

State Council for Higher Education for Virginia
Assessment of Competencies
CRITICAL THINKING
UNIVERSITY OF MARY WASHINGTON
Fall 2023

GENERAL EDUCATION AT THE UNIVERSITY OF MARY WASHINGTON

General Education is the foundation of a liberal arts education and is designed to cultivate the skills, knowledge, values, and habits of mind that are essential in every field of study and which enable graduates to make effective decisions as citizens of a rapidly changing, richly diverse, and increasingly interconnected world. The University's General Education requirements introduce students to a variety of learning perspectives and methods of inquiry, which combine to foster an appreciation of the connections between different ways of viewing, knowing, and engaging with the world. In particular, the General Education curriculum should:

- *develop core skills that enable students to understand, evaluate, articulate, and advance their ideas and the ideas of others.* Across their General Education courses, students learn to think critically, analyze data, evaluate evidence and the arguments and theories grounded in that evidence, conduct research thoroughly and with integrity, write and speak effectively, and be in command of the technologies that define not only 21st-century communication but also the emerging tools of different disciplines.

- *challenge students to explore issues, solve problems, and learn through multiple methodological approaches.* General Education offers a wide range of courses challenging students to make connections across their course of study and to explore the variety of ways they can understand and apply what they learn. They achieve this through studying complex problems and issues in the arts, humanities, quantitative reasoning, and natural and social sciences.

- *prepare students to engage knowledgeably and responsibly with a changing, complicated, and multi-dimensional world.* University of Mary Washington students must understand and appreciate global connections, differences, cultures, languages, environments, and change. These courses require students to be both individual and collaborative learners, solve problems systematically and creatively, and find opportunities to explore beyond the classroom experiences such as undergraduate research, internships, study abroad, and engagement in community and civic life.

These goals were the basis for the development of the new General Education curriculum, where requirements were placed into three overarching categories: Foundations, Methods of Investigation, and Connections. Courses in the Foundations category will establish skills for later success at UMW, are fundamental to the liberal arts, and ideally should be taken early in the academic career. Methods of Investigation consist of lower level courses that explore how different disciplines approach critical thinking, research, and problem-solving. Connections courses will build on prior requirements to help students make links between classroom knowledge, the world, and their life beyond UMW. This arrangement of the courses emphasizes the skills and knowledge that will be gained from each required course and clarifies the benefits that will be acquired through the completion of the General Education curriculum through this framework.

The General Education curriculum and the Honor System are both integral parts of the educational experience at UMW. It is expected that students will devote their authentic selves to each course, will learn and respect relevant disciplinary norms, and will conduct themselves with integrity in

accordance with the honor pledge made upon arriving at Mary Washington in the completion of this curriculum.

CORE COMPETENCIES IN THE STATE OF VIRGINIA

In 2017, the State Council of Higher Education for Virginia established a policy on Student learning Assessment and Quality in Undergraduate Education. Goal #2 of the *Virginia Plan for Higher Education* directs SCHEV to “optimize student success for work and life,” and, specifically, to “strengthen curricular options to ensure that graduates are prepared with the competencies necessary for employment and civic engagement.” Priority Initiative #4 for 2016 includes a commitment to “collaborate with institutions to measure the quality of undergraduate education, including civic engagement of graduates and relevance to demand occupations across regions of the state.” The 2017 policy identifies four core competencies for student success to be assessed by all institutions:

- 1) **Critical thinking** – the ability to subject one’s own and others’ ideas, arguments, assumptions, and evidence to careful and logical scrutiny in order to make an informed judgment, draw a sound conclusion, or solve a problem.
- 2) **Written communication** – the ability to develop and communicate ideas effectively in writing as appropriate to a given context, purpose, and audience. It includes a variety of styles, genres, and media, including computer-mediated communications.
- 3) **Quantitative reasoning** – the ability to manipulate, analyze, and/or evaluate numbers and numerical data. It may involve calculation and/or analysis and interpretation of quantitative information derived from existing databases or systematic observations, and may be based in a variety of disciplines, not limited to mathematics and the natural and physical sciences.
- 4) **Civic engagement** – an array of knowledge, abilities, values, attitudes, and behaviors that in combination allow individuals to contribute to the civic life of their communities. It may include, among other things, exploration of one’s role and responsibilities in society; knowledge of and ability to engage with political systems and processes; and/or course-based or extra-curricular efforts to identify and address issues of public or community concern.

Two additional core competencies are selected by the institutions themselves. At the University of Mary Washington, these competencies are:

- 5) **Oral communication** – The ability to communicate effective oral messages in a variety of settings, including public speaking, group discussion, and interpersonal communication; the ability to plan, organize, support, and deliver ideas and arguments, and utilize a variety of research techniques to synthesize information and support their messages.
- 6) **Digital Fluency** – Digital fluency is the ability to consume and produce digital knowledge critically, ethically, and responsibly, as well as to creatively adapt to emerging technology.

The calendar for UMW’s reporting of these core competencies is below:

SCHEV Competencies Review Calendar							
2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
	Civic Engagement (early)			Civic Engagement			Civic Engagement
Critical Thinking (early)				Critical Thinking			Critical Thinking
		Digital Fluency			Digital Fluency		
Oral Communication			Oral Communication			Oral Communication	
		Quantitative Reasoning (late)			Quantitative Reasoning		
Written Communication			Written Communication			Written Communication	

Critical Thinking at UMW

Definition. The ability to subject one's own and others' ideas, arguments, assumptions, and evidence to careful and logical scrutiny in order to make an informed judgment, draw a sound conclusion, or solve a problem.

