GENERAL EDUCATION RE-ENVISIONING

PROPOSAL AND TRANSITION PLAN

October 2020, for fall 2022 changes

INTRODUCTION AND VISION

What should Clemson undergraduate students know and do regardless of major?
How do we express our land-grant mission in our curriculum?
How do we infuse engaged learning opportunities into our curriculum to reach all students?

These are just some of the questions that we – the faculty, students, staff, alumni, and other partners – have been probing for the past few years. From the inaugural ClemsonForward strategic planning process through the creation of a general education task force through the establishment of a standing faculty general education committee, over 600 individuals have provided input and ideas, culminating in this document establishing a blueprint for continued change and evolution of our undergraduate general education curriculum.

Fundamentally, a college curriculum should adapt as educational needs and opportunities arise. As the only common academic curriculum for all undergraduate students, the Clemson University general education curriculum should be more than an accreditation requirement and more than a graduation checklist. And yet, it should not be so cumbersome as to impede student choice and timely progress to degree. What we collectively most desire is a curriculum that integrates students' intellectual development with their growth as thinkers and citizens, while both supporting and augmenting students' major courses of study.

This document outlines the details of how we have and will continue to support undergraduate education at Clemson University.

Approved by General Education Committee 10/28/20

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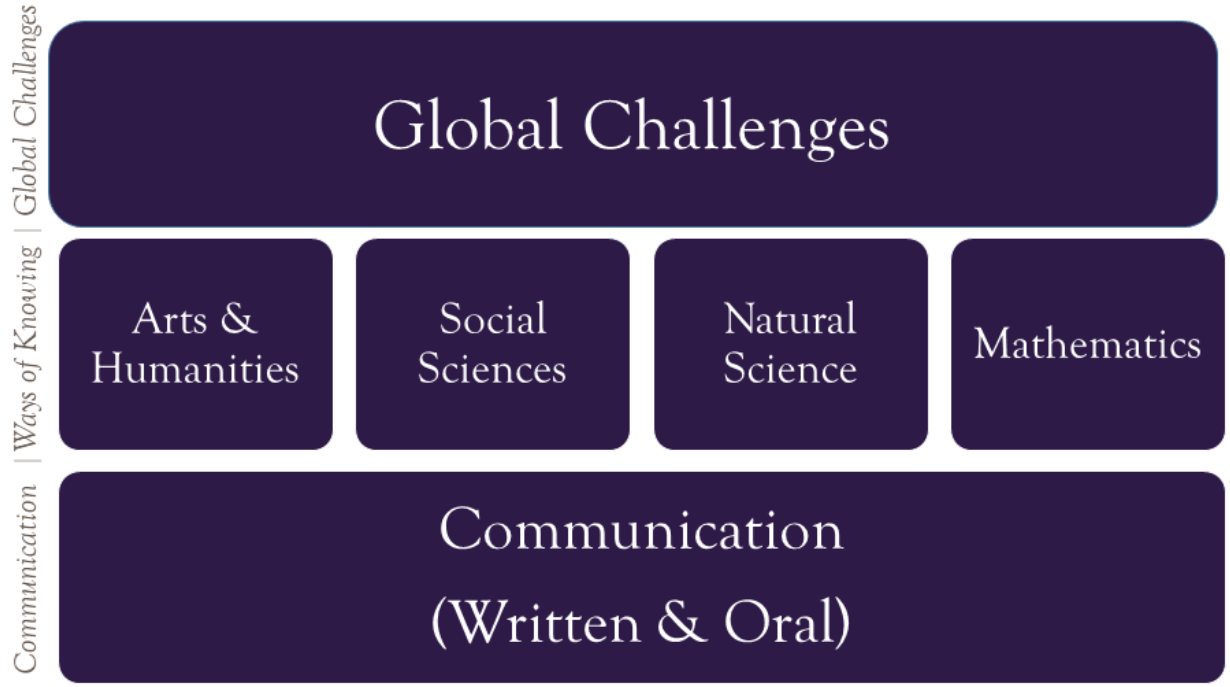
CONTENTS

General Education Re-Envisioning 1
Proposal and Transition Plan 1
Introduction and Vision 1
Contents 2
Model for General Education at Clemson University 4
Communication 4
Ways of Knowing 4
Global Challenges 5
What Constitutes a Global Challenges Course? 5
Overall Timeline & Critical Tasks 6
Curriculum Review 7
Process 7
Course Attributes: No Double Counting between Courses in General Education Curriculum 7
Course Attributes: Double Counting between Courses in General Education Curriculum & Courses in Major or Minor Curricula 8
Transition and Data Modeling 8
Additional issues or Problems to be addressed 9
Appendix I. An Update on Re-Envisioning the Clemson Undergraduate General Education Curriculum – Dec 2019 10
Introduction 10
What Do We Propose? 10
What Are Global Challenges Courses? 11
What Do Global Challenges Contribute to Intellectual Development? 12
Student Learning Outcome(s) 12
Resources Available to Support Change 12
Appendix I.A. U.N. Sustainable Development Goals 13
Appendix I.B. Intellectual Development for Proposed Curriculum 14
Appendix I.C. Clemson Global Competency Outcomes 14
Appendix I.D. Global Challenges Rubric 14
Appendix I.E. Historical Constraints and Possibilities 16
Appendix II. SACSCOC Requirements for general education 18
Appendix III. General Education by the Numbers - 2018 19
General Education Teaching, Distributed by College 19

Faculty Ranks of Instructors of Record in General Education courses.....20
General Education by Competency and College 21

MODEL FOR GENERAL EDUCATION AT CLEMSON UNIVERSITY

Our model delineates three areas for our students' development: communication, ways of knowing, and engagement with global challenges. This model would start for new students with the fall 2022 undergraduate catalog.



