Clemson University General Education Student Learning Outcomes & Rubrics

The Clemson University General Education Curriculum (branded 'Crossings') has three areas of student learning:

Communication (6 hours) – oral and written. A new student learning outcome went into effect in fall 2019.

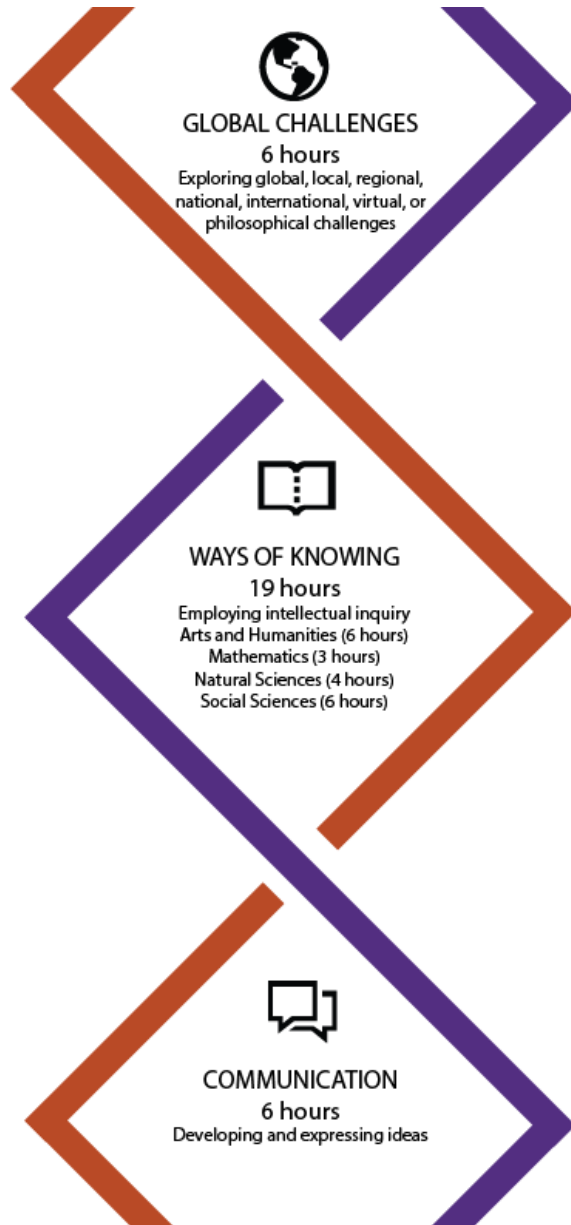Ways of Knowing (19 hours) – distributed across disciplinary content areas

Arts & Humanities ● Social Sciences ● Mathematics ● Natural Sciences with Lab

We have student learning outcomes specific for each area; new student learning outcomes went into effect in fall 2019.

Global Challenges (6 hours) – a new area going into effect in fall 2022 for new students.

CROSSINGS

THE CLEMSON® UNIVERSITY UNDERGRADUATE GENERAL EDUCATION CURRICULUM

GLOBAL CHALLENGES
6 hours
Exploring global, local, regional, national, international, virtual, or philosophical challenges

WAYS OF KNOWING
19 hours
Employing intellectual inquiry
Arts and Humanities (6 hours)
Mathematics (3 hours)
Natural Sciences (4 hours)
Social Sciences (6 hours)

COMMUNICATION
6 hours
Developing and expressing ideas

Communication (assessed in odd academic years: 19-20, 21-22, etc.) –Revised effective fall 2019 catalog

Student learning outcome: Students will demonstrate competence in communication through organization of a central message with supporting materials in the chosen medium.

