Mastery	Outcomes	Assessment Tools
Written Communications	Students must demonstrate their writing competency by passing the Exit Examination of Writing Proficiency (EEWP). This requires students to write an essay that reflects critical thinking on a complex topic and a maturity of expression, including a varied syntax and vocabulary appropriate to the task. The essay will be reasonably free from mechanical errors. Specific competencies include the ability to write an essay that includes the following components: 1. A clearly stated objective; 2. Ability to present supporting evidence; 3. Clarity in sentence structure and word choice; 4. Logical consistency; and 5. Reasonable freedom from mechanical errors.	The EEWP is a three-hour proctored essay examination. It is given eleven times per calendar year. When students register for the exam, they are given a list of topics for the examination. There are 3 general topics and 2 topics from a list for the colleges. Students chose 2 topics from the list two to four weeks in advance of their scheduled test date. From the 2, the student then chooses the topic he/she wishes to address in the essay. Two trained evaluators evaluate every essay exam. Overall competency is demonstrated by a score of at least three (3) – Satisfactory – on each of the five essay criteria listed in the Outcomes column. The scoring values used for these criteria are 4=Very Good; 3=Satisfactory; 2=Unsatisfactory; and 1=Poor. In the event of disagreement on whether the student has achieved passing scores on each of the criteria, the exam is sent to a third evaluator. Passing the exam is a condition to graduating, and the student may take the exam as many time as necessary to achieve a passing score.
Technology/Information Literacy	Goals in Old Dominion University's General Education program include computer competence and developing an understanding of the impact of technology on society. The means to accomplish these goals and objectives is defined as the Computer Skills Requirements in the University Catalog. The Computer Skills Requirement is intended to have students acquire the following 5 competencies: 1. Systems Hardware; 1. System Software; 1. Application Software; 1. Telecommunications; and	By coursework and examination. Overall competency is demonstrated by a grade of "pass" on each of the five competency sections of the Computer and Technological Literacy Examination (CTLE), a newly designed common examination. It is administered to all students enrolled in 3 lower-division courses approved to fulfill the General Education Program's Computer Skills Requirement.

	5. Computers and Society. Detailed definitions and descriptions of each competency and 5 to seven specific skills in each are in an appendix. All undergraduate students are required to demonstrate that they can use computer tools, resources, processes, and systems effectively and responsibly. They are expected to be able to ethically access and evaluate information, in any medium, and use that information to solve problems, communicate clearly, make informed decisions, and construct new knowledge, products, or systems.	

Quantitative Reasoning	The mission and goals of Old Dominion University require that every Old Dominion undergraduate student follow a general education program that is designed to develop the intellectual skills of critical thinking and problem solving and to encompass the breadth of understanding needed for personal growth and achievement and for responsible citizenship. One of the goals of the General Education Program is to develop basic mathematical competence. Basic mathematical competence requires competence in quantitative reasoning. Competency in quantitative reasoning is defined by the following 5 skills and abilities: 1. Logical Reasoning; 2. Computational Skills; 3. Data Interpretation; 4. Problem Solving; and 5. Quantitative Modeling.	A set of 20 multiple-choice questions is given as part of the final exam in 3 courses that satisfy the University's General Education Requirement in Mathematics. The 3 courses are: 1. MATH 102, College Algebra; 2. MATH 162, Precalculus; and 3. STAT 130, Elementary Statistics. There is a different set of 20 questions for each course to reflect the content of that course. On each final exam, each of the 5 quantitative reasoning competencies is examined by 4 multiple-choice questions. Students score "high" competency with a score of 17-20 (85-100%) and satisfactory with a score of 12-16 (60-80%). In addition, the student must correctly answer 2 of the 4 questions in each of the 5 areas and pass the course. A score of 0-11 indicates that the student has not shown adequate competency in quantitative reasoning.
Scientific Reasoning	The goals of Old Dominion University's General Education Program include the establishment of competency in the natural sciences. In a two-course natural science sequence (including laboratory), students "are introduced to the disciplines and methods of science and develop the abilities to make reasoned judgments based on scientific and technological considerations." Natural science courses are defined as Biology, Chemistry, Geology, Oceanography, and Physics. In addition to the above courses, students are required to take a third course in a second natural science or technology area. Scientific reasoning is characterized by adherence to a self-correcting system of inquiry that relies on empirical evidence and testable theory to describe, understand, predict and control natural phenomena. Specific competencies include the ability to:	A new methodology was devised in 2003-2004 and a pilot study was conducted during the spring 2004. The new methodology involves embedding the measure(s) in the 5 natural science courses designed to meet students' general education requirements. Faculty within each discipline responsible for the courses designed a test of the three competencies to be administered as part of the final exam in the course. Each test will be a 9-12 item multiple-choice examination with 3-4 items measuring each competency. Students who correctly answer 60% of the items and pass the course will be considered competent in scientific reasoning. The Office of Institutional Research will independently score the examination(s). The 2 courses chosen for the pilot were a chemistry course required for science and engineering majors and

	1. Draw conclusions based on valid evidence or proof; 2. Use the process of scientific reasoning; and 3. Use scientific results to reach appropriate conclusions.	a general education Oceanography course designed for non-science majors. Science majors out-performed the non-science majors significantly, suggesting that non-science majors need an increased emphasis on scientific reasoning.
Oral Communications (2006)		
Critical Thinking (2006)		