COMMUNICATION

For students, faculty, and employers, the ability to communicate is always toward the top of any list of desired skills and abilities. The Clemson undergraduate general education curriculum has at minimum one course each in written communication (3 credit hours) and oral communication (3 credit hours).

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

WAYS OF KNOWING

A general education curriculum should ensure depth and breadth across different disciplines and domains of knowledge. We describe this area as "ways of knowing;" study across epistemologies is an important component of developing higher order thinking skills. The Clemson undergraduate general education curriculum has at minimum one course in mathematics (3 credit hours), one course in natural sciences with lab (4 credit hours), two courses in arts & humanities (6 credit hours, 3 hours of which focus on literature), two courses in social sciences (6 credit hours, selected from two different fields).

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

Student learning outcome for natural sciences: *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.*

Student learning outcome for arts & humanities: *Students will analyze, interpret, and employ aesthetic, ethical, linguistic, and/or philosophical discourse in relevant contexts. -or- Students will create, perform, interpret, reinterpret, and/or criticize artistic works.*

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

GLOBAL CHALLENGES

The opening of this document provides three framing questions that were used for gathering information, ideas, and consensus from stakeholders, from 2017 through the present: *What should Clemson undergraduate students know and do regardless of major? How do we express our land-grant mission in our curriculum? How do we infuse engaged learning opportunities into our curriculum to reach all students?*

The global challenges area of the curricular model was created directly from the feedback obtained. Repeatedly, faculty, students, staff, and other stakeholders indicated that we want our students to develop critical thinking and ethical decision-making, analyze multiple perspectives, integrate learning across disciplines, and develop as global citizens. The general education committee proposes that the Clemson undergraduate general education curriculum has a minimum of 6 credit hours in global challenges. (See Appendix I for further information on how the topic of global challenges evolved.)

Student learning outcomes for global challenges: *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 integrative thinking through analyzing ethical consequences of global challenges.* (Each global challenges course would incorporate at least two of the three student learning outcomes.)

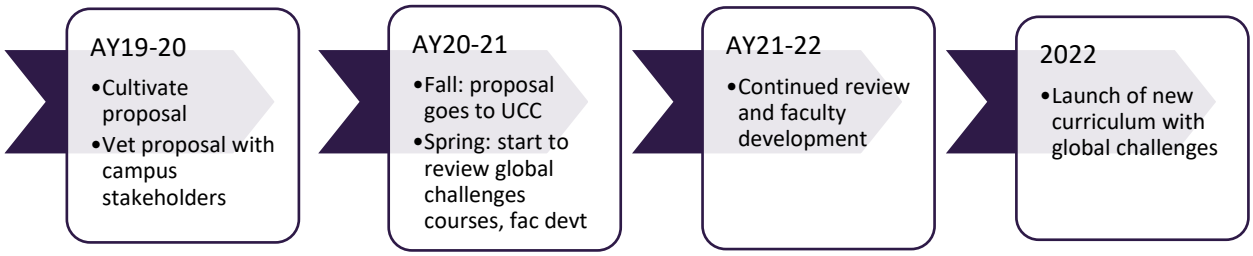
What Constitutes a Global Challenges Course?

- Content: Global challenges are a series of problems, issues, and/or enduring questions facing the world and its inhabitants.
    - The U.N. Sustainable Development Goals are a good framework, though global challenges are not limited to these topics alone.
    - They do not belong to any one discipline. In fact, the study of global challenges encourages interdisciplinary thinking.
    - 'Global' does not require an international focus, though it may. Local, regional, national, international, and virtual issues can all be global challenges.
- Intellectual development: By design, courses in the global challenges area should incorporate:
    - interdisciplinary and integrative thinking,
    - metacognition and student self-awareness in relation to a position of knowledge, and/or
    - systems thinking.
- Broadening perspectives: A general education curriculum should include both depth and breadth of study. Issues of curriculum review are further delineated below, but the general education committee also proposes that the global challenges credit hours are earned from at least two different fields, unless the fields are inherently interdisciplinary (SUST, HON, WS, PAS, HUM, etc.).
- Sequencing: The global challenges courses extend to and build upon skills and knowledge acquired in the communication and ways of knowledge areas. Accordingly, the committee proposes that at least 3 hours of the global challenges requirement is from courses at the 3000-level or above. This sequencing model helps students with their developmental trajectory for general education learning

outcomes across an academic program and across time. This expectation allows us to move our undergraduate general education program beyond its current heavy reliance on foundational courses.

- A Clemson signature program: The global challenges area insures a shared experience of a distinctly Clemson perspective as part of undergraduate education. Our institutional data show that 22% of non-transfer students and 27% of transfer students never engage in a high-impact educational practice prior to graduation. (High-impact educational practices include: student-faculty research, study abroad and international virtual exchange, service learning, internships, co-ops, and capstones/senior design). As much as possible, global challenges courses should include engaged learning opportunities, thereby allowing all of our undergraduate students to take advantage of our R01 institution's resources and land-grant mission, which is not always available at other institutions. Additionally, Clemson students currently engaging in high-impact educational practices for elective credit could earn global challenges/general education credit when the courses meet the criteria described herein. In many ways, students will be not only studying global challenges, but will also be working to address and solve them. To ensure a distinctly Clemson component of the undergraduate curriculum, no transfer equivalencies will be considered for the 6 hours of global challenges coursework.
- Transition: Many Clemson courses – including those that meet the current cross-cultural awareness and science & technology in society areas – may be suitable for modification into global challenges courses. Faculty and departments may wish to create new courses or redesign aspects of current courses.
    - The information above will help with design and review.
    - Any global challenge course should have a signature assignment to be used for assessment. (See Appendix I.D for assessment rubric.)