Rubric for assessing the student learning outcome:

	4	3	2	1
Organization	Organizational pattern is clearly and consistently observable. It is skillful and makes the content cohesive.	Organizational pattern is clearly and consistently observable.	Organizational pattern is intermittently observable.	Organizational pattern is not observable.
Central Message	Uses appropriate, factual, relevant, and compelling content such that a clear central message is easy to identify. Central message is also comprehensive and detailed.	Uses appropriate, factual, and relevant content to develop and explore ideas such that a clear central message is easy to identify.	Uses appropriate, factual, and relevant content to develop ideas in some parts of the work. A clear central message may not be easily identifiable.	Content may be inappropriate, inaccurate, or irrelevant to the central message, and/or a central message is not explicitly stated.
Supporting Material/Sources and Evidence	Demonstrates skillful use of high-quality, credible, relevant sources and varied resources to develop ideas.	Demonstrates consistent use of credible, relevant sources to support ideas.	Demonstrates an attempt to use credible and/or relevant sources to support ideas.	Demonstrates an attempt to use sources to support ideas.
And at least one of the following:				
Oral Communication Delivery	Delivery techniques make the presentation compelling, and speaker appears polished and confident.	Delivery techniques make the presentation interesting, and speaker appears comfortable.	Delivery techniques make the presentation understandable, and speaker appears tentative	Delivery techniques detract from the coherence of the presentation, and speaker appears uncomfortable.
Written Communication Syntax and Mechanics	Uses graceful language that skillfully communicates meaning to readers, with clarity and fluency. Virtually error-free language.	Uses straightforward language that generally conveys meaning to readers. Few language errors	Uses language that generally conveys meaning to readers with clarity. Might include some language errors.	Uses language that sometimes impedes meaning because of language usage errors.
Digital/Visual Media	Message is compellingly delivered. Represents exceptional use of the opportunities and constraints of the medium.	Message is appropriately delivered. Represents an effective use of the opportunities and the constraints of the medium.	Message is delivered with some limitations. Represents limited use of the opportunities and constraints of the medium.	Message is unclear and inappropriately crafted for the medium.

*Definitions:

"Organizational pattern" refers to the grouping and sequencing of ideas and supporting material. It may often include a specific introduction and conclusion, sequenced material within the main body of the communication form, and transitions.

"Central message" refers to the main point/thesis/"bottom line"/"take-away" of a communication form. A clear central message is easy to identify and a compelling central message is also vivid and memorable.

Delivery techniques may include posture, gesture, eye contact, and vocal expressiveness. They enhance the effectiveness of a presentation when the speaker stands and moves with authority, looks more often at audience than at materials/notes, uses the voice expressively, and uses few vocal fillers (um, uh, like, you know, etc.)

Arts and Humanities (assessed in even academic years: 20-21, 22-23, etc.) – Revised effective fall 2019 catalog

Courses fulfilling the Arts and Humanities component of the General Education curriculum should address SLO1 or SLO2. (In submitting student work for assessment, faculty will have the opportunity to indicate whether the signature assignment addresses SLO1 or SLO2.)

Student learning outcome 1: Students will analyze, interpret, and employ aesthetic, ethical, linguistic, and/or philosophical discourse in relevant contexts.

Rubric for assessing the student learning outcome:

	4	3	2	1
Makes a coherent argument.	Supports the argument with organized layers of sophisticated and meaningful reasoning.	Supports the argument through appropriate reasoning.	Supports the argument in a simplistic or obvious manner.	Reasoning is unrelated to the argument.
Synthesizes sources	Explores a topic in depth, yielding a rich awareness and/or little-known information.	Explores a topic in depth, yielding insight.	Explores a topic with some evidence of depth, providing occasional insight.	Explores a topic at a surface level, providing little insight and/or information beyond basic facts.

or
Student learning outcome 2: Students will create, perform, interpret, reinterpret, and/or criticize artistic works.

Rubric for assessing the student learning outcome:

	4	3	2	1
Creation and/or performance	Demonstrates proficiency and innovation in knowledge and/or use of skills, tools, and methods for the artistic work.	Demonstrates proficiency in knowledge and/or use of skills, tools, and methods for the artistic work.	Demonstrates satisfactory knowledge and/or use of skills, tools, and methods for the artistic work.	Demonstrates limited knowledge and/or use of skills, tools, and methods for the artistic work.

| Interpretation, reinterpretation, and/or criticism | Interpretation, reinterpretation, and/or criticism is supported with concrete details, intellectual associations, and personal perceptions about the artistic work. | Interpretation, reinterpretation, and/or criticism is supported with two of the following: concrete details, intellectual associations, personal perceptions about the artistic work. | Interpretation, reinterpretation, and/or criticism is supported with one of the following: concrete details, intellectual associations, personal perceptions about the artistic work. | Interpretation, reinterpretation, and/or criticism is missing concrete details, intellectual associations, and personal perceptions about the artistic work. |

Social Science (assessed in even academic years: 20-21, 22-23, etc.) – Revised effective fall 2019 catalog

Student learning outcome: Students will use social science concepts and evidence to explain human actions or behaviors in the past, the present, and/or the future.

