

**The University of Tennessee, Knoxville
Undergraduate Council
Minutes of the Meeting
April 18, 2017**

Elected Members present: Katherine Ambroziak, Chair, Richard Bennett, Rachel Chen, Ken Baker, John Bell (by proxy George Drinnon), Harriet Bowden, Marianne Custer (by proxy Casey Sams), Marleen Davis, Jochen Denzler, Joshua Emery, Nadia Fomin, Beth Foster (by proxy Joan Rentsch), Paul Frymier, Mary Holcomb (by proxy George Drinnon), Roxanne Hovland (by proxy Joan Rentsch), Laurie Meschke, Robert Mindrup, Drew Paul, John Scheb, Heidi Stolz (by proxy Rachel Chen), Richard Strange, Shelia Swift, Belle Upadhyaya (by proxy Paul Frymier), and Aleydis Van de Moortel,

Ex-Officio Members present: Chuck Collins, George Drinnon, Jeff Fairbrother, Barbara Murphy, Taimi Olsen, Bonnie Ownley, Masood Parang, Joan Rentsch, John Stier, Jana Spitzer (representing Jamia Stokes), and Ingrid Puffin (representing Teresa Walker)

Student Members present: (None)

Others present: Mary Albrecht, Monique Anderson, Kirsten Benson, Ryan Carter, Alison Connor, Erin Hardin, R.J. Hinde, Chris Lavan, Beauvais Lyons, Missy Parker, Suzy Prentiss, Lisi Schoenbach, Elisabeth Schussler, and Molly Sullivan

Call to order: A special meeting of the Undergraduate Council (UGC) was held in the Multipurpose Room of Frieson Black Cultural Center on April 18, 2017. The meeting was called to order at 4:00 pm by Katherine Ambroziak, Chair, after determining that attendance satisfied a quorum.

Purpose of the meeting: This special meeting was called for the sole purpose of reviewing the report of the General Education Reinvention Task Force and to vote on their proposal.

R.J. Hinde presented the history of this task force as well as the procedure, set by precedent, for approving changes to the university's general education requirements. These remarks were followed by a presentation, with the assistance of Erin Hardin and other task force members, of the report and accompanying recommendations. (See attached.)

After the presentation, UGC members and guests asked questions and voiced concerns about the proposal. A motion was then made to approve the curricular framework recommended by the task force as a guiding principle for the university's general education requirements. The motion received a second and the subsequent vote consisted of the majority voting "yea," one member voting "nay," and one member abstaining.

This task force has completed their directive and will disband. A new task force will be appointed to implement the approved curricular framework, with the new general education curriculum taking effect in fall 2020.

Adjournment: Katherine Ambroziak adjourned the meeting at 5:05 pm.

Next regularly scheduled meeting: Tuesday, September 19, 2017, at 3:40 pm in the Multipurpose Room of Frieson Black Cultural Center.

Minutes submitted by: Molly Sullivan



To: Undergraduate Council Members

From: Vice Provost R.J. Hinde

Re: General Education Reinvention

Date: 6 April 2017

Please find attached to this memo the final report of the General Education Reinvention Task Force, along with the task force's recommendation for a new university-wide General Education curriculum and a new UTK graduation requirement. At its called meeting of April 18, 2017, the Undergraduate Council will be asked to approve both the General Education curricular framework recommended by the task force and the new graduation requirement. If approved, these changes will take effect in the 2020-2021 academic year.

The task force was originally appointed by my predecessor, Sally McMillan, and was charged with reinventing the General Education curriculum "in ways that are consistent with the vision and mission of the University of Tennessee, Knoxville" so that the curriculum will "align with the QEP focus on experiential learning as well as the broad themes of the Ready for the World initiative", will "help students clearly understand the value of general education in helping to solve the 'big problems' of the world", and will "encourage engagement across disciplines".

To complete this assignment, the task force has met continuously since its inception in January 2015. The task force has had several meetings with department-, college-, and university-level bodies, has issued intermediate progress reports on its work through stories in *TN Today* and the Provost's *Priorities* newsletter, and has presented progress reports to the university's Academic Council and to the Undergraduate Council. The task force also invited the entire campus community to a General Education Roundtable to obtain input from faculty (tenured, tenure-track, and non-tenure-track), staff, and students. The task force has carried out its work in an open, consultative manner and has considered input and recommendations from a large number of campus constituents.

The proposed new General Education curricular framework has been designed to not increase the number of credit hours dedicated to General Education requirements that are not also applicable to a student's major or minor. The main changes to the current General Education curriculum are as follows:

- (1) Addition of a required course in Applied Oral Communication, typically associated with (and overlapping with) a student's major, that provides students with experience in discipline-specific oral communication;
- (2) Addition of a new category of Applied Arts & Humanities courses allowing students to apply to General Education requirements up to six credit hours that provide opportunities for independent creative work and artistic expression;

BIG ORANGE, BIG IDEAS.

Platform Council of the University of Tennessee

- (3) Replacement of the two-course Cultures & Civilizations requirement with a two-course Global Citizenship requirement that includes a U.S.-focused course and a course with international focus;
- (4) Recognition that some courses might fit into either the traditional Arts & Humanities or Social Sciences area, or the new Global Citizenship area – although students cannot apply a single course to more than one area at a time;
- (5) Increased flexibility in a student's course selections through a two-course General Education Elective component that allows students to develop an academic focus within their General Education coursework, and that can support a student's pursuit of a minor;
- (6) Addition of a new Engaged Inquiries requirement that helps students understand how the learning objectives in General Education coursework link to topics in their major field of study, and that emphasizes collaborative, reflective, applied, and multidisciplinary learning – Engaged Inquiries courses can be in a student's major or minor, or pure electives.

The task force also proposes that all students complete an integrative, culminating educational experience that integrates their General Education and major coursework by applying what they have learned to the study of a critical issue or challenge facing today's world. This Contemporary Issues and Solutions requirement can overlap with a disciplinary capstone course, with a course in a student's major, or with elective courses.

The proposed new framework for General Education is innovative and flexible, connects to the university's Experience Learning and Ready for the World initiatives, incorporates several evidence-based high-impact practices shown to promote student retention and graduation, and does not add requirements that will stand in the way of students' timely progress to graduation. The additional flexibility provided by the new curriculum's Elective component may in fact reduce graduation bottlenecks.

The Undergraduate Council is being asked to approve the framework of the new curriculum; approval will be followed by appointment of a new implementation task force that will finalize catalog copy, oversee the establishment of new subcommittees of the Council's Curriculum and General Education committees, and begin creating the course lists that will populate the new curriculum. A draft version of the new General Education catalog copy has been provided by the task force as a starting point for implementation; however, the Council is not being asked to approve the draft catalog copy at this time. The draft catalog copy is provided here simply to help Council members understand the broad structure of the proposed new curriculum.

The Council will be provided with new catalog copy for consideration in academic year 2017-2018 and course lists for final approval in academic years 2018-2019 and 2019-2020.

Proposal for a new General Education Curriculum and Graduation Requirement for UTK undergraduates

April 3, 2017

The following materials are included for review by the Undergraduate Council.

1. Overview Document

This 4-page document provides:

- a. A description of what makes the proposed new curriculum innovative
- b. A concise overview of the proposed new curriculum
- c. A side-by-side comparison with the current curriculum
- d. Several frequently asked questions (FAQs) and responses.