OVERALL TIMELINE & CRITICAL TASKS



	19-20	20-21	21-22	22-23
Development of global challenges learning outcome area & course list	Work with advisors to identify & mitigate problems.	UCC review/vote on catalog change.* GC course review can begin in spring 2021. Create details and policies for attributes (with Registrar Office & others).	Substantial course review to prepare for 2022 catalog. Curriculum proposals for new courses as needed. Departments alter major curriculum maps.	(Continued & ongoing)
Faculty development for global challenges courses & signature assignments	Soft launch (May 2020) – Faculty Institute CT2/Global Challenges.	Faculty workshops & learning groups around GC assignments & content (with OTEI).	(Continued & ongoing)	(Continued & ongoing)

Clarification on SACSCOC policies		Keep SACSCOC VP updated of changes.	Keep SACSCOC VP updated.	Keep SACSCOC VP updated. 10 year review report due in fall. 10 year visit in spring.
Analytics, teaching loads, budget model	Analytics Team is building a Tableau dashboard. Academic budget model revisions (Provost Office).	(Continued)		
*Footnote: A redline version of the proposed catalog changes is also being circulated with this document on proposal/transition plan.				

CURRICULUM REVIEW

Courses can be reviewed and approved for only one general education student learning outcome area.

Process

The process for review is through Curriculog, providing transparency and faculty governance.

1. The "Gen Ed Course Review" form is completed in Curriculog.
2. The form is reviewed by the General Education Committee or a subcommittee.
3. The General Education Committee will undertake one of two actions:
    a. If the course is approved, a recommendation will be made to UCC for inclusion in the general education list in the appropriate catalog year. The General Education Committee chair will move this forward using the "[Year] Catalog Undergraduate Modify General Education" form in Curriculog. (Any courses that need to be removed from the list will be adjudicated through the same process.)
    b. If a course is not approved, feedback will be given to the proposing unit.

Course Attributes: No Double Counting between Courses in General Education Curriculum

In the new general education model described above, each course in the general education curriculum would count for one student learning outcome area – communication, mathematics, natural sciences, arts/humanities, social sciences, or global challenges. Currently, a number of courses "double dip" for two general education areas. This is problematic for two reasons: a.) SACSCOC standards require that students complete at least 30 hours of coursework in general education, and extensive use of double dipping cuts down on the depth and breadth of an undergraduate education, and b.) our institutional assessment data show that students in courses that are coded to meet more than one student learning outcome are not demonstrating appropriate achievement in those areas. (SACSCOC requirements for general education can be seen in Appendix II.)

The table below shows the current level of double dipping in general education course areas.

Number of courses that:	Natural Science	Math	AH Lit	AH Non-Lit	Social Science
Have no "double dip"	25	12	23	83	18
Also fulfill STS	18	1	0	12	3
Also fulfill CCA	0	0	2	9	9
% double dip	43%	9%	8%	20%	40%

Notes: a.) 1 course (AGBR 2050) fulfills both STS and CCA, but no other areas. b.) Of the 18 courses that fulfill both natural science and STS, many have not been taught in the past two years and when they are, the student enrollment accounts for less than 3% of our total annual seats in general education courses.

To remedy this, the General Education Committee will recommend that faculty teaching courses in the general education curriculum submit them for review in one and only one outcome area according to the *tentative* table below. All reviews will be done through the Curriculog "Gen Ed Course Review" form and all necessary catalog changes will flow from the General Education Committee to the Undergraduate Curriculum Committee, according to our already established process.

Student learning outcome area	**Review Calendar (*Tentative)****	**Assessment**
Communication (oral & written)	2019-2020	Odd years (19-20, 21-22, 23-24, etc.)
Mathematics	2020-2021	Odd years (19-20, 21-22, 23-24, etc.)
Natural Science	2020-2021	Odd years (19-20, 21-22, 23-24, etc.)
Arts & Humanities	2021-2022	Even years (20-21, 22-23, 24-25, etc.)
Social Science	2021-2022	Even years (20-21, 22-23, 24-25, etc.)
Global Challenges	Starts in spring 2021, continues through 2021-2022 and beyond	Even years (22-23, 24-25, etc.)
*Once reviewed, the General Education Committee will not request another full review of the courses in this block for a period of 6 years. However, faculty and departments can submit courses for review (for inclusion or removal) at any time.		

Course Attributes: Double Counting between Courses in General Education Curriculum & Courses in Major or Minor Curricula

We seek to devote 6 credit hours of general education program requirements to student engagement in real-world problems through a global challenges learning outcome area, thus moving beyond a general education curriculum heavily reliant on sets of foundational courses. Some of the global challenges courses are expected to also fulfill requirements for major or minor courses of study. A consensus among Clemson faculty engaged in advances in general education curricula is that integrating general education skills/competencies with a student's major skills/competencies is the optimal way to enrich student development

In speaking with our SACSCOC Vice President, we do not anticipate any problem with overlaps between global challenges courses in the general education curriculum and courses in majors or minors, as long as the following are met:

- We have clear criteria for what a global challenge course entails.
- We have ongoing faculty development participation for faculty that helps to ensure that courses are by design meeting the student learning outcome.
- We have clear criteria for assessment of the global challenges student learning outcome.

TRANSITION AND DATA MODELING

The new general education curricular model is intended to go into place in 2022 for new Clemson first-time/first-year students.