Learning Outcomes. Critical thinking proficiency was evaluated by measuring students' abilities across five criteria as expressed in a delivered speech.

Accuracy: The speaker presented the issue in a manner that demonstrated clarity, precision, and consistency of thought.

Perspective: student can examine topic in balanced and comprehensive manner representing different points of view and convey the complexities and nuances of issues related to it.

Logic: Student can present arguments in a logical fashion showing how one point led to another until a reasonable conclusion could be reached

Fairness: student can exhibit a healthy skepticism of any assertion or claim until evidence sufficient to support the validity of said assertion or claim could be advanced.

Strategy: The speaker crafted a conclusion appropriate for the purpose of the speech.

Standard(s) for Proficiency. Assessment of critical thinking for all student presentations given in Speaking Intensive courses employ the same evaluative process, rubric, and measure of overall rating success. Of three rating categories (i.e., not proficient, proficient, strong), at least 70% of students will receive an overall rating of proficient or strong as the accepted standard for proficiency. The assessment provides a point of comparison to gauge the proficiencies of our first-year and major students in critical thinking.

Description of Methodology Used to Gather Evidence of Proficiency. Speeches given by students in various sections of our First-Year Seminar in Fall 2022 and a Studio Art course in Spring 2023 were video recorded and then viewed by faculty evaluators to assess proficiency in the categories listed above. A sample of 40 presentations from the FSEM and 17 from the Studio Art course were selected from the recordings and evaluated. Presentations were viewed online by faculty evaluators. Each presentation was evaluated by at least 2 faculty members. Individual faculty evaluations were compared with each other and, in cases where faculty team members did not agree on an overall rating, the presentation was evaluated by additional faculty until agreement was reached on whether the presentation met minimum standards for proficiency.

The methodology used to gather evidence of proficiency during this assessment study was reasonable in that it utilized materials already present in sections of our First-Year Seminar and taken by students in Studio Art, and the evaluation methodology mirrored the procedures that have been used for university-wide assessment of critical thinking.

Critical Thinking Assessment Methodology. The evaluation categories are the same as those used in the University assessments of critical thinking. The critical thinking criteria utilized herein were derived from those that typically appear in the critical thinking research literature. No attempt was made to utilize an exhaustive set of criteria; rather, a delimited set was developed for specific use in this proficiency assessment. A speech rated as *not proficient* on two or more criteria was deemed *not proficient* overall. If a speech was rated as *strong* in at least four criteria, the speech was deemed *strong* overall. Any rating pattern between these two end points yielded a rating of *proficient*.

Critical Thinking Summary. Results of this assessment are presented in the tables below. One FSEM presentation was removed from the critical thinking assessment sample, as faculty evaluators agreed they were unable to evaluate the presentation in at least one of the five categories for critical thinking assessment. The remaining 39 videos resulted in a success rate of 100% meeting the critical thinking standard of proficient, which is significantly above the target of 70%. Similarly, the Studio Art success rate of 100% of 17 speeches meeting the critical thinking standard of proficient is significantly above the target of 70%.

Results of Critical Thinking Assessment (FSEM)

	Speeches rated <i>not proficient</i>	Speeches rated <i>proficient</i>	Speeches rated <i>strong</i>	Speeches meeting standard of <i>proficient</i> or <i>strong</i>
Speeches evaluated	0	39	0	39
Percent of total	0%	100%	0%	100%

Results of Critical Thinking Assessment (Studio Art)

	Speeches rated <i>not proficient</i>	Speeches rated <i>proficient</i>	Speeches rated <i>strong</i>	Speeches meeting standard of <i>proficient</i> or <i>strong</i>
Speeches evaluated	0	17	0	17
Percent of total	0%	100%	0%	100%

The “results by category” table looks at the number of not proficient, proficient, and strong ratings given in each of the 93 individual faculty ratings. Students in the FSEM course performed especially well in the “Logic” category with a strong rating of 27%.

**Results of FSEM Critical Thinking Assessment by Category
(from 93 total faculty evaluations)**

	Accuracy	Perspective	Logic	Fairness	Strategy
Strong	10% (9)	16% (15)	27% (25)	6% (6)	16% (15)
Proficient	88% (82)	84% (78)	71% (66)	84% (78)	82% (76)
Not Proficient	2% (2)	0% (0)	2% (2)	10% (9)	2% (2)

Studio Art students performed especially well in the “Perspective” and “Logic” categories, with strong ratings of 41% and 32%, respectively. Furthermore, across all 37 faculty evaluations, there was only one individual rating of not proficient (“Fairness” category).

**Results of Studio Art Critical Thinking Assessment by Category
(from 37 total faculty evaluations)**

	Accuracy	Perspective	Logic	Fairness	Strategy
Strong	3% (1)	41% (15)	32% (12)	0% (0)	5% (2)
Proficient	97% (36)	59% (22)	68% (25)	97% (36)	95% (35)
Not Proficient	0% (0)	0% (0)	0% (0)	3% (1)	0% (0)

Recommended changes: None needed at this time.

Critical Thinking is scheduled to be assessed again in 2025-26. For questions, contact the office of IAE.

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