2. Taskforce Report

This 7-page document provides:

- a. A list of current and past taskforce members
- b. A copy of the original charge to the committee
- c. A description of the guiding framework used by the taskforce
- d. A semester-by-semester summary of the taskforce's work, including
 - i. A Table (Table 1) of formal presentations / events to share work of the Taskforce with the Campus Community and hear feedback.
 - ii. A Table (Table 2) of curriculum changes considered but ultimately rejected, along with rationales

3. Detailed Description of the new curriculum

This 7-page document provides draft catalog copy of the entire new General Education and Volunteer Difference requirement, including proposed learning outcomes

4. New General Education Process Implications

This 2-page document describes the changes to existing committee structures and approval processes needed to implement the new curriculum, along with a proposed timeline for implementation

5. AOC courses

This 4-page document provides examples and suggestions for adapting existing courses to meet the new AOC requirement.

6. EI courses

This 4-page document provides examples and suggestions for adapting existing courses to meet the new Engaged Inquiries requirement.

7. VOL courses

This 1-page document provides examples for how to convert an existing course or experience into a VOL-designated Contemporary Issues and Solutions experience

8. Appendices

a. Appendix A: Reports from Roundtable

- i. A copy of the 2-page report from the April 2016 campus-wide roundtable event
- ii. A copy of the 2-page handout on linked / integrated courses developed based on discussions at the Roundtable.

b. Appendix B: Departmental examples

This appendix provides examples from specific departments of existing courses that would likely fit within the new General Education categories with modest modifications / adjustments. The Appendices are provided to provide greater clarity and help units better understand the extent to which the proposed new curriculum fits with the existing course offerings and curricula. Departments included:

- i. Animal Sciences
- ii. Biological Sciences
- iii. Biosystems Engineering
- iv. Business Administration
- v. Mathematics
- vi. Music
- vii. Psychology

Proposal for a new UTK General Education + Graduation Requirement

What makes this new curriculum different?

- **Global Citizenship:** Requiring all students to have exposure to both a US- focus and International focus course will ensure more students take a US History or other US-focused course to help them understand issues of pluralism and their role within the United States.
- **Electives:** The new General Education curriculum offers students more choice and flexibility by allowing them to choose specific areas and courses in which to take their 6 elective General Education credits. By not limiting the areas or departments in which these electives are taken, students have the flexibility to pursue a minor as they fulfill General Education requirements.
- **Applied Arts & Humanities:** This new elective option will allow students to count experiential courses in the arts (e.g., performance-based music or theatre classes, studio art) toward their General Education requirements, promoting active learning.
- **Engaged Inquiries:** The most significant change in the new General Education is not in the specific content to which

students will be exposed in the classroom but the ways in which students *experience* the curriculum within – and beyond – the classroom. The Engaged Inquiries designation is designed to encourage active and experiential learning, interdisciplinary thinking, self-reflection, and application; in short, it is designed to encourage innovative pedagogy to transform students' (and instructors') experience of the General Education curriculum.

Proposal for a new UTK General Education + Graduation Requirement

OVERVIEW

Ways of Communicating – 5 courses, 9-15 credits

Written Communication (WC) – 3 courses

- English first-year composition sequence – 2 courses
- 1 Additional WC-designated course (*may be in major; can be fulfilled with 1-3 credits*)

Verbal Communication (OC) – 2 courses

- 1 OC-designated course (*may be in the major; can be fulfilled with 1-3 credits*)
- 1 Applied Oral Communication (AOC)-designated course (*may be in major; can be fulfilled with 1-3 credits*)

Broadening Perspectives – 31+ credits

Ways of Knowing – minimum of six 3-4 credit courses

- Arts & Humanities (AH) – 1 course
- Natural Sciences (NS) – 2 courses
- Quantitative and Logical Reasoning (QR) – 2 courses
- Social Sciences (SS) – 1 course

Global Citizenship – minimum of two 3-4 credit courses

- International Focus (GCI) – 1 course
- US Focus¹ – (GCUS) – 1 course

Electives – 6 credits

- Selected from any of the following designations: AH, AAH², GC, or SS

Engaged Inquiries³ (EI) – 9 credits⁴

Engaged Inquiries courses may be within the student's major, minor, elective, or any General Education area (AH, AAH, AOC, GCI, GCUS, OC, NS, QR, SS, WC). Students must complete at least 9 EI credits from at least 2 different departments.

In addition to the above revised General Education proposal, we are also proposing an additional graduation requirement: **THE VOLUNTEER DIFFERENCE:**

Contemporary Issues and Solutions Integrative Experience⁵ – 0-3 credits

¹ *Global Citizenship – US Focus courses “develop students’ understanding of historical and contemporary influences on the experiences of those living in the United States in order to foster students’ awareness of their own identities and responsibilities in an increasingly pluralistic country and world.”*

² *Applied Arts & Humanities (AAH) courses allow students to learn by doing through performances or creative activities.*

³ *Engaged Inquires courses are defined as courses that meet learning outcomes from at least 2 of the following domains: (a) Integrative or Multidisciplinary Knowledge; (b) Applied Learning; (c) Collaborative Learning; (d) Reflective Development.*

⁴ *The taskforce recommends a phased roll-out of the EI requirement, such that only 3 EI credits are required of students who enter UTK in the first catalog year of the new curriculum, 6 EI credits are required of students who enter UTK in the second catalog year, and the full 9 credits not being required until catalog year 3.*

⁵ *Courses or experiences that satisfy the Contemporary Issues and Solutions requirement provide students with the opportunity to integrate the disciplinary ways of knowing, awareness of self and other, and communication and reasoning skills developed through their General Education curriculum with focused inquiry in one or more specific disciplines (often a student's major) to examine critical issues facing today's world. Students may fulfill this requirement through a variety of VOL-designated experiences including capstone courses; internship, experiential, and service-learning courses; paid and unpaid internships, volunteer experiences, and study abroad experiences.*

Notes:

- *Individual courses may appear under more than one General Education category if they fulfill the learning outcomes of multiple categories (e.g., a single course might qualify for both GCUS and SS designations). However, no course may be used to satisfy two Broadening Perspectives requirements (e.g. a student may not use one course to satisfy both the GCUS and an SS requirement).*
- *All current General Education courses will need to re-apply for General Education designation (if departments wish to retain those courses' General Education designation). It should not be assumed that courses currently in one category will automatically carry over to a new category. In order for a course to be considered for General Education designation, an application is required that articulates the ways in which the course would meet the (in some cases new or revised) student learning outcomes for that category and addresses how those outcomes will be assessed, both at the student level (i.e., formative and summative class assignments) and the course level (i.e., plans for ongoing assessment and course development).*

Side-by-side comparison of current and proposed new requirements

CURRENT	NEW*
3 WC	3 WC
OC	OC
--	AOC
2 QR	2 QR
2 NS	2 NS
2 CC	GCUS, GCI
AH 1	AH 1
AH 2	Elective 1: AH, AAH, SS, or GC
SS 1	SS 1
SS 2	Elective 2: AH, AAH, SS, or GC
--	Volunteer Difference graduation requirement: <i>Contemporary Issues & Solutions</i>

AH = Arts and Humanities

AAH = Applied Arts & Humanities

AOC = Applied Oral Communication

CC = Cultures and Civilization

GC = Global Citizenship

GCI = Global Citizenship – International Focus

GCUS = Global Citizenship – US Focus

NS = Natural Sciences

OC = Oral Communication

QR = Quantitative Reasoning

SS = Social Sciences

WC = Written Communication

9 of students' 120+ credits must be designated Engaged Inquiries (EI)*Frequently Asked Questions:****What about foreign language requirements?**

Assuming the language course meets the GCI learning outcomes, two semesters of a foreign language could be used to satisfy the GCI requirement *and* one elective requirement. (Assuming American Sign Language (ASL) courses meet the GCUS learning outcomes, two semesters of ASL could be used to satisfy the GCUS requirement *and* one elective requirement.)