For a period of time, we will need a "teach-out period" as students entering Clemson prior to 2022 are completing the general education curricular requirements under their catalogs of entry. As we transition from one set of learning outcomes and courses to the new set of global challenges learning outcomes and courses, we will need to closely watch submitted course schedules and student enrollments, and we may need to employ the use of course substitutions (with documentation) for students under older catalog years.

Appendix III contains a holistic view of our general education curriculum as it is currently taught, using the 2017-2018 academic year as a snapshot. Additionally, a Tableau dashboard has been created to allow semester-by-semester visualization of courses in the general education curriculum over time to assist with modeling.

ADDITIONAL ISSUES OR PROBLEMS TO BE ADDRESSED

As the university prepares to move away from a historic based academic budget model, department chairs desire a budget model that matches resources to needs and goals, especially with regard to the general education curriculum. When departments experience high student enrollments compared to the number of instructors available, they are often forced to make difficult decisions on what to prioritize, and course offerings for general education students (i.e. – students outside of the major) are often cut. Having clear financial/performance incentives connected to quality undergraduate teaching, assessment of learning, analytics, and enrollments is paramount.

Department chairs also desire a budget model with clear support for teaching assistants and/or graduate instructors. Some departments need teaching assistants only for lab courses. Others need teaching assistants to support a large grading load and still others use teaching assistants as instructors of record. Having a budget that connects resources to teaching assistant needs is important.

We need a clear institutional strategy for how to grow general education instructional FTEs with planned increases in student enrollment. Current widespread departmental reliance on revenues from summer and/or online general education courses to support departmental expenses is not sustainable in the long run. Some of these issues are described in Appendix I.E and many are already in the process of being addressed.

Concerns about transfer student progress toward degree will continue to need to be addressed as we create our global challenges offerings. Involving the departmental curriculum committees will be important, since they best understand the curricula of the major courses of study and where they might be opportunities to engage students in global challenges courses that also fulfill major requirements.

The General Education Committee and our thousands of faculty, academic staff, and students are poised to continue to seek improvements and to deliver the excellent education that is a hallmark of the Clemson experience.

APPENDIX I. AN UPDATE ON RE-ENVISIONING THE CLEMSON UNDERGRADUATE GENERAL EDUCATION CURRICULUM – DEC 2019

12/02/19 - To accompany a planned listening tour[1]

[Please note: There may be discrepancies between the information in Appendix I and the proposal narrative of pages 1-9. Appendix I was an earlier draft, so the information above is more accurate.]

INTRODUCTION

The General Education Committee, now in its second year, has reviewed the work of the General Education Task Force and writes with continued purpose to re-envision the General Education curriculum at Clemson.

As the General Education Task Force noted in May 2018, a Clemson General Education curriculum should/could involve *Ways of Knowing* (i.e. – traditional disciplines of arts and humanities, social sciences, natural sciences, and mathematics), *Communication* (i.e. - composing, editing, oral/written/digital presentation), and *Integration*.[2] Currently, Clemson's General Education curriculum emphasizes Ways of Knowing and Communication, but falls short on the Integration component.

At the August 2019 General Education Program retreat, approximately 200 stakeholders were able to examine and make meaning from course assessment and survey data related to student learning. Qualitative feedback collected from attendees indicate that our current General Education curriculum needs improvement in encouraging students to practice application, engage in diversity, and take ownership for their intellectual development. Nearly all of the input can be summarized into two needs: improving our curriculum and truly supporting its delivery.

Our discussions over the past year-and-a-half have focused on these opportunities. We revised our student learning outcomes and assessment rubrics last year for all but the Integration components, and we supported a program of faculty development to focus on assignment design in courses that are part of the General Education curriculum. Now it is time to further discuss and implement curricular improvements.

WHAT DO WE PROPOSE?

To complete the steps taken in the May 2018 white paper from the General Education Task Force and the needs identified by colleagues in August 2019, the General Education Committee is working toward proposing the following curricular reform: implementing a **Global Challenges** integrative requirement in the General Education curriculum. To be clear, what looks like a single reform is in fact a multilayered approach to General Education revision, addressing a number of pedagogical and structural concerns raised over the past few semesters of collaborative work.

We propose that all Clemson students complete six credit hours in Global Challenges courses and that these credits are Clemson courses only. The General Education Committee has deliberated extensively about *the how* of this component, discussing two possible options.

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[1] More information on the document and the listening tour is available on the General Education Re-envisioning Blog: https://blogs.clemson.edu/undergraduate-studies/2020/02/14/globalchallenges/.

[2] Link to the original white paper is available on the General Education Re-envisioning Blog: https://blogs.clemson.edu/undergraduate-studies/2018/05/04/whitepaper/. While you're there, consider reading other posts to catch up on or reacquaint yourself with the work that has been completed or is underway.

1. All of these six hours of Global Challenges credits are at the 3000-level or above, in order to build on foundational coursework (i.e. – Ways of Knowing and Communication) and extend knowledge, skill and engagement throughout the curriculum. The Committee believes that this approach is the overall best one for student development and for a coherent curriculum.
2. At least three credit hours of Global Challenges curricula must be at the 3000-level or above, but the other three can be variable.

Clemson's proposal creating the CT2 program in 2013 sought to address the need for 2000-level courses,[3] and a 3000-level Global Challenges scaffold provides additional opportunity for curricular depth and breadth. It is imperative to remember that Global Challenges courses are part of a student's true *general education*, designed to impart knowledge and skill for all students regardless of their major courses of study. The General Education Committee intends to work on an implementation plan and timeline to ensure that we have adequate course offerings and staffing within the next four years, while also acknowledging underlying resource and structure issues that must be addressed.

