

University of Virginia
Undergraduate Competency Assessments 2010-2017

Note: The schedule, definitions, standards, and methodologies cited below are subject to change.

Competency [Year(s) Assessed]	Definition	Standards	Description of Methodology												
Critical Thinking 2010-2011	<p>Critical thinking is the process of analyzing, evaluating, and constructing arguments based on their merits.</p> <p style="text-align: center;"><small>SKILL AREAS ASSESSED BY THE CAT INSTRUMENT</small></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="padding: 2px;">Separate factual information from inferences that might be used to interpret those facts.</td></tr> <tr><td style="padding: 2px;">Identify inappropriate conclusions.</td></tr> <tr><td style="padding: 2px;">Understand the limitations of correlational data.</td></tr> <tr><td style="padding: 2px;">Identify evidence that might support or contradict a hypothesis.</td></tr> <tr><td style="padding: 2px;">Identify new information that is needed to draw conclusions.</td></tr> <tr><td style="padding: 2px;">Separate relevant from irrelevant information when solving a problem.</td></tr> <tr><td style="padding: 2px;">Learn and understand complex relationships in an unfamiliar domain.</td></tr> <tr><td style="padding: 2px;">Interpret numerical relationships in graphs and separate those relationships from inferences.</td></tr> <tr><td style="padding: 2px;">Use mathematical skills in the context of solving a larger real world problem.</td></tr> <tr><td style="padding: 2px;">Analyze and integrate information from separate sources to solve a complex problem.</td></tr> <tr><td style="padding: 2px;">Recognize how new information might change the solution to a problem.</td></tr> <tr><td style="padding: 2px;">Communicate critical analyses and problem solutions effectively.</td></tr> </table>	Separate factual information from inferences that might be used to interpret those facts.	Identify inappropriate conclusions.	Understand the limitations of correlational data.	Identify evidence that might support or contradict a hypothesis.	Identify new information that is needed to draw conclusions.	Separate relevant from irrelevant information when solving a problem.	Learn and understand complex relationships in an unfamiliar domain.	Interpret numerical relationships in graphs and separate those relationships from inferences.	Use mathematical skills in the context of solving a larger real world problem.	Analyze and integrate information from separate sources to solve a complex problem.	Recognize how new information might change the solution to a problem.	Communicate critical analyses and problem solutions effectively.	25% of undergraduates are expected to be highly competent; 75% competent or above; 90% minimally competent or above.	Administer Critical Thinking Assessment Test (CAT) test to samples of fourth-year undergraduate students, with oversampling to create adequate samples by school and for specific programs.
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Undergraduate Research 2011-2012	Research is the practice of carefully formulating or addressing a question, problem or objective, analyzing it within a disciplinary or interdisciplinary framework, producing findings, conclusions, designs, or creative works, and clearly communicating and defending such to a critical audience	25% of undergraduates are expected to be highly competent; 75% competent or above; 90% minimally competent or above.	Apply skills-based, descriptive rubrics to samples of students' written research reports. The rubrics will be used to score student work on a scale of "Not competent" to "Highly competent" by learning outcome. Multiple samples will represent undergraduate population as well as specific school and/or program populations.												
Education Abroad (2011-2012)	<p>Upon studying abroad, students will attain an international perspective on a chosen academic field or career path, and the ability to interact and communicate across differences.</p> <ol style="list-style-type: none"> 1. Students apply their knowledge to create a global frame of reference in their response to situations and events. (Knowledge) 2. Students understand, respect, and appreciate cultural differences. (Attitude) 3. Students demonstrate understanding of themselves and their ability to cope and adapt. (Attitude) 	25% of undergraduates are expected to be highly competent; 75% competent or above; 90% minimally competent or above.	Administer a pre- and post-program Learning Outcomes Self-Assessment Questionnaire and skill-based, descriptive rubrics to assess the quality of students' written portfolios, consisting of pre- and post-program essays, and samples of daily journals												

	<p>4. Students apply their knowledge of intercultural communication to adapt to a different culture and to interact effectively with those from a different culture or cultural background. (Skill)</p> <p>5. Students seek out opportunities for engagement. (Action)</p>		
<p>Scientific Reasoning 2012-2013</p>	<p>Consistent, logical thought patterns employed during the process of scientific inquiry that enable individuals to propose relationships between observed phenomena in order to accomplish the following:</p> <ol style="list-style-type: none"> A. Design experiments which test hypotheses concerning the proposed relationships. B. Determine possible alternatives and outcomes. C. Consider probabilities of occurrences. D. Predict logical consequences. E. Weight evidence, or proof. F. Use a number of instances to justify a particular conclusion. 	<p>25% of undergraduates are expected to be highly competent; 75% competent or above; 90% minimally competent or above.</p>	<p>Administer faculty-created exam to samples of undergraduate fourth-year students. Multiple samples will represent undergraduate population as well as specific school and/or program populations. Students who took the test in their first year (2010) will be specifically invited to participate again.</p>
<p>Quantitative Reasoning 2013-2014</p>	<p>Quantitative reasoning is correctly using numbers and symbols, studying measurement, properties, and the relationships of quantities, or formally reasoning within abstract systems of thought to make decisions, judgments, and predictions.</p>	<p>25% of undergraduates are expected to be highly competent; 75% competent or above; 90% minimally competent or above.</p>	<p>Administer faculty-created exam to samples of undergraduate fourth-year students. Multiple samples will represent undergraduate population as well as specific school and/or program populations.</p>
<p>Written Communication 2014-2015</p>	<p>Upon graduating from the University, students in the College of Arts and Sciences and Schools of Architecture, Commerce, Education and Nursing who complete (or place out of) the First and Second Writing Requirements (FWR and SWR) should be able to:</p> <ol style="list-style-type: none"> 1. Create Effective Introductions 2. Compose Balanced Arguments 3. Produce a cohesive, clear, and coherent document 4. Create Effective Conclusions <p>In addition to these outcomes associated with FWR and SWR, students in these schools develop additional skills from writing in their major.</p> <p>Upon graduating from the University, students from SEAS should be able to:</p> <ol style="list-style-type: none"> 1. Produce prose that is correct with regard to grammar, diction, spelling, and sentence structure. 2. Design documents that exhibit an understanding of audience, occasion, purpose and structure. 3. Frame introductions that quickly and reliably establish context and signal a document's purpose to its readers. 4. Delineate methods, present results, and reach conclusions that are logical and clear. 5. Produce coherent and cohesive document subsections and 	<p>25% of undergraduates are expected to be highly competent; 75% competent or above; 90% minimally competent or above.</p>	<p>Apply skills-based, descriptive rubrics to assess the quality of students' writing according to school-specific learning outcomes. Writing samples to be solicited from the individual schools that serve undergraduate students.</p>

	<p>paragraphs.</p> <p>6. Integrate appropriate graphics into the text and document sources in a correct and consistent style.</p>		
<p>Oral Communication 2015-2016</p>	<p>Oral communication is the effective interpretation, composition, and presentation of information, ideas, and values to a specific audience.</p>	<p>25% of undergraduates are expected to be highly competent; 75% competent or above; 90% minimally competent or above.</p>	<p>Apply skills-based, descriptive rubrics to assess the quality of students' oral communication skills. Samples to be solicited from the individual schools that serve undergraduate students and assessed according to school-specific learning outcomes.</p>
<p>Reporting to SCHEV 2016-2017</p>	<p>Submit reports to SCHEV on results—performance and resulting program improvements—for all assessments <u>except</u> Education Abroad.</p>		