Approved Writing Intensive Courses

School of Science & Engineering

BMEN 4900-4910 Biomedical Research and Professional Practice I and II (2,2)
This course introduces the tools, techniques, and rules necessary to function professionally as a researcher or engineer. Topics include economic analysis, ethics, professional communication including writing and oral presentation, research techniques including literature searching, citation, and the structure of a scientific paper. An integral part of the course is a year-long research or design project under the direction of a faculty member or other scientist or professional. This culminates in a Senior Thesis and a presentation in Departmental Seminar.

CELL 4260 Principals of Biomedical Writing (3) (Capstone)
Prerequisites: CELL 3010 or CELL 3110 or CELL 4010. An examination of various types of scientific literature, scientific writing and presentation. Exploration of scientific databases such as PubMed. Emphasis on critical reading of scientific literature and writing in a scientific style. Also satisfies writing intensive requirement.

CELL H4990-H5000 Honors Thesis (3, 4)
Staff. For juniors and seniors with approval of department and the Honors Committee. Students who complete H499 and H500 with the preparation of a senior thesis may be recommended to the college for the award of degree with departmental honors.

CENG 3240 Unit Operations Lab I (4) Laboratory.
Prerequisites: CENG 2110, 2120, 2320, and 3330. Bench scale laboratory experiments in Unit Operations. Report writing, safety, oral presentations, ethics and group activities are emphasized.

CENG H4990-H500 Honors Thesis (3)
Admission by department and Honors Committee approval.

CHEM H4990-H5000 Honors Thesis (3, 4)
For senior honors candidates. May be substituted for 4010 and 4020, respectively.

COLQ 4120 - The Grand Canyon (3)
Staff. A study of the anthropology, archaeology, biology, geology, and history of the southern Colorado plateau region, especially the Grand Canyon. Lectures, readings, and research paper followed by a post-semester, eight-day float trip through the Marble and Grand Canyons. Note: Open to first-year students through seniors.

EENS H4990-H5000 Honors Thesis (3, 4)
Staff. Open to seniors in the Tulane Honors Program. Culminating in a defended thesis based on substantial independent research overseen by a faculty advisor.

EBIO 3190 Darwin and Darwinism (4)
Prerequisite: approval of instructor. A consideration of Charles Darwin's theory of Natural Selection, including the history of evolutionary thought before Darwin’s time, the circumstances surrounding Darwin’s research, and the effect of Darwin’s ideas on the development of
contemporary biology. Readings, discussions, and written assignments. Satisfies the LAS writing requirement.

**EBIO 3690 - Experimental Animal Behavior (4)**
Karubian. This course provides students the opportunity to design, implement, and write-up an independent research project related to behavioral ecology. Research will be conducted on live animals at the Audubon Zoo. The course will emphasize general principles of experimental design; the collection, organization and analysis of data; and written and oral presentation of results. The course consists of 3 hours of laboratory per week and 2 hours of seminar per week, all at the zoo. Note: Fulfills the college intensive-writing requirement. (Same as PSYC 3690.)

**EBIO H4990-H5000 Honors Thesis (3, 4)**
Staff. For especially qualified juniors and seniors with approval of department and the Honors Committee. Note: Satisfies the Capstone Requirement

**MATH 3980-3990 Seminar in Mathematics (1, 3)**
Prerequisites: MATH 3050, 3090, and two additional courses at the 300-level or above. Under faculty guidance, students will select a topic in current mathematical research, write an expository article on that topic, and give an oral presentation. This seminar is required of all mathematics majors who are not doing an Honors Project within the department. Completion of 398 and 399 fulfills the college intensive-writing requirement.

**MATH H4990-H5000 Honors Thesis (3, 4)**
Prerequisite: approval of the department. Thesis may serve to satisfy part of the departmental honors requirements.

**NSCI 4512 Memory Systems of the Brain (3)**
Prof. Colombo. Pre-requisite: NSCI/PSYC 3300 or approval of instructor. In this writing-intensive Honors Seminar, students read and discuss empirical and theoretical works on neural systems specialized for memory, with emphasis on interactions among systems. Writing assignments include experimental proposals and reviews. Same as PSYC 4512.

**NSCI 4513 Music and the Brain (3)**
Pre-requisite: PSYC/NSCI 3300. An introduction to current research linking music education to brain development and function. Fulfills writing intensive and service learning requirements. Same as PSYC 4513.

**NSCI 4515 Biological Psychology Laboratory (1)**
Corequisite: NSCI/PSYC 4510. Prerequisite: PSYC 3090. A laboratory course providing training in behavioral and neurobiological methods, experimental design, data collection and analysis and preparation of research reports. Satisfies psychology and neuroscience laboratory requirement. Fulfills college laboratory and writing requirements. Same as PSYC 4515.

**NSCI H4990, H5000 Honors Thesis (3, 4)**
Admission by department and Honors Committee approval.
PSYC  4512 Memory Systems of the Brain (3)
Prof. Colombo. Pre-requisite: NSCI/PSYC 3300 or approval of instructor. In this writing-intensive Honors Seminar, students read and discuss empirical and theoretical works on neural systems specialized for memory, with emphasis on interactions among systems. Writing assignments include experimental proposals and reviews. Same as NSCI 4512.

PSYC  4513 Music and the Brain (3)
Pre-requisite: PSYC/NSCI 3300. An introduction to current research linking music education to brain development and function. Fulfills writing intensive and service learning requirements. Same as NSCI 4513.

PSYC  4515 Biological Psychology Laboratory (1)
Corequisite: PSYC/NSCI 4510. Prerequisite: PSYC 3090. A laboratory course providing training in behavioral and neurobiological methods, experimental design, data collection and analysis and preparation of research reports. Satisfies psychology and neuroscience laboratory requirement. Fulfills college laboratory and writing requirements. Same as NSCI 4515

PSYC H4990-H5000 Honors Thesis (3, 4)
Staff. For senior honors candidates. Open only to candidates for honors degrees with department approval. Intensive reading and research related to the topic of the thesis.