VIRGINIA STATE UNIVERSITY

Competency [Year(s) Assessed]	Definition	Standards	Description of Methodology
Quantitative Reasoning 2011-2012	Quantitative reasoning is defined as the ability to perform mathematical operations and apply the logic of mathematics to the functions of daily life and professional work. Students are expected to demonstrate the knowledge and skills reflected the following quantitative reasoning requirements developed by the Mathematical Association of America (MAA): • Interpret mathematical models such as formulas, graphs, tables, and schematics and draw inferences from them. • Represent mathematical information symbolically, visually, numerically, and verbally. • Use arithmetical, algebraic, geometric, and statistical methods to solve problems. • Estimate and check answers to mathematical problems in order to determine reasonableness, identify alternatives, and select optimal results. • Recognize that mathematical and statistical methods have limits.	During the summer of 2010, Virginia State University developed the first iteration of a quantitative reasoning assessment instrument. That instrument will be refined and developed further in summer 2011. The University will continue to pilot test the instrument to ensure that it is valid and reliable. Until sufficient analysis is completed, a cut-off score of 60 percent correct on the quantitative reasoning items will serve as the competency criterion.	The longitudinal repeated-measures approach will be applied to the assessment of the scientific reasoning core competency. First time freshmen are tested at the beginning of the academic year to obtain pretest scores. Post-test scores are obtained from this cohort of students as juniors after they have earned between 60 and 89 semester hours. (This range of credit hours is subject to change for the 2012-2013 academic year.) The pretest group consists of approximately 1300 first time freshmen. The post-test group consists of members of the freshman cohort who will have earned between 60 and 89 semester hours within two to three years. Based on previous cohorts, this group should consist of approximately 50-55 percent of the original group of freshmen. Transfer students who enter VSU with less than 24 semester hours will be included in both the pretest and post-test groups. Students who transfer to VSU with 30 more semester hours are not administered the pretest. Both the pretest and post-test are

			administered in a single setting in a controlled environment. In both instances, students are assigned to testing rooms where they are tested under the same conditions. The value added should be reflected as gains between pretest and post-test scores among students in the cohort. The scores of cohort members as juniors are expected to higher than their scores as freshmen.
Scientific Reasoning 2011-2012	Scientific reasoning is defined as the ability of students to demonstrate an understanding of the structure of science, conceptual schemes and procedures employed in scientific investigation, types of reasoning used to reach conclusions, the procedures used to verify the validity of conclusions. Undergraduate students at Virginia State University are expected to develop scientific reasoning competencies through the general education program by achieving the learning objectives listed below. The student will: • Identify the basic assumptions underlying the structure of science. • Apply scientific reasoning to solving real world problems • Reject scientific misconceptions. • Demonstrate the ability to understand and correctly apply scientific terminology.	During the summer of 2010, Virginia State University developed the first iteration of a scientific reasoning assessment instrument. That instrument will be refined and developed further in summer 2011. The University will continue to pilot test the instrument to ensure that it is valid and reliable. Until sufficient analysis is completed, a cut-off score of 60 percent correct on the scientific reasoning items will serve as the competency criterion.	The longitudinal repeated-measures approach will be applied to the assessment of the scientific reasoning core competency. First time freshmen are tested at the beginning of the academic year to obtain pretest scores. Post-test scores are obtained from this cohort of students as juniors after they have earned between 60 and 89 semester hours. (This range of credit hours is subject to change for the 2012-2013 academic year.) The pretest group consists of approximately 1300 first time freshmen. The post-test group consists of members of the freshman cohort who will have earned between 60 and 89 semester hours within two to three years. Based on previous cohorts, this group should consist of approximately 50-55 percent of the original group of freshmen. Transfer students who enter VSU with less than 24 semester hours will be included in both the

	• Interpret and express the results of observation and experimentation.		pretest and post-test groups. Students who transfer to VSU with 30 more semester hours are not administered the pretest. Both the pretest and post-test are administered in a single setting in a controlled environment. In both instances, students are assigned to testing rooms where they are tested under the same conditions. The value added should be reflected as gains between pretest and post-test scores among students in the cohort. The scores of cohort members as juniors are expected to higher than their scores as freshmen.
Critical Thinking 2012-2013	The Virginia State University Quality Enhancement Plan (QEP) for reaffirmation of accreditation by Commission on Colleges of the Southern Association of Colleges and Schools focuses on the development of a culture of writing to improve student writing, learning, and critical thinking skills. Various means of enhancing students' ability to think critically are infused throughout each of the three phases of the QEP. Within the context of the QEP and core competency assessment, critical thinking may be defined operationally as the demonstrated ability of students to use essential, crucial, and exacting standards to examine and evaluate	In addition to serving as the assessment tool for the VSU writing program, the e-portfolio rubric will include the criteria for the assessment of critical thinking competencies on a six-point scale among those adopted by the Council of Writing Program Administrators. Student minimum competency in critical thinking will be defined as an overall score of three (3) or higher on the applicable standards. A score of three translates into a rating of acceptable in overall quality.	The VSU writing program is structured in three phases with critical thinking infused into specific courses. Using the scoring rubric, the writings of students enrolled in these courses will be evaluated for specific elements of critical thinking, reported to the QEP director, compiled, and analyzed.