The Global Challenges proposal insures a shared experience of a distinctively Clemson perspective as part of the undergraduate education. The integrative nature of the Global Challenges requirement insures exposure to ethics, perspectives, and critical thinking in every Clemson graduate's experience. Furthermore, this structure allows the space to integrate Clemson's engaged learning portfolio (undergraduate research and creative inquiry, service-learning, international virtual exchange, etc.) into the Global Challenges curriculum and to allow transfer students to take advantage of our R01 institution's resources not always available at other institutions.

This third category of the General Education curriculum calls on Clemson faculty to consider how they prepare their students for Global Challenges and to develop or revise courses to meet the new student learning outcomes. It builds upon our land-grant mission and pushes our curriculum to establish the relevancy that prepares all of our students for Global Challenges.

Classification	Student Learning Outcome Area
Communication 6 hours	Oral Communication (3 hours or distributed)* Written Communication (3 hours) *
Ways of Knowing (18-19 hours)	Arts & Humanities (6 hours)* Social Sciences (6 hours)* Natural Sciences (3-4 hours)* Mathematics (3 hours)*
Global Challenges 6 hours	Courses with themes that connect to Global Challenges (6 hours)

Note: Student learning outcome areas depicted with a * are currently in operation. New student learning outcomes and assessment rubrics were passed effective fall 2019 and the new student learning outcomes are in the Undergraduate Catalog.

WHAT ARE GLOBAL CHALLENGES COURSES?

Global Challenges are a series of problems, issues, and/or enduring questions facing the world and its inhabitants. Although the title is a nod to the National Academy of Engineering (NAE) Grand Challenges category, Global Challenges do not belong to any one discipline or area, much like how the NAE's Grand

[3] CT2 website: https://www.clemson.edu/academics/programs/thinks2/.

Challenges can be fully addressed only by interdisciplinary thinking. Global Challenges are problems faced locally, nationally, and globally. In this context 'global' does not imply an international focus, though it may. Global Challenges occur across multiple regions and spaces, including past, present, future, and virtual.

Global Challenges courses would involve thematic areas, including but not limited to:

- Environmental & Economic Sustainability
- Gender Equality
- Equitable Societies
- Peace & Conflict
- Intersections of Race, Class, and Gender
- Health & Wellness
- Value Systems
- Energy
- Culture & Diversity

Global Challenge courses involve multi-dimensional, multi-perspective explorations of a current or long-term issue facing the world and its inhabitants. These courses may look at such challenges from a primary lens, but should also incorporate multiple perspectives to illustrate that such problems have many approaches to solutions. Global Challenges courses should require reflection from the student, thereby expecting students to analyze their own perspectives while exploring other ways of viewing, analyzing, and approaching issues.

The U.N. Sustainable Development Goals (Appendix I.A) framework is a valuable source for defining and engaging Global Challenges.

WHAT DO GLOBAL CHALLENGES CONTRIBUTE TO INTELLECTUAL DEVELOPMENT?

Courses with Global Challenges themes help students with interdisciplinary, integrative, and systems thinking. They build upon skills and knowledge acquired in the Communication and Ways of Knowing areas and address what is lacking in our current curriculum and its scaffolding. Furthermore, they encourage student critical thinking and metacognition in analyzing their own perspectives with regard to the needs and perspectives of others. (See Appendix I.B for a brief table delineating these types of thinking.)

Many current Clemson courses – including current offerings that fulfill STS and CCA requirements - may be suitable for modification into Global Challenges courses.

STUDENT LEARNING OUTCOME(S)

The proposed student learning outcomes for Global Challenges courses are as follows:

1. Demonstrate critical thinking through analysis of global challenges.
2. Evaluate how varying perspectives influence global challenges.
3. Demonstrate integrative thinking through analyzing ethical consequences of global challenges.

Each Global Challenges course would connect to at least two of the three student learning outcomes.

Appendix I.C contains a link to the Clemson Global Competency Outcomes from which the language was derived, and Appendix I.D contains the draft rubric that will be used for assessment and development of Signature Assignments.

RESOURCES AVAILABLE TO SUPPORT CHANGE

The Division of Undergraduate Studies, the Office of Teaching Effectiveness & Innovation, and the Office of Global Engagement have appropriated resources to faculty development with regard to a Global Challenges curriculum. These include, but are not limited to:

- The development of a Global Engagement Institute, to parallel the successful CT2 Faculty Institute. Faculty will work on course design/redesign in a learning community with other faculty and will receive a stipend. This will begin in June 2020.
- The continuation of an Assignment Design workshop series, to assist faculty with designing/redesigning signature assignments. We have created an asynchronous, self-paced version of the series to be launched in Canvas in early spring 2020.
- We have created six Faculty Fellow positions, with Clemson faculty members poised to lead workshops, discussions, consultations, etc. around Global Challenges courses and assignments. This will begin in spring 2020.
- We have funding available to bring outside speakers to provide additional perspectives and best practices to our campus.

The General Education Committee and the Division of Undergraduate Studies leadership will continue to develop resources and address timelines and needs as the revision process unfolds. Appendix I.E. details some of the constraints and opportunities that have been identified through discussions with faculty and other stakeholders. We are optimistic that improvements are possible and look forward to the discussions with our colleagues on these ideas.