It looks like some students may take only one Social Science or Arts & Humanities course. Is that true?

Possibly, yes. Keep in mind, however, that we expect courses in the Global Citizenship category to span the Social Sciences, Arts, and Humanities. That means, for example, that a student might only take one Ways of Knowing Social Science course but use a second course from a social science discipline to fulfill the GCUS requirement.

The new curriculum guarantees exposure to the Arts & Humanities and the Social Sciences for all students while also introducing flexibility for students to choose courses in which they are most interested or to pursue minors.

How will our students fit in the new Applied Oral Communication course?

Our expectation is that there are already many courses students take within their major in which disciplinary communication is sufficiently emphasized to meet the AOC designation, meaning departments would not necessarily have to create a new course. (Rather, they could apply for such an existing course to satisfy the AOC General Education requirement.)

How will our students fit in the new Contemporary Issues and Solutions graduation requirement?

Again, our expectation is that there are many courses students take within their major or to fulfill the Global Challenges requirement in Arts & Sciences that could readily be adjusted to fulfill the CIS graduation requirement. In addition, programs could develop 0-credit options for pre-existing study abroad or internship requirements. This requirement creates exciting opportunities for programs to consider innovative capstone courses and co-curricular experiences.

General Education Redesign Taskforce Report – April 2017**Taskforce Members**

Erin Hardin (chair), Psychology
Kirsten Benson, English
Chuck Collins, Associate Dean, A&S
Cheryl Kojima, Animal Science
Barbara Murphy, School of Music
Missy Parker, A&S Advising
Conrad Plaut, Mathematics
Suzy Prentiss, Communication Studies
Lisi Schoenbach, English
Beth Schussler, EEB

Past members

Ian Down, Political Science
Ernie Freeberg, History
RJ Hinde, Vice Provost
Roger Parsons, Mechanical, Aerospace, and Biomedical Engineering
Dixie Thompson, Dean of the Graduate School

The General Education Redesign Taskforce was formed in Spring 2015 by then Vice Provost Sally McMillan with the following charges:

"The primary charge for the current taskforce is to:

1. *Review best practices in general education and apply them in ways that are consistent with the vision and mission of the University of Tennessee, Knoxville.*
2. *Revise the UT general education requirements.*
3. *Develop clear outcome expectations for general education.*
4. *Develop mechanisms for assessing the outcomes of general education.*

"The recommendations of the taskforce should:

1. *Uphold high standards to prepare students who embody the Volunteerspirit as life-long learners and ethical and professional leaders in the global community. Also consider ways to integrate core values of UT (see VOL Vision document) into the general education experience.*
2. *Align with the QEP focus on experiential learning as well as the broad themes of the Ready for the World initiative.*
3. *Be designed to help students clearly understand the value of general education in helping to solve the "big problems" of the world.*
4. *Be designed in a way that helps to encourage engagement across disciplines.*
5. *Start from the assumption that UTK admits students with high academic profiles.*
6. *Reflect input from the faculty at every stage of development and implementation.*
7. *Recognize the need for efficiency and effectiveness in delivery of academic programs."*

The taskforce met for the first time on January 12, 2015.

Backward Course Design as a Guiding Framework

Our work has been guided by the principles of backward course design (McTighe & Wiggins, 1999), in which the first step is to *Identify what you want students to know or be able to do*, with particular emphasis on identifying *enduring understandings*. "The term enduring refers to the big ideas, or the important understandings, that we want students to 'get inside of' and retain after they've forgotten many of the details. Put differently, the enduring understandings provide a larger purpose for learning the targeted content: They implicitly answer the question, **Why is this topic worth studying?**" (McTighe & Wiggins, 1999, p. 70). Enduring understandings tend to be the kinds of knowledge, awareness, or skills we want students to retain 6 months or 6 years after finishing a course or curriculum.

The second step in the backward course design process is to identify the evidence one would need in order to accept that students have acquired that enduring understanding. In other words, how will we assess achievement of the learning outcomes? Although the taskforce has not identified specific assessment methods for all proposed learning outcomes, conceptual questions about assessment have been present throughout our work. For example, this step forced us to consider what being *an effective problem-solver* or *engaged citizen* would look like, which often involved specifying the kinds of observable behaviors or written products such students would produce.

The third step in the backward course design process is to design the specific educational experiences that will produce the desired outcomes. For example, if we identify persuasive communication and creative thinking as important outcomes, what educational experiences do students need in order to acquire those communication and thinking skills and foundational knowledge?

Timeline and process

Table 1 presents a summary of all formally-scheduled meetings at which taskforce members presented the status of our work and solicited feedback from various parts of the campus community.

Spring 2015. During Spring 2015, the taskforce

- Reviewed the work of prior committees including the report from the 2012 General Education Taskforce and the committee that worked in Fall 2014 to revise the General Education Learning Outcomes
- Reviewed SACSCOC and THEC requirements
- Reviewed the general education programs at peer and aspirational peer institutions

In addition, Erin Hardin, Chair, attended the AAC&U annual conference on General Education and Assessment in Kansas City, Kansas, in Feb. 2015, allowing her to share information about best practices from the AAC&U and institutions from around the country with the taskforce.

Fall 2015. The taskforce reconvened and met approximately monthly throughout Fall 2015. Following the principles of backward course design (McTighe & Wiggins, 1999), we stepped back to focus on identifying the *enduring understandings* we want students to take away from General Education at UTK. Guided by questions such as, *What do we want every student who graduates from the University of Tennessee, regardless of major or career goals, to know or do?* we engaged in the following activities:

- Drawing on language from our own VolVision 2020 planning, benchmark schools, best practices and guidelines from the AAC&U and the Lumina foundation, we sifted and organized over 100 goals/concepts (e.g., ethics, logic, lifelong learning, creativity) into themes and priorities such as: *Seeing and Solving Problems, Awareness and Appreciation, Transfer, Engaged Learning.*
- Developed questions to seek information from current students and faculty about what works in our existing General Education and what people want. Members of the taskforce held listening sessions with small groups of undergraduate students and attended faculty meetings across the university (See Table 1).
- Reviewed relevant responses from an engineering student survey
- Developed [a brief video](#) inviting answers to the question of *What should every student who graduates from the University*

of Tennessee know or be able to do?

Spring 2016. In January, we began the process of moving from the abstract and aspirational to the concrete and practical. Each taskforce member synthesized the information and ideas from the previous year and, in the context of SACSCOC and THEC guidelines, taskforce members individually drafted an ideal new General Education Curriculum. Discussion of these possibilities helped us identify points of agreement:

- The need to change perception and name
- Improve the student experience in Gen Ed courses
- Make learning in Gen Ed courses relevant to students' planned majors and careers
- Focus on learning outcomes
- Integration of General Education throughout the curriculum, with courses beyond the first 2 years
- Maintain a broad experience for students, exposure to ideas and content outside one's major
- Incorporate the QEP Experience learning
- Ensure options, choices, flexibility for students
- Don't make it more cumbersome
- Regular assessment of achieving outcomes

At the end of Feb. 2016, three taskforce members (Erin Hardin, Missy Parker, Suzy Prentiss) attended the 2016 AAC&U Conference on General Education & Assessment. Inspired by a presentation at this conference, and with support from the Provost's office, the taskforce spent the rest of the spring semester preparing and planning for the **April 8 General Education Roundtable event**. As described in the attached brief report (Appendix A), which was shared with all participants within 3 weeks of the event, the event brought together over 120 faculty (tenure line and non-tenure line), students, administrators, and staff to engage in a big-picture discussion about what General Education is and could be at UT. The participants represented 100% of colleges and more than 80% of departments that serve undergraduates, along with more than 15 offices.