Rubric for assessing the student learning outcome:

	4	3	2	1
Social science concepts and evidence connected to human actions or behaviors	Analyzes, with insight, the connections between social science concepts/evidence and human actions or behavior.	Produces accurate and appropriate connections between social science concepts/evidence and human actions or behavior.	Produces limited and/or superficial connections between social science concepts/evidence and human actions or behavior.	States social science concepts/evidence with no connection to human actions or behavior, or States human actions or behaviors with no connections to social science concepts/evidence.
Effectiveness of explanations	Reaches meaningful and logical conclusions based upon evidence, demonstrating a sophisticated understanding of multiple, interconnected contextual factors.	Reaches meaningful and logical conclusions based upon evidence.	Reaches conclusions based upon limited evidence.	States conclusions with little evidence.

Mathematics (assessed in odd academic years: 19-20, 21-22, etc.) – Revised effective fall 2019 catalog

Student learning outcome: Students will demonstrate mathematical literacy through interpretation of mathematical forms and performing calculations.

Rubric for assessing the student learning outcome:

	4	3	2	1
Calculation	Calculations are successful and sufficient to solve the problem, while also demonstrating elegant presentation and clear organization.	Calculations are successful and sufficient to solve the problem.	Calculations are attempted, but may be unsuccessful or insufficient to solve the problem.	Calculations are unsuccessful and insufficient to solve the problem.
Interpretation	Provides accurate and sophisticated explanations of information presented in mathematical forms.*	Provides accurate explanations of information presented in mathematical forms.*	Provides explanations of information presented in mathematical forms,* but shows minor errors or lacks clarity.	Attempts to explain information presented in mathematical forms,* but shows major errors and lacks clarity.
*Definition: mathematical forms = equations, graphs, diagrams, tables, words				

Natural Science (assessed in odd academic years: 19-20, 21-22, etc.) – Revised effective fall 2019 catalog

Student learning outcome: Students will demonstrate the process of scientific reasoning through experimental activity and critical comparison of their results to those predicted by accepted natural science principles.

Rubric for assessing the student learning outcome:

	4	3	2	1
Scientific Reasoning: Experimental activity	Scientific endeavor* and its purpose is stated clearly and described comprehensively, delivering all relevant information necessary for full understanding by the intended audience.	Scientific endeavor* and its purpose is described and clarified so that understanding is not seriously impeded by omissions.	Scientific endeavor* is described, but description leaves some ambiguities.	Scientific experiment* is missing or incorrectly described.
Scientific Reasoning: Evidence and analysis	Evidence from experiment is analyzed and fully interpreted to reveal insightful patterns, differences, or similarities to accepted principles.	Evidence from experiment is analyzed to reveal important patterns, differences, or similarities to accepted principles.	Evidence from experiment is presented, but description leaves some ambiguities.	Evidence from experiment is listed, but is unrelated to accepted principles.
Scientific Reasoning: Conclusions and limitations	Constructs a conclusion based upon sophisticated interpretation of results and hypothesis. Insightfully discusses relevant and supported limitations and implications.	Constructs a conclusion based upon the results and the hypothesis. Discusses relevant and supported limitations and implications.	States a general conclusion somewhat connected to results and hypothesis.	States a conclusion, but it may be ambiguous, illogical, or unsupported.
*Clarification: scientific experiment should be considered broadly. It may involve a number of activities, such as running computer models, identifying substances, classification, observation, field work, building, mapping, etc.				

Global Challenges (assessed in even academic years: 22-23, 24-25, etc.) – The Global Challenges area of the general education curriculum will go into effect for the fall 2022 catalog.