APPENDIX I.A. U.N. SUSTAINABLE DEVELOPMENT GOALS

U.N. Sustainable Development Goals. https://www.un.org/sustainabledevelopment/sustainable-development-goals/

APPENDIX I.B. INTELLECTUAL DEVELOPMENT FOR PROPOSED CURRICULUM

	Student Learning Outcome Areas:	Intellectual Development:	Fulfilled By:
Communication	Communication	Organizational reasoning Justification of ideas Point of view and purpose Oral, written, digital, multimodal communication and presentation skills	Oral Communication course or cluster Written Communication course
Ways of Knowing	Arts & Humanities Social Sciences Natural Sciences Mathematics	Disciplinary thinking Application of concepts, theories, principles, models Coherent argumentative reasoning Interpretation, reinterpretation, and/or Criticism Application of social science concepts and evidence to explain human actions or behaviors Scientific reasoning Calculation and interpretation	Disciplinary courses
Global Challenges	Global Challenges	Interdisciplinary and integrative thinking Metacognition, student self-awareness in relation to knowledge position Systems thinking	Courses developed/revised with Global Challenges themes

APPENDIX I.C. CLEMSON GLOBAL COMPETENCY OUTCOMES

The Clemson Global Competency Outcomes, created by a task force of Clemson faculty during the 2016-2017 academic year, were used in developing the Global Challenges student learning outcomes. The task force was established with the support of the Office of Global Engagement and responded to a need for articulated global learning, as identified through the ACE Internationalization Lab report.

Link: https://www.clemson.edu/administration/global-engagement/documents/globalcompetencyoutcomes.pdf

APPENDIX I.D. GLOBAL CHALLENGES RUBRIC

The proposed assessment rubric to accompany the Global Challenges student learning outcomes is below. The rubric provides the means for the student learning outcomes to be assessed, and they help to guide the creation of signature assignments within courses in the General Education curriculum. Each Global Challenges course will have an assignment that meets at least two of the rubric rows. (One assignment that addresses all six is not an expectation.)

	4 (Capstone)	3 (Milestone)	2 (Milestone)	1 (Benchmark)
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.
Analysis of Ethical Consequences	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 global challenges and opportunities in the natural and human world, while recommending strategies for improvement.	Insightfully and explicitly analyzes significant global challenges and opportunities in the natural and human world.	Identifies significant global challenges and opportunities in the natural and human world.	Superficially or simplistically identifies global 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*

APPENDIX I.E. HISTORICAL CONSTRAINTS AND POSSIBILITIES

Some obstacles at Clemson University have reduced the space for past developments in the General Education program. Many of these are outside the purview of the General Education Committee, but are nonetheless real and substantial impediments to improvement. We itemize current and past obstacles, while recognizing that the proposal herein is a start for addressing some of these issues.

1. Overall, the General Education curriculum has seemed a low priority at Clemson. Students often see it only as a requirement for graduation and the University as a checkbox for SACSCOC accreditation.
2. Plans have not yet been communicated as to how Clemson will grow General Education course staffing needs with increases in student enrollment. There is a history of limited, rather than systemic, investment in staffing and structure, scattered across the University.
    a. Over time, we have developed a widespread departmental reliance on revenues from summer and/or online General Education courses to support departmental expenses and activities throughout the year that are not related to improving the General Education program.
    b. An uneven budget structure and assignment of teaching load creates problems with the two current General Education requirements that are conceptual but not departmental, i.e. - Cross-Cultural Awareness (CCA) and Science, Technology and Society (STS).
3. There has been minimal investment in General Education pedagogy. The Office of Teaching Effectiveness and Innovation currently has only one permanent employee despite a student population of 25,000+. Dedicated FTE lines filled by those with classroom and pedagogical experience are necessary.
4. There are no common intellectual experiences or core that all Clemson University students share.[4]
    a. A substantial percentage of first-time, first-semester students arrive with AP, IB, and dual-enrollment credits which exempt them from Clemson General Education courses.
    b. Approximately one-third of our undergraduate population transfers to Clemson from other institutions with credits that meet General Education requirements, but the courses taken elsewhere do not always provide a solid foundation for a Clemson education.
    c. The net result is a system that moves undergraduate students through a checklist of General Education requirements such that some students take no General Education courses at the institution that will award their degrees.
5. The current structure for the General Education program does not support an integrated intellectual development of Clemson students as thinkers and citizens, largely handing that development to

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[4] The Association of American Colleges & Universities helps to define, promote, and publicize a series of high-impact educational practices (HIPs). These HIPs are known to benefit undergraduate student learning and success. The literature defines common intellectual experiences as the following:
The older idea of a "core" curriculum has evolved into a variety of modern forms, such as a set of required common courses or a vertically organized general education program that includes advanced integrative studies and/or required participation in a learning community. These programs often combine broad themes—e.g., technology and society, global interdependence—with a variety of curricular and co-curricular options for students.
Link: https://aacu.org/leap/hips

courses in the majors. Many Clemson faculty continue to express to this Committee their shared frustrations at the need to cultivate students' growth through a holistic curriculum. Because the integrative dimension of general education - which should offer students access to that bigger picture - is lacking, some Clemson faculty see this as a profound weakness of Clemson's current General Education system.

For all these reasons, we see our task as one of making progress where possible while continuing to advocate for remediation of the obstacles in the long term. Change on this scale does not happen overnight, but the General Education Committee intends to continue to identify and mitigate challenges for the foreseeable future.

APPENDIX II. SACSCOC REQUIREMENTS FOR GENERAL EDUCATION[5]

Standard 8.2

The institution identifies expected outcomes, assesses the extent to which it achieves these outcomes, and provides evidence of seeking improvement based on analysis of the results in the areas below:

b) Student learning outcomes for collegiate-level general education competencies of its undergraduate degree programs.