Summer 2016. The taskforce held a retreat across 3 days during the May mini-term to develop an initial curriculum proposal.

Fall 2016. The taskforce met weekly throughout the fall to continue to revise the proposal based on feedback from various constituents (see Table 1), as well as to draft learning outcomes and catalog copy for the revised curriculum. Table 2 presents a summary of changes that were considered by the Taskforce, but eventually rejected, throughout Summer and Fall.

Table 1. Formal presentations / events to share work of the Taskforce with the Campus Community and hear feedback.

Date	Group
Fall 2015	
Oct. 14	Associate Deans' Meeting
Oct. 14	A&S College Teaching Council
Nov. 24	Sophomore Committee
Nov. 30	Two undergraduate student focus groups
Dec. 15	CASNR Department Heads
Spring 2016	
Jan. 29	Advising community
Mar. 24	TN Today story
April 8	Roundtable Event
Fall 2016	
Sept. 7	General Education Committee
Sept. 13	Undergraduate Council
Sept. 29	Academic Advising Leadership Group
Oct. 10	Roundtable Participants
Oct. 12	Associate Deans' Meeting
Oct. 17	Listening session with students
Oct. 17	Listening session with instructors
Oct. 18	Listening session with NTT faculty
Oct. 19	Listening session with students
Oct. 19	Listening session with NTT faculty
Oct. 19	Listening session with instructors
Oct. 20	Listening session with instructors
Oct. 20	Listening session with Students
Nov. 2	TTLT symposium
Nov. 3	Academic Council
Nov. 16	Associate Deans'
Nov. 16	A&S Deans' Student Advisory Council
Nov. 30	History Department Faculty Meeting
Spring 2017	
Jan. 25	Academic Advising Retreat
Jan. 30	CCI Department Heads
Jan. 30	Provost's newsletter story
Feb. 28	Undergraduate Council
Mar. 22	CASNR Undergraduate Council

Table 2. Summary of changes to the curriculum considered, but eventually rejected by the taskforce, with rationale

Idea considered	Reason considered	Reason rejected
1. Organize General Education around broader learning outcomes rather than disciplinary categories	• Clearer focus on purpose of General Education	• Too difficult to work with state-mandated transfer articulation agreements
2. Reduce General Education to SACS-mandated minimum of 30 credits and implement 9- 12 credit graduation requirement (Tennessee Difference)	• Better integration of General Education knowledge / awareness / skills throughout curriculum • Ensuring transfer students benefit from redesign efforts	• Too burdensome for transfer students
3. Two-tier system in which second NS, SS, AH, GC course would explicitly build on the first course in each area, target higher-order learning outcomes	• Better integration of General Education knowledge / awareness / skills throughout curriculum • Improved pedagogy / more engaging classroom experience for students	• Too burdensome on individual units, who would have to significantly revise existing or create new courses in virtually every department to achieve the second-level goals and learning outcomes
4. Modified two-tier system, in which second NS, SS, AH, GC course would need to be an Engaged Inquiries course, but wouldn't need to explicitly build on the first course in each area	• Better integration of General Education knowledge / awareness / skills throughout curriculum • Improved pedagogy / more engaging classroom experience for students	• Still too burdensome on individual units; with only 1 "traditional" course required, units would be forced to significantly revise existing or create new courses or risk losing 50% or more of enrollment
5. Contemporary Issues and solutions 3-credit capstone course	• Better integration of General Education knowledge / awareness / skills throughout curriculum • Ensuring transfer students benefit from redesign efforts	• Too difficult to implement within existing resources structures (not enough faculty to teach small, writing-intensive capstones to every student on campus; potential addition of new 3-credit course for many majors)
6. Only require 1 semester of NS, and allow a 2 nd semester to be elective (as with AH, SS, GC)	• Greater flexibility of curriculum • Consistency across disciplines	• Belief students need at least 2 exposures to most disciplinary ways of thinking • With most GC courses being drawn from AH & SS, the majority of students will continue to get more than 1 exposure to these areas
7. Continue to require 2 semesters of AH & SS	• Ensure breadth of curriculum for all students	• No longer possible for 2 semesters of foreign language to both fulfill Gen Ed requirements, making new curriculum too burdensome on students whose college / major require 2 semester of foreign language
8. Make the Engaged Inquiries Requirement part of the Volunteer Difference graduation requirement, rather than General Education	• Ensure transfer students benefit from redesign efforts • Reduce burden on lower division courses	• Too burdensome for transfer students • Fails to incentivize pedagogical innovation within General Education itself
9. Require a FYS course of all first-year students	• Promote retention and successful transition of new students	• Too difficult to implement to scale within existing resources structures • Ignores transfer students • Expands General Education

Draft Catalog copy of the proposed new General Education Curriculum

Statement of Purpose. General education provides students with the foundation for successful academic study, for lifelong learning, and for carrying out the duties of local, national, and global citizenship. The university's general education curriculum is designed to help students better understand themselves, human cultures and societies, the natural world, and to contribute to their personal enrichment.

The general education program focuses on Ways of Communicating, Broadening Perspectives, and Engaged Inquiries.

Ways of Communicating: One hallmark of an educated person is the ability to think independently, and communicate this understanding to others. Therefore, students must practice the ability to acquire, evaluate, and use information and apply it in their written and oral expression. They must write clearly and speak convincingly to a variety of audiences.

Broadening Perspectives: General education should help students understand their relationship to family, community, local and global societies, and the natural world. To this end, general education should help foster a commitment to respecting the diversity of personal, cultural, and scientific values. Students should be able to explain their own values and beliefs, as well as to understand the histories and cultures behind those values. Students should study the historical traditions and artistic works of other cultures, both within and outside the United States, and the fundamental principles and chief discoveries of the scientific disciplines. They should be able to solve problems using logical and critical reasoning.

Engaged Inquiries: Educated global citizens need to be able to apply knowledge and skills beyond the classroom. They should be able to work effectively in teams, be self-reflective, and think integratively. General education should help students develop habits of self-examination, strengthen their sensitivity to the dynamic nature of a multicultural world through interdisciplinary perspectives, and collaborate with others to apply what they know.

The design of the University of Tennessee's general education program enables students to move among colleges within the university or another institution of higher learning to fulfill the requirements. Although general education provides students with the foundational knowledge and skills required for life in and beyond college, this information is specific neither to UT nor to a particular major or career path.

Requirements and Outcomes. The general education requirements and the student learning outcomes expected for each area are listed below. (See Notes).

Ways of Communicating – 5 courses

Written Communication (WC)

3 courses including ENGL 101 and ENGL 102 or equivalent plus an approved additional written communication (WC) course

Good writing skills enable students to create and share ideas, investigate and describe values, and record and explain discoveries – all skills that are necessary not only for professional success but also for personal fulfillment. Students must be able to engage in a productive writing process and write correctly, as well as locate relevant information, evaluate its usefulness and quality, and incorporate it logically and ethically to support ideas and claims for different audiences and purposes.

Courses in this area are expected to produce the following outcomes for students:

1. Students will demonstrate the ability to write clearly and correctly, employing the conventions of standard American English.
2. Students will demonstrate engagement in a writing process that includes drafting, feedback, and revision.
3. Students will demonstrate the ability to locate and use relevant, credible evidence to support ideas.
4. Students will demonstrate the ability to write effectively for different audiences and purposes, shaping content, organization, style, and citation/documentation conventions to correspond with appropriate disciplinary expectations and rhetorical contexts.