Student learning outcomes: 1.) Students will demonstrate critical thinking through analysis of global challenges. 2.) Students will evaluate how varying perspectives influence global challenges. 3.) Students will demonstrate the integration of ethics into analysis of global challenges. (Each Global Challenges course will incorporate at least two of the three student learning outcomes.)

Rubric for assessing the student learning outcomes:
(In submitting student work for assessment, faculty will have the opportunity to check which rubric rows are most appropriate to the signature assignment instructions.)

	4	3	2	1
Analysis of global challenges	Challenge to be considered critically is stated clearly and described comprehensively, delivering relevant information necessary for thorough understanding.	Challenge to be considered critically is stated, described, and clarified so that understanding is not seriously impeded by omissions.	Challenge to be considered critically is stated and described, with ambiguities.	Challenge to be considered critically is stated without clarification or description.
Influence of varying perspectives	Interprets experiences from the perspectives of one's own and more than one worldview while demonstrating respect for other cultural groups.	Recognizes and uses dimensions of more than one worldview.	Identifies components of the worldview of others.	Catalogs one's own cultural worldview only.
Integration of ethics into analysis of global challenges	Insightfully and explicitly analyzes ethical consequences in a complex, multilayered context. Integrates an explanation of cross-relationships among the issues.	Analyzes ethical consequences fully and in a complex, multilayered context.	Identifies ethical consequences fully.	Identifies basic and obvious ethical consequences, but fails to grasp complexity or interrelationships.
Integrative learning (i.e. – "transfer" of knowledge)	Adapts and applies skills, abilities, theories, or methodologies gained in one situation to new situations to explore complex issues and extend knowledge.	Adapts and applies skills, abilities, theories, or methodologies gained in one situation to new situations to explore complex issues.	Connects skills, abilities, theories, or methodologies gained in one situation to a new situation to understand issues.	Identifies (in a basic way) skills, abilities, theories, or methodologies applicable to a situation.
Diversity and inclusion	Insightfully and explicitly analyzes basic and complex advantages and challenges of diversity and inclusion in communities or organizations, while recommending strategies for improvement.	Insightfully and explicitly analyzes basic and complex advantages and challenges of diversity and inclusion in communities or organizations.	Identifies basic advantages and challenges of diversity and inclusion in communities or organizations.	Superficially or simplistically identifies advantages and challenges of diversity and inclusion in communities or organizations.

Global challenges and opportunities	Insightfully and explicitly analyzes significant and complex challenges and opportunities in the natural and human world, while recommending strategies for improvement.	Insightfully and explicitly analyzes significant challenges and opportunities in the natural and human world.	Identifies significant challenges and opportunities in the natural and human world.	Superficially or simplistically identifies challenges and opportunities in the natural and human world.

Definitions:

Complex, multi-layered context: The sub-parts or situational conditions of a scenario that bring two or more ethical dilemmas (issues) into the mix/problem/context for students' identification

Context: The historical, ethical, political, cultural, environmental, or circumstantial settings or conditions that influence and complicate the consideration of any issues, ideas, artifacts, and events.

Cross-relationships among the issues: Obvious or subtle connections between/among the sub-parts or situational conditions of the issues present in a scenario.

Perspective-taking: The ability to engage and learn from perspectives and experiences different from one's own and to understand how one's place in the world both informs and limits one's knowledge. The goal is to develop the capacity to understand the interrelationships between multiple perspectives, such as personal, social, cultural, disciplinary, environmental, local, and global.

Strategies for improvement: A plan/plans of action or an approach/approaches designed to arrive at a solution.

Worldview: Worldview is the cognitive and affective lens through which people construe their experiences and make sense of the world around them. It involves metacognition on behalf of the learner, through student self-awareness in relating one's own perspective to the perspectives of those in a position of knowledge.

Created and/or adapted in part from:

- *Association of American Colleges and Universities (AAC&U) VALUE rubrics. Retrieved from https://www.aacu.org/value-rubrics*
- *Pathways: General Education for All. Virginia Tech. Retrieved from https://www.pathways.prov.vt.edu/about.html*