Standard 9.3

The institution requires the successful completion of a general education component at the undergraduate level that

a) is based on a coherent rationale.

b) is substantial component of each undergraduate degree program. For baccalaureate programs, a minimum of 30 semester hours or the equivalent.

c) ensures breadth of knowledge. These credit hours include at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural science/mathematics. These courses do not narrowly focus on those skills, techniques, and procedures specific to a particular occupation or profession.

[5] Retrieved from https://sacscoc.org/pdf/2018PrinciplesOfAcreditation.pdf.

APPENDIX III. GENERAL EDUCATION BY THE NUMBERS - 2018[6]

GENERAL EDUCATION TEACHING, DISTRIBUTED BY COLLEGE

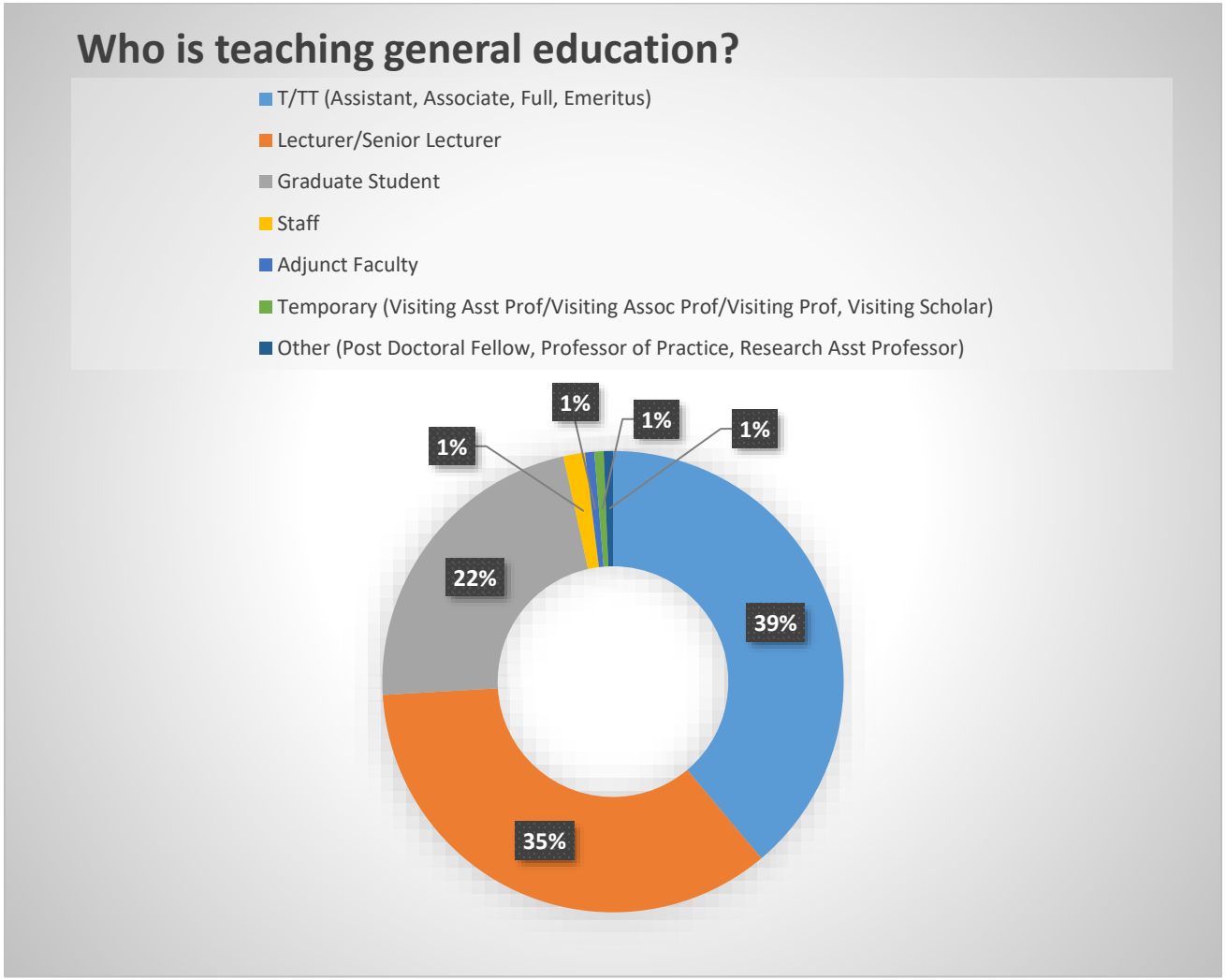
Table 1. Totals by College

	# courses	# sections	# sections under 20*	# instructors	# stu enrolled**	credit hrs generated
AAH	163	646	302	219	15,150	42,977
AFLS	23	32	9	19	1,050	4,143
BSHS	41	220	89	88	8,864	26,376
Business	20	116	62	49	3,625	10,877
CECAS	24	60	14	29	1,775	6,168
Education	1	11	9	6	196	588
Honors	21	46	36	27	609	1,736
OGE	2	15	7	11	322	294
Other	2	27	6	10	760	2,280
Science	86	621	95	196	24,183	82,961
Totals	383	1,794	629	654	56,534	178,400

***Did not count lab sections. ****Non-duplicated for students enrolled in lecture course with accompanying lab. However, those enrolled students are included in credit hours generated.**

[6] Using 2017-2018 as a snapshot. Data include actual student enrollments in fall, spring, and summer terms. Although more courses may be listed in the Undergraduate Catalog as meeting General Education competencies, these numbers are pulled from the courses taught in AY17-18 and which actually enrolled students.