A. First-year composition (2 courses)

Students may satisfy the first-year composition requirement in one of two ways:

1. By completing 6 hours in English writing courses according to one of the following 4 sequences:
 - ENGL 101 and ENGL 102
 - ENGL 118 and ENGL 102. Students who earn a B or higher in ENGL 118 may complete their first-year composition requirement with ENGL 102, a sophomore-level course in the English department, or ENGL 355. The sophomore course, if appropriately designated, may be used to satisfy another General Education requirement (e.g., AH, GCUS). Eligibility for ENGL 118 will be determined by ACT or SAT scores.
 - ENGL 131 and ENGL 132. Placement in ENGL 131 or ENGL 132 will be determined by TOEFL (or equivalent standardized test) scores.
 - ENGL 198 and ENGL 298 (for Chancellor's Honors Program students only)
2. By earning credit for ENGL 101 through a College Board Advanced Placement Test and completing one additional course from the following:
 - ENGL 102 or ENGL 290. Eligibility for ENGL 290 will be determined by ACT or SAT scores.

B. Additional Written Communication (WC) course (1 course)

Upon completion of the first-year composition requirement, students must take one other approved writing intensive (WC) course. The WC course can be within the student's major or an elective.

List of approved courses to follow.

Verbal Communication (VC)

1 Oral Communication (OC) course and 1 Applied Oral Communication (AOC) course

Oral communications skills enable students to interact successfully with others, share ideas, and present and explain discoveries, all of which are necessary for professional success and personal fulfillment. Students should be able to speak in an informative and/or convincing manner to other individuals and to groups, both small and large. Students should be able to locate relevant information, evaluate its usefulness and quality, and incorporate the information logically and ethically in oral communication.

A. Oral Communication (OC) 1 course

The OC course lays the foundation for verbal communication across all majors, disciplines, and professions.

Courses in this area are expected to produce the following outcomes for students:

1. Students will demonstrate the ability to speak clearly and effectively.
2. Students will demonstrate the ability to locate and use relevant, credible evidence to support ideas.
3. Students will demonstrate the ability to present oral information effectively to different audiences, shaping message, organization, language choices, and delivery techniques to correspond with purpose and rhetorical context.

Students may satisfy the OC requirement by completing any course from the approved OC list.

List of approved OC courses to follow.

B. Applied Oral Communication (AOC) 1 course

Applied Oral Communication (AOC) courses will expand upon the OC course to focus on oral communication skills as they apply to a specific discipline or career. The AOC course can be within the student's major or an elective.

Courses in this area are expected to produce the following outcomes for students:

1. Students will demonstrate the ability to speak clearly and effectively.
2. Students will demonstrate the ability to locate and use relevant, credible evidence to support ideas.
3. Students will demonstrate the ability to present oral information effectively, shaping message, organization, language choices, and delivery techniques to correspond with purpose and rhetorical context.
4. Students will demonstrate the ability to communicate effectively in an applied context.
5. Students will recognize the ethical responsibilities of communicators while demonstrating respect for diversity and cross cultural verbal and nonverbal communication practices as they apply to their academic and professional areas.

List of approved AOC courses to follow.

Broadening Perspectives – 31 credits**Ways of Knowing****Minimum of six 3-4 credit courses**

To be prepared to solve novel problems, effective citizens must have basic knowledge of the chief discoveries and perspectives of the sciences, arts, and humanities; be familiar with the ways in which these disciplines generate knowledge about the world; and be able to apply logical and critical reasoning. Ways of Knowing courses are intended to provide all students with broad exposure to mathematical, quantitative, and logical reasoning; the social and natural sciences; and the arts and humanities.

A. Arts & Humanities (AH) 1 course

"What does it mean to be human?" In attempting to answer this question, people have produced—and continue to produce—culturally and historically significant works. The study and critical interpretation of such works and their creators not only enriches students' lives but also helps students understand their own and others' answers to this enduring question.

Courses in this area are expected to produce the following outcomes for students:

1. Students will demonstrate the ability to identify and describe prominent works, figures, and/or schools of thought in the arts and humanities.
2. Students will demonstrate the ability to describe the cultural and historical significance of prominent works, figures, and/or schools of thought in the arts and humanities.
3. Students will demonstrate the ability to critically interpret prominent works or accomplishments in artistic and humanistic fields.

This requirement is satisfied by taking one course from the approved AH list.

List of approved courses to follow.

B. Natural Sciences (NS) 2 courses

Over time, advances in science and technology have shaped our understanding of the world and our place in it. All students should be familiar with the fundamental principles and chief discoveries of one or more scientific disciplines,

should understand the role and relevance of science in contemporary society, and should be able to use scientific knowledge and methods to answer questions about natural phenomena and analyze contemporary issues.

Courses in this area are expected to produce the following outcomes for students:

1. Students will demonstrate the ability to describe fundamental principles and chief discoveries through appropriate use of the basic vocabulary of a course's discipline.
2. Students will demonstrate the ability to identify the scientific dimensions of contemporary issues.
3. Students will demonstrate the ability to use experimental techniques to answer questions and test hypotheses.

This requirement is satisfied by taking two courses from the approved NS list. At least one of the courses must have a laboratory.

List of approved courses to follow.

C. Quantitative and logical reasoning (QR) 2 courses

Quantitative and statistical evidence and mathematical and logical reasoning often play critical roles in building arguments and claims to support opinions and actions. Students should therefore possess the mathematical and quantitative skills needed to evaluate such arguments and claims. Students should be able to recognize the quantitative dimensions of questions and issues they will encounter in their professional and personal lives. They also should be able to use mathematical and logical reasoning to formulate and solve problems.

Courses in this area are expected to produce the following outcomes for students:

1. Students will demonstrate the ability to identify those aspects of arguments and claims that rely on quantitative evidence and on mathematical or logical reasoning.
2. Students will demonstrate the ability to evaluate the appropriateness of conclusions drawn from quantitative evidence and mathematical or logical reasoning techniques.
3. Students will demonstrate the ability to formulate and solve problems that rely on mathematical or logical reasoning.

This requirement is completed by

1. Taking one course from the list below:

Mathematics

MATH 113 - Mathematical Reasoning MATH 115 - Statistical Reasoning
MATH 117 - Honors: Mathematical Reasoning MATH 123 - Finite Mathematics
MATH 125 - Basic Calculus MATH 141 - Calculus I MATH 142 - Calculus II
MATH 147 - Honors: Calculus I MATH 148 - Honors: Calculus II
MATH 151 - Mathematics for the Life Sciences I MATH 152 - Mathematics for the Life Sciences II
MATH 202 - Probability, Statistics, and Euclidean Geometry

Statistics

STAT 201 - Introduction to Statistics
STAT 207 - Honors: Introduction to Statistics

2. Taking a second course from the list above OR taking a course designated in the undergraduate catalog as having a quantitative component (QR). The course designated as having a quantitative component may be within the student's major or an elective.

List of approved QR courses to follow.

D. Social Sciences (SS) 1 course

Why do people – individually and collectively – do what they do? Answering this question allows us to better understand ourselves, make better decisions, and promote the health and success of individuals and groups. The ability to answer this question requires gaining knowledge about individual and group behavior and political and social systems, as well as understanding the methods by which social scientists collect, create, and evaluate such knowledge.

Courses in this area are expected to produce the following outcomes for students:

1. Students will identify and critique claims about human behavior and the dynamics of individual, political, and social issues.
2. Students will demonstrate knowledge of appropriate and ethical methods, technologies, and data that social scientists use to investigate and describe the human condition.

This requirement is satisfied by taking two courses from the approved SS list.