	information, evidence, and the statements and claims of others as well as their own to formulate inferences, make judgments, draw conclusions, make decisions within diverse contexts and under varied circumstances.		
Written Communication 2012-2013	Student competency in written communication is the major focus of VSU Quality Enhancement Plan for regional accreditation. Within this context, writing may be defined operationally as a process of communication in which the expression of ideas, facts, and opinions in an academic setting is conveyed in accordance with the conventions of standard English through a printed or printable medium. After experiencing writing across the curriculum (WAC) and writing in the disciplines (WID), junior and senior students will: • Demonstrate increased levels of competency in rhetorical knowledge. • Demonstrate increased levels of competency in critical thinking, reading, and writing. • Demonstrate increased levels of competency in the process of writing • Demonstrate increased levels of competency in the conventions of writing. • Demonstrate technology literacy.	The electronic portfolio will serve as the instructional and assessment tool for the VSU writing program. The e-portfolios will contain a collection of students' writing from their first year composition courses through writing intensive courses in the major. The assessment of student writing competency will be conducted using a writing portfolio scoring guide (rubric) that contains a six-point scale, with six as the highest score and one as the lowest. Student minimum competency in writing is defined as a portfolio score of three (3) or higher. A score of three translates into a rating of acceptable in overall quality.	The longitudinal design will be applied to the assessment of the writing core competency. The VSU Quality Enhancement Plan (QEP) emphasizes writing in three areas: (1) academic writing in the first year as a foundation for professional writing practices in other general education (GE) courses and the major, (2) writing to learn (writing across the curriculum [WAC]) in GE courses and the disciplines, as well as the development of critical thinking skills across the curriculum, and (3) writing in the disciplines (WID) through writing intensive courses in the major. These three components of the QEP are structured for assessment through an e-portfolio process. Each student's portfolio will contain a collection of individual writings from the first-year writing courses, selected GE and major courses during the second and third years, and writing intensive courses in the major during the third and fourth years. Freshman student portfolios will be read and scored holistically on a six-point scale using a scoring guide (rubric) at the end of each

			fall semester and spring semester. Students will continue to develop their writing skills and abilities during the sophomore, junior, and senior years through participation in the WAC and WID components of the QEP. Toward the end of the senior year, portfolios will be scored holistically using the scoring guide to determine value-added. As a result of participating in all components of the QEP, juniors and especially seniors are expected to demonstrate increased levels of competency on the major criteria for the assessment of writing. The faculty has reviewed the scoring guide on several occasions and concluded that its content validity is sound. Raters have been trained to use the scoring guide/rubric, and inter-rater reliability has been determined when writing samples and portfolios are scored. Also, external reviewers will score a stratified random sample of portfolios to confirm inter-relater reliability further. Consequently, the content validity and inter-rater reliability of the scoring guide/rubric is considered to be substantially robust. The new VSU writing program is structured to develop and advance students' writing abilities over at least a four-year period. The writing portfolio will document

			the progressive, incremental development of students' writing competency from the freshman through senior years. The value added should be reflected in the difference between the portfolio scores of the freshmen cohort as compared to the scores of these students as seniors. The scores of seniors should be higher and reflect a more advanced, complex, and mature writing structure and style than the freshman scores.
Oral Communication 2014-2015	Oral communication is defined operationally as the act of expressing or describing ideas, thoughts, feelings, and perceptions verbally and non-verbally. This definition includes verbal and nonverbal delivery skills, audience analysis, organization, reasoning, and use of language.	The report of findings will consist of tables that reflect the number and percentage of students by level who score within each of the following categories of assessment reflected in the rubric: (1) advanced, (2) proficient, (3) novice, or (4) unsatisfactory. Overall, more than 70 percent of the students are expected to score within or above the proficient category.	Trained faculty will use a scoring rubric adapted from the Northwest Regional Educational Laboratory to assess students on the following aspects of oral presentation: (1) Verbal Effectiveness: Idea development, use of language, and the organization of ideas are used effectively to achieve a specified purpose. (2) Non-verbal Effectiveness: The non-verbal message supports and is consistent with the verbal message. (3) Appropriateness: Idea development, use of language, and the organization of ideas for a specific audience, setting, and occasion are appropriate. (4) Responsiveness: Communication may be modified based on verbal and non-verbal feedback. Speakers/listeners demonstrate active listening behaviors. Students will be assessed through several speech- intensive courses (e.g. SPEE 214, SPEE 215, GEEN 310) and other courses that

			emphasize oral communication. Student performance on the final presentation will be recorded and compiled and reported to SCHEV.
Information Technology Literacy 2015-2016	Technology literacy is defined as the ability of students working independently and with others, to responsibly, appropriately and effectively use technology tools to access, manage, integrate, evaluate, create and communicate information.	The demands to use and apply technology are changing, diversifying, and increasing rapidly in our personal and professional lives. To respond to this phenomenon, Virginia State University proposes to assess information technology literacy in up to three ways through: (1) Element K, an online, self-instructional technology training and assessment system that is available to students, (2) the Johnston Library's information literacy services, and (3) technology literacy initiative of the VSU Quality Enhancement Plan. The preliminary standards for satisfactory performance through Element K and the library's information literacy assessments will be set at 70 percent of the items or tasks on each instrument answered or performed correctly. Technology literacy through the QEP will be judged based on the extent to which each student satisfies the established technology criteria for the senior electronic portfolio.	The Reginald F. Lewis School of Business has adopted Element K as the instructional and assessment system for its introduction to computers course. Other students also use Element K. Assessment results from students enrolled in Element K will be reported as one means of assessing technology literacy. The Johnston Library provides information literacy training services on a regular basis. During and after training, students complete performance-based assessment tasks and items to determine competency. These findings will be reported as another means of assessing technology literacy. As participants in the VSU writing program offered through the QEP, VSU students must demonstrate certain technology competencies included in the e-portfolio scoring rubric. Using the rubric, students' e-portfolios will be evaluated for specific elements of technology literacy, compiled, analyzed, and reported.