FACULTY RANKS OF INSTRUCTORS OF RECORD IN GENERAL EDUCATION COURSES



GENERAL EDUCATION BY COMPETENCY AND COLLEGE

Table 2. General Education Teaching Loads by Competency, College, and Semester.
(Legend: c=# courses; s=# sections; i=# instructors; e=# students enrolled)

Fall 2017	Arts/Humanities Competency				Social Sciences Competency				Cross-Cultural Awareness Competency (non-duplicated)				Communication (Composition) Competency			
	c	s	i	e	c	s	i	e	c	s	i	e	c	s	i	e
AAH	51	187	87	4830	8	13	10	792	2	3	2	74	1	80	29	1247
AFLS	0	0	0	0	1	2	1	81	0	0	0	0	0	0	0	0
BSHS	0	0	0	0	10	43	22	2800	0	0	0	0	0	0	0	0
Business	0	0	0	0	3	48	20	1688	0	0	0	0	0	0	0	0
Honors	4	8	5	133	3	6	4	80	2	5	4	57	0	0	0	0
OGE	0	0	0	0	0	0	0	0	1	3	1	34	0	0	0	0
Other (STS)	1	9	1	307	0	0	0	0	0	0	0	0	0	0	0	0
Fall 2017 (cont)	Communication (Oral) Competency				Mathematics Competency				Natural Science Competency				Science and Technology in Society Competency (non-duplicated)			
	c	s	i	e	c	s	i	e	c	s	i	e	c	s	i	e
AAH	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	30
AFLS	0	0	0	0	0	0	0	0	2	3	2	66	5	6	4	426
BSHS	2	50	15	1625	0	0	0	0	0	0	0	0	2	4	4	72
Business	3	7	3	101	0	0	0	0	0	0	0	0	2	2	2	56
CECAS	0	0	0	0	0	0	0	0	3	20	7	703	4	4	4	61
Education	0	0	0	0	0	0	0	0	0	0	0	0	1	7	4	118
Science	0	0	0	0	13	160	78	4837	17	139	40	7052	1	1	1	24
Honors	0	0	0	0	0	0	0	0	0	0	0	0	2	3	3	52

(Legend: c=# courses; s=# sections; i=# instructors; e=# students enrolled)																
Spring 2018	Arts/Humanities Competency				Social Sciences Competency				Cross-Cultural Awareness Competency (non-duplicated)				Communication (Composition) Competency			
	c	s	i	e	c	s	i	e	c	s	i	e	c	s	i	e
AAH	49	177	14	4889	6	8	3	641	3	4	1	175	1	67	3	1127
AFLS	0	0	0	0	1	1		74	0	0	0	0	0	0	0	0
BSHS	0	0	0	0	7	36	5	2159	0	0	0	0	0	0	0	0
Business	0	0	0	0	3	40	4	1488	0	0	0	0	0	0	0	0
Honors	3	8	1	128	2	3	3	31	1	7	2	44	0	0	0	0
OGE	0	0	0	0	0	0	0	0	2	5	3	143	0	0	0	0
Other (STS)	1	8	1	287	0	0	0	0	0	0	0	0	0	0	0	0
Spring 2018 (cont)	Communication (Oral) Competency				Mathematics Competency				Natural Science Competency				Science and Technology in Society Competency (non-duplicated)			
	c	s	i	e	c	s	i	e	c	s	i	e	c	s	i	e
AAH	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3	77
AFLS	0	0	0	0	0	0	0	0	2	2	2	217	7	11	4	74
BSHS	2	46	15	1477	0	0	0	0	0	0	0	0	4	10	4	238
Business	3	7	9	92	0	0	0	0	0	0	0	0	2	2	1	42
CECAS	0	0	0	0	0	0	0	0	4	20	6	699	4	5	1	147
Education	0	0	0	0	0	0	0	0	0	0	0	0	1	4	2	78
Science	0	0	0	0	13	128	61	4361	19	151	36	5540	0	0	0	0
Honors	0	0	0	0	0	0	0	0	0	0	0	0	2	3	2	53

(Legend: c=# courses; s=# sections; i=# instructors; e=# students enrolled)																
Summer 2018	Arts/Humanities Competency				Social Sciences Competency				Cross-Cultural Awareness Competency (non-duplicated)				Communication (Composition) Competency			
	c	s	i	e	c	s	i	e	c	s	i	e	c	s	i	e
AAH	27	71	47	863	7	17	6	162	0	0	0	0	1	5	5	78
AFLS	0	0	0	0	1	1	1	8	0	0	0	0	0	0	0	0
BSHS	2	2	2	25	7	13	10	233	0	0	0	0	0	0	0	0
Business	0	0	0	0	3	9	9	138	0	0	0	0	0	0	0	0
Honors	0	0	0	0	0	0	0	0	2	3	3	31	0	0	0	0
OGE	0	0	0	0	0	0	0	0	2	7	7	145	0	0	0	0
Other (STS)	1	1	1	17	0	0	0	0	0	0	0	0	0	0	0	0
Summer 2018 (cont)	Communication (Oral) Competency				Mathematics Competency				Natural Science Competency				Science and Technology in Society Competency (non-duplicated)			
	c	s	i	e	c	s	i	e	c	s	i	e	c	s	i	e
AAH	0	0	0	0	0	0	0	0	0	0	0	0	2	9	7	165
AFLS	0	0	0	0	0	0	0	0	1	1	1	8	4	6	4	104
BSHS	2	12	8	140	0	0	0	0	0	0	0	0	3	4	3	82
Business	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	17
CECAS	0	0	0	0	0	0	0	0	4	6	6	112	5	5	5	53
Education	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Science	0	0	0	0	11	23	18	668	12	19	14	522	0	0	0	0
Other (STS)	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1