List of approved SS courses to follow.

Global Citizenship (GC)

Minimum of two 3-4 credit courses

Deepening understanding of one's own cultures and traditions requires stepping back to see how and why individuals and societies

are both similar and different. Contextualizing beliefs about global events, ideas, and social practices provides students with the tools they need to understand historical, social, linguistic, and/or cultural similarities and differences.

A. Global Citizenship - International Focus (GCI) 1 course

Courses in the International Focus area of the Global Citizenship category develop students' appreciation of international cultures. Courses will help students develop an understanding of historical and contemporary influences on the experiences of those living outside the United States.

Courses in this area are expected to produce the following outcomes for students:

1. Students will exhibit knowledge of the histories, experiences, language, and/or contributions of social, ethnic, and cultural groups outside of the United States.
2. Students will demonstrate an ability to reflect critically on their own social and cultural perspectives. This requirement is satisfied by taking one course from the approved GCI list.

List of approved GCI courses to follow.

B. Global Citizenship - US Focus (GCUS) 1 course

Courses in the US Focus area of the Global Citizenship category develop students' appreciation of the variety and realities of the "American experience." Courses will help students develop an understanding of historical and contemporary influences on the experiences of those living in the United States in order to foster students' awareness of their own identities and responsibilities in an increasingly pluralistic country and world.

Courses in this area are expected to produce the following outcomes for students:

1. Students will exhibit knowledge of the histories, experiences, and/or contributions of different social and cultural groups in the United States such as groups categorized by ethnicity, race, gender, class, religion, sexual orientation, disability, language, or human geography.
2. Students will demonstrate an understanding of the ways that categories of difference have been socially constructed and affect the socioeconomic and cultural status of and opportunities for individuals and groups in the United States.
3. Students will demonstrate an ability to reflect critically on their own social and cultural perspectives. This requirement is satisfied by taking one course from the approved GCUS list.

List of approved GCUS courses to follow.

Electives 6 credits

Electives offer students choice and flexibility to choose specific areas and courses in the arts & humanities, social sciences, and / or global citizenship to explore in greater depth.

This requirement is satisfied by taking six additional credits from any courses on the approved AH, SS, or GC lists (shown above). In addition, elective courses may be from the Applied AH area, described below. The courses may be within the student's major, minor, or electives; however, only 3 credits may overlap with the major.

Applied Arts & Humanities (AAH)

Applied AH courses allow students to learn by doing through performances or creative activities.

Courses in this area are expected to produce the following outcome for students:

1. Students will demonstrate the ability to create or perform an artistic work.

List of approved courses to follow.

Engaged Inquiries (EI) – 9 credits

Foundational knowledge alone is insufficient for being a truly well-educated global citizen ready to lead and solve novel problems; students also need experiences that broaden, extend, apply, and integrate prior learning and promote collaboration and self-awareness.

In all Engaged Inquiries courses, students will produce an investigative, creative or practical work relevant to the course topic.

In addition, EI courses must demonstrate that they produce learning outcomes from at least 2 of the following areas:

• **COLLABORATIVE LEARNING**

Throughout the semester, students will engage in a process of sharing ideas, making useful contributions, communicating effectively, understanding their role(s), planning and implementing the plan to completion.

Courses in this domain are expected to produce the following outcomes for students:

1. Students will demonstrate the ability to work effectively in a group to complete a project or performance.

- **INTEGRATIVE OR MULTIDISCIPLINARY LEARNING**

Courses that address this domain may include team-taught interdisciplinary courses; exploration into adjacent fields; courses on pre-defined interdisciplinary subjects (e.g., Law & Literature).

Courses in this domain are expected to produce the following outcomes for students:

1. Students will demonstrate the ability to draw on theories, tools, and / or methods from at least two fields of study to produce an investigative, creative, or practical work or understand a relevant issue.

- **APPLIED LEARNING**

In applied learning courses, students will engage in a process of proposing, implementing, and assessing the success of strategies, plans, or approaches to addressing questions in applied contexts.

Courses in this domain are expected to produce the following outcomes for students:

1. Students will apply skills and knowledge from the classroom in hands-on and /or real-world settings or in independent / directed research or creative projects.

- **REFLECTIVE LEARNING**

Students will engage in reflective activities including journal entries, reflective response papers, creative exercises, etc., on a regular basis in this course not only to grapple with the major ideas of the course, but with the question of what these ideas mean to them:

Courses in this domain are expected to produce the following outcomes for students:

1. The ability to draw connections between the subject matter of the course and the student's own experience, to concepts from other classes, to ethical or social issues raised by the subject matter, or to the larger significance of the materials.
2. The ability to reflect on their own thinking, learning, understanding, and competencies.

This requirement is satisfied by taking 9 credits of courses from the approved Engaged Inquiries (EI) list. These courses must be from at least 2 different departments. These courses may be within the student's major, minor, elective or within any General Education area (AH, AAH, AOC, GCI, GCUS, OC, NS, QR, SS, WC).

List of approved courses to follow.

NEW GRADUATION / DEGREE REQUIREMENT: THE VOLUNTEER DIFFERENCE (VOL)

Contemporary Issues and Solutions Integrative Experience – 1 course / 0-3 credits

Experiences that satisfy the Contemporary Issues and Solutions requirement provide students with the opportunity to integrate the disciplinary ways of knowing, awareness of self and other, and communication and reasoning skills developed through their General Education curriculum with focused inquiry in one or more specific disciplines (often a student's major) to examine critical issues facing today's world. Courses or experiences with this designation address a contemporary issue or challenge, defined as a topic that currently affects individuals' abilities to lead safe, fulfilling, healthy lives and to contribute to productive societies.

Examples include but are not limited to poverty, the ethics of capitalism, biodiversity loss, the role and value of the arts or sciences in contemporary society, world hunger, racism, gender-based violence, climate change, education.

Students may fulfill this requirement through a variety of VOL-designated experiences including capstone courses; internship, experiential, and service-learning courses; paid and unpaid internships, volunteer experiences, and study abroad experiences.

VOL-designated experiences will produce the following learning outcomes for students:

1. Students will be able to reflect in writing on how the knowledge, awareness, and skills they have acquired through their General Education experiences contribute to their understanding of the contemporary issue and possible solutions.
2. Students will demonstrate the ability to effectively communicate to one or more specific audiences about the contemporary issue, in terms of its history, scientific dimensions, cultural influences, underlying mechanisms, correlates, outcomes, and /or policy implications.
3. Students will evaluate proposed solutions to a contemporary issue.

Suggested Pre-reqs: junior standing

Suggested Background: Completion of Ways of Communicating component of Gen Ed (all WC, OC, AOC)

Notes

1. Some courses on the various General Education course lists may have prerequisites. Students are responsible for meeting all course prerequisites.
2. A student's college/program may require specific General Education courses.
3. General Education courses must be taken for a letter grade (i.e., A-F) rather than Satisfactory/No Credit (unless this is the only way the course is offered).
4. The Office of Disability Services (ODS) is committed to providing equal opportunities for students with disabilities at the University of Tennessee. Appropriate accommodations will be made to enable persons with disabilities to satisfy the General Education requirements. Students with documented disabilities should contact the Office of Disability Services for assistance with appropriate accommodations at (865) 974-6087 or ods@tennessee.edu.
5. Subcommittees of the Undergraduate Council General Education Committee are charged with management of the courses to be included on the General Education course lists for the Ways of Communicating, Broadening Perspectives, and Engaged Inquiries areas.

