theoretical perspectives. Prerequisite: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, or permission of instructor.
WRTC 430. Studies in Style and Stylistics. 3 credits.
An advanced writing intensive study of stylistic history, theory and practice. The course acquaints students with the origins and history of different writing styles, current stylistic theory and practice, and gives them the opportunity to write in different styles, including experimental ones. Students will analyze the relationship between rhetoric and writing style and analyze and produce stylistically diverse pieces of academic, public, and personal writing. Prerequisite: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, or permission of instructor.

WRTC 435. Genre Theory. 3 Credits. Offered once per year.
Students will be introduced to key concepts and principles of genre theory, specifically as taken up by scholars and practitioners of writing, rhetoric, and technical communication. Students will investigate both academic and nonacademic genres and explore different purposes for writing in a range of appropriate genres. Prerequisite: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, or permission of instructor.

WRTC 450. User Documentation. 3 credits.
Study of theory and practice on computer documentation for end users. Emphasizes documentation design and production, online documentation, usability testing, and writing of users' guides. Prerequisite: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, or permission of instructor.

WRTC 451. Publications Management. 3 credits.
This course addresses the management, preparation and editorial policy of professional publications. The class will work collaboratively to examine managerial and editorial responsibilities such as defining editorial policy, defining management roles, creating document publication schedules, reviewing and editing submissions for publication, and collaborating with authors. Basic page preparation in Adobe InDesign and project planning using Microsoft Project will also be covered. Prerequisite: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, or permission of instructor.

WRTC 452. Student Publications. 3 credits.
Addresses the management, preparation and editorial policy of professional publications, with an emphasis on participation in the creation of significant technical communication work. Students collaborate on editorial policy and management roles, create publication schedules, review and edit submissions for publication, and collaborate with authors. Students will use Microsoft Project. Prerequisite: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, or permission of instructor.

WRTC 455. Managerial and Entrepreneurial Communication. 3 credits.
Advanced study of the function of technical communication in management. Students learn to conduct research about business cultures and to select communication channels for technical and scientific messages. Students develop communications for supervising, managing, and representing technical and scientific communication units within various types of industrial and knowledge development organizations. They learn to measure and communicate the value added to an organization through technical communication. Prerequisite: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, or permission of instructor.

WRTC 460. Beginning Topics in Online Publication. 3 credits.
Beginning study and creation of online publications, including Web sites. Emphasizes principles in designing and coding. Prerequisite: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, or permission of instructor.

WRTC 461. Intermediate Topics in Online Publication. 3 credits.
Intermediate study of online publications, building upon the skills and knowledge gained in WRTC 460. Emphasizes the tools for creating, assessing and maintaining electronic data. Prerequisite: WRTC 460 or approval of the instructor.

WRTC 462. Advanced Topics in Online Publication. 3 credits.
Advanced study of online publications. Emphasizes advanced design and coding techniques using current materials and skills. Prerequisite: WRTC 461 or approval of the instructor.

WRTC/SCOM 465. Rhetoric of Environmental Science and Technology. 3 credits.
This course offers an advanced study of the way the public receives, makes sense of, and influences scientific and technical information about environmental issues. Implications of these processes on environmental policy will be analyzed. Readings and assignments will concentrate on the interactions between technical and public spheres of communication, with an in-depth examination of the way the media facilitates the transfer of information between scientific communities and public audiences. Prerequisite: WRTC 103 or equivalent and junior or senior standing, or permission of the instructor.

WRTC 480. Special Topics in Technical and Scientific Communication. 3 credits.
A focused, in-depth study of specific areas or subjects in writing, rhetoric, and technical communication. Topics may pertain to issues relevant to the discipline, to the study of particular theories and practices, or to the study of significant figures in the field. Seminars may be repeated for credit when course content changes. Prerequisite: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, or permission of instructor.

WRTC 481. Beginning Web Theory and Design. 3 credits.
Beginning study of Web theory and design, such as audience, purpose, structure, accessibility, content and its components, design and its components, and usability. Emphasizes design principles for online technical publications. Prerequisite: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, or permission of instructor.

WRTC 482. Advanced Web Theory and Design. 3 credits.
Advanced study of Web theory and design. Focuses on the business of Web design. Emphasizes theories of evaluating, revising and maintaining Web sites; searching for the Web developer job; negotiating client contracts; creating the Web team; managing the Web project; and learning the advantages and disadvantages of various technological tools technical communicators use on the job. Prerequisite: WRTC 481 or approval of the instructor.

WRTC 490. Advanced Independent Study in Writing, Rhetoric and Technical Communication. 3 credits.
Individualized projects in writing, rhetoric, and technical communication. Available only to junior or senior majors, though exceptions may be made at the directors discretion. May be repeated with the director's approval when course content changes. Prerequisites: WRTC 220 or WRTC 230, and WRTC 240, or permission of the instructor.

WRTC 495. Internship in Writing, Rhetoric and Technical Communication. 3 credits.
Designed to allow students to incorporate field experience with WRTC courses work through internships in government, business, industry, or education where they can observe communication processes and apply effective written, interpersonal, and public communication skills. Prerequisite: WRTC 200, WRTC 210, WRTC 211 or WRTC 220, or permission of instructor.

WRTC 499. Honors. 6 credits. Offered fall and spring.
Year course.