PROCESS IMPLICATIONS

Each subcommittee will need to review existing / develop new criteria and review processes for approving courses. All courses must be resubmitted for consideration for inclusion in the new General Education. New applications must include specific information about assessment plans. The General Education committee will also need to determine a process for regularly re-approving courses.

WAYS OF COMMUNICATING

- Verbal Communication:
 - o Rename the OC sub-committee of the General Education committee
 - o Development of clear criteria and a clear review process for approving courses for the AOC designation. (cf. the criteria and review process for approving courses for the WC designation)
- Written Communication (WC): Existing structure

BROADENING PERSPECTIVES

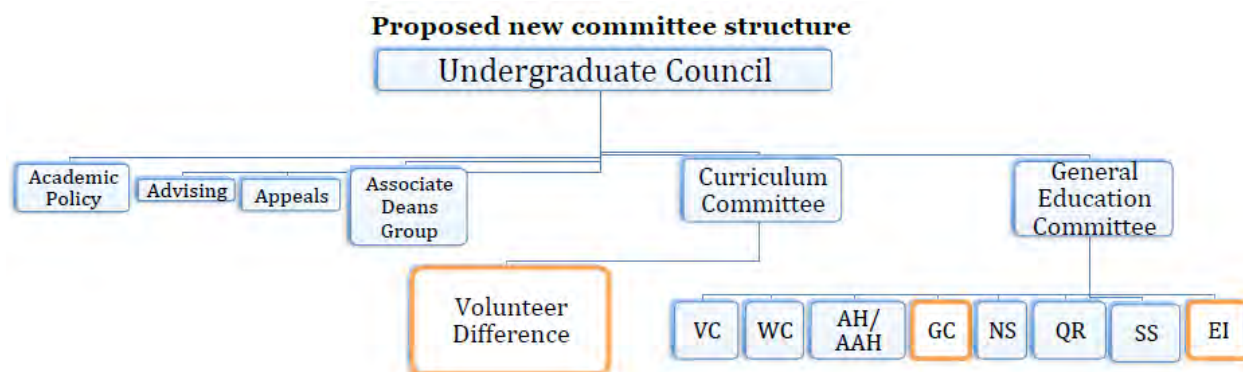
- Arts & Humanities (AH): Existing structure
 - o AH sub-committee would also be charged with developing clear criteria for, reviewing and approving courses with the Applied Arts & Humanities (AAH) designation.
- Cultures & Civilizations (CC): sub-committee of the General Education committee will be eliminated
- Global Citizenship (GC):
 - o New sub-committee formed to review and approve courses in both the GCI and GCUS areas.
 - o Development of clear criteria and a clear review process for approving courses for the GC designation.
- Quantitative Reasoning (QR): Existing structure
- Natural Science (NS): Existing structure
- Social Sciences (SS): Existing Structure

ENGAGED INQUIRIES (EI)

- Formation of a new Engaged Inquiries Sub-committee to review and approve courses in these areas

VOL: Contemporary Issues & Solutions

- Formation of a new *Volunteer Difference* subcommittee under the Curriculum Committee of the Undergraduate Council. This subcommittee would refine learning outcomes and develop approval processes for this new graduation requirement.



Proposed Timeline

Spring 2017	New curriculum structure approved
Fall 2017	New committees formed; timeline for re-approving existing courses developed; new Gen Ed advertised so departments may begin planning in earnest; course (re)approval begins
Spring 2018	Course (re)approval continues
Fall 2018	Bulk of courses for new Gen Ed submitted for approval
Spring 2019	List of approved courses released for department/ college review
Fall 2019	College updates due (changes to college curricula, majors, in response to new courses on Gen Ed lists)
Spring 2020	All changes for Fall 2020 catalog approved!
Fall 2020	NEW GEN ED goes into effect, with 3 credits of EI courses required
Fall 2021	6 credits of EI courses required
Fall 2022	9 credits of EI courses required; full implementation of new Gen Ed

AOC Course Guidelines

Applied Oral Communication (AOC) courses highlight those communication skills needed and valued in many different disciplines across campus including: interpersonal, small group and team communication; nonverbal and cross-cultural communication; communication of discipline-specific information both within and outside the discipline; conversational communication in formal and informal settings; and active listening. The taskforce suspects there are many latent AOC courses already being offered across the campus that simply have not had the incorporation of oral communication skills recognized yet. For example, many upper division courses already integrate significant discussion and/or student presentations.

Although the Verbal Communication subcommittee of the General Education Committee will be charged with developing specific and enforceable requirements for the new Applied Oral Communications category, the General Education Redesign Taskforce offers the following suggested guidelines for the **required features of an AOC course** (adapted from existing guidelines for WC courses):

1. Oral communication should be distributed throughout the semester

- The oral communication may take many forms and may include:
 - o Class discussions
 - o Formal and informal small group presentations including panel discussions, Q&A sessions, chapter/topic presentations, workshops, seminars, and demonstrations/trainings
 - o Individual or small group presentations in preparation for formal or informal delivery at seminars or conferences involving poster and/or paper presentations (with or without visual aids)
 - o Work groups and project teams who collaborate together throughout the course and who set agendas and conduct meetings (to brainstorm ideas, make decisions, set work schedules, solve problems, etc.), provide updates and progress reports, and present their final project.
 - o Showcasing of creative works (such as art, music, theatre, literature) involving verbal explanation of the background, value and interpretation of the piece to either the performance audience as an introduction or to the class after the performance as a reflection
 - o Individual or small group participation in mock interviews as preparation for jobs, internships, grants, study abroad opportunities, scholarships, etc.
- Rather than being concentrated at the end of the semester, both formal and informal assignments should be distributed throughout the semester.
- For example:
 - o a course that assigns a formal presentation on the last day of class at the end of the semester is not acceptable. However, if the presentation is divided into stages – an initial oral proposal, practice presentation, final presentation – and students receive feedback along the way, it would likely meet the spirit of the AOC requirement.
 - o a course that had a single debate-style discussion on the last day of class at the end of the semester is not acceptable. However, if the debate is divided into stages – with students communicating orally in small groups throughout the semester to plan their arguments, practicing for the final event, etc. – and students receive feedback along the way, it would likely meet the spirit of the AOC requirement.

2. Students should be provided with the opportunity to develop their oral communication skills based upon the instructor's feedback.

- Depending on the types of applied oral communication activities included in the course, this could mean:
 - o In discussion-oriented courses, providing formal feedback at least once before the end of the semester about the student's communication skills (speaking and listening) during class discussions, with areas of strength and opportunities for improvement clearly identified.
 - o In courses with small-group work, providing formal feedback (from instructors and peers) at least once mid-way through the group's work about each group member's oral communication skills (speaking and listening) during group activities, with areas of strength and opportunities for improvement clearly identified.
 - o In courses with formal presentations, providing formal feedback on the oral communication skills exhibited in a practice presentation, before the student completes the final presentation.
- An emphasis on the importance of the oral communication process and enhancing one's skills must be built into the course design.

3. Instructors should provide some in-class instruction in discipline- specific oral communication during the semester.

- The criteria for successful performance on graded oral communication requirements should be made clear via some type of in-class instruction and should be noted on the syllabus / assignment sheet.
- Instructors have flexibility in determining what needs to be covered in class. The in-class instruction should focus on teaching students how to speak / listen / present according to the criteria for successful performance on the graded communication assignments.

4. Oral communication should be a major component of the overall course grade.

- Students who do passing work in the class should be able to demonstrate proficiency in oral communication appropriate to the level, discipline, and content of the course.
- Unlike WC courses, which specify a number of words students must produce during the course, we recommend that AOC course guidelines specify a minimum portion of the overall course grade (e.g., 20%) determined by oral communication.

Course examples

Traditional content-focused courses:

Small teams could be responsible for the teaching of specific chapters, concepts, theories or procedures. These students would work collaboratively (either during or outside class) to research, structure, and design their materials. Their class session may include an activity or assignment, such as a game or quiz. Students could complete a participation checklist or report of each meeting, highlighting their progress, tasks, and contribution, which could be used for assessment purposes. Throughout the semester, the instructor would provide formal feedback on the group members' communication as well as discuss specific strategies for improving communication in the groups. On the day(s) students lead the class, the audience would evaluate the content and delivery of their lesson, as well as the quality of the activity or assignment. A rubric could be utilized by the instructor to assess the session and contribution, with opportunities for improvement noted for subsequent presentations.

Discussion-oriented seminar:

Throughout the semester, students would receive formal feedback from instructor (and possibly peers) on their discussion participation in class, including feedback on the extent of the student's improvement from one evaluation to the next. Evaluation criteria could include the abilities to communicate using course-appropriate evidence, demonstrate appropriate listening skills and responsiveness to others' ideas, and form persuasive arguments. Throughout the semester, the instructor would discuss specific strategies for improving communication in the discussion.

Practicum or field placement courses:

Students could be routinely evaluated on and provided explicit feedback about their communication and listening skills with clients / consumers by their site supervisors, including evaluation of improvement in specific areas across the placement experience.

Students could meet in small groups to brainstorm and discuss ways to communicate relevant information to clients / consumers (e.g., how to alleviate the fears of children getting a flu shot, the most effective ways to present nutritional information to juvenile diabetes patients, or how to encourage exercise among residents at an assisted living facility). As a small in-class activity, students could report back to the class by verbally sharing their ideas and writing them on the board. A larger project might include multiple meetings to discuss this issue (either during or outside class) with a final product of a training workshop presented to the entire class. Audience members could complete a peer evaluation checklist to provide feedback and small group members could provide participation feedback, as well. A rubric could be utilized by the instructor to assess the final project and member contribution.

Lab or other research-focused courses:

Students could, in preparation for attending an undergraduate research conference, present their papers to their classmates to share knowledge and receive feedback. Students would present their findings and engage in Q&A just like they would at a real conference, following time, dress, and format guidelines. Classmates would ask thoughtful questions, provide meaningful

feedback, and assess the presentations. Both the presentations and audience participation could be evaluated, with feedback provided before the conference so improvements can be made.

Service learning courses with community partners:

Teams of students could design a campaign or event for the community partner. Working collaboratively throughout the term (often outside of class), project teams set agendas, engage in face-to-face and virtual meetings with the community partners, periodically submit and/or present update and progress reports to the class, and present their final project to the class and community partner at the end of the term. Students assess the contribution of their team members on various aspects throughout the course. Throughout the semester, the instructor could check in during class on the groups' progress, discussing specific strategies for improving communication in the group. Rubrics could be utilized by the instructor and community partner to assess updates, preliminary presentations, final projects and team member contributions.

Performance / exhibition-oriented courses in the arts:

Students would research and analyze their audience before creating an effective message to connect them with the work(s). Prior to their performance / exhibition, the students would discuss the work with the audience, which could include information on the composer, the story behind the work, the motives or themes in the work, the form of the piece, the text and its meaning (if the piece is based on or uses a text), the motivation for selection, and rationale for sharing it with this audience. After the performance, there could be Q&A with the audience. Students could then share their experiences in a roundtable discussion back in their classroom. Throughout the semester, the instructor could discuss specific strategies for improving communication between artist and audience, with student practice and feedback.

Capstone

Students could actively engage in multiple mock interview activities as they prepare to interview for jobs, graduate school, and competitive grants. They could practice with each other during class, be interviewed by the instructor or by outside professionals. Rubrics could be utilized for assessment and students could provide peer evaluations, as well.

Engaged Inquiry Course Suggestions

Engaged Inquiries courses must meet three requirements:

1. **CREATIVE PRODUCT:** Students will produce an investigative, creative or practical work relevant to the course topic.
2. **Area 1:** EI courses must demonstrate that they produce learning outcomes from one of the following areas (*see Detailed Description document for description and learning outcomes for each area*):
 - a. **COLLABORATIVE:** COLLABORATIVE LEARNING
 - b. **APPLIED:** APPLIED LEARNING
 - c. **INTEGRATED:** INTEGRATIVE OR MULTIDISCIPLINARY LEARNING
 - d. **REFLECTIVE:** REFLECTIVE LEARNING
3. **Area 2:** EI courses must demonstrate that they produce learning outcomes from a second of the above areas.

Course Ideas: How to convert an existing course into an EI course

EXAMPLE 1: A course that already has a large group project that results in a final report and presentation.

1. **CREATIVE PRODUCT:** The final report and presentation likely already meet this requirement.
2. **Area 1: COLLABORATIVE**
To enhance it towards **Collaborative**, there would need to be some element of the project rubric that addresses individual students' contributions and roles in the group project. This could be through peer feedback at the end of the project, or through a rotation of group roles with instructor feedback.
3. **Area 2 possibilities:**
 - a. For **APPLIED**, the project could be designed to apply the course methods or ideas to solving a specific problem.
 - b. For **INTEGRATED**, the project could be designed to connect multiple fields (from within the course)
 - c. For **REFLECTIVE**, the course could add reflections about responsibilities and learning during the group project process. For example there could be a series of blog posts that address certain questions or prompts. At the end of course, students could produce an individual report on the connection between the project and their own learning process.

EXAMPLE 2: Suppose a course is already focused on the application of domain knowledge and skills to some practical problems, for example a course with fieldwork or some service component.

1. **CREATIVE PRODUCT:** the students could produce final report(s) in the form of a report to a client, perhaps with a presentation; the students could collectively, individually or in groups, create a handbook of proper procedures for the work they've done.
2. **Area 1: APPLIED**
This course likely already meets **APPLIED** as its first area.
3. **Area 2 possibilities:**
 - a. For **COLLABORATIVE**, the class could work as teams with clearly defined roles on the applied projects. There would need to be some assessment of how well they worked as a group.
 - b. For **REFLECTIVE**, there could be pre- and post-reflections on prompts related to the issues, related to the application of the content in practice, or any other related issues.

EXAMPLE 3: Suppose a course has 100+ students, meets twice a week in lecture (with clickers and other active learning elements) and once a week in smaller discussion groups. The course is focused primarily on developing advanced knowledge and problem solving skills. It does not directly involve applications, although the field does have applications.

1. **CREATIVE PRODUCT:** the students could (individually or in groups), create 3-5 minute videos to explain course content ideas to other students or the general public.
- 2-3. **Areas 1 & 2 possibilities:**
 - a. For **COLLABORATIVE**, the class could work in teams with clearly defined roles on the final creative project or throughout the semester on in-class activities in either the larger lecture or smaller discussion groups. There would need to be some assessment of how well they worked as a group and fulfilled their individual roles.
 - b. For **APPLIED**, students could use the final creative product to demonstrate applications; a service-learning component of the course could be developed in which students engage with a relevant community agency outside of class to learn about real-world applications of course material.
 - c. For **REFLECTIVE**, there could be pre- and post-reflections on prompts related to the issues, related to the application of the content in practice, or any other related issues.

Course Ideas: Specific Examples

Possible new course: Sustainability in the 21st Century

This course will combine the disciplinary areas of biology and economics to explore ways in which we can preserve and use resources in a more economically and biologically consistent manner. **Area 1: INTEGRATIVE** Renewable and non-renewable resources will be considered, with a specific focus on how resources are used at UTK. After learning about the many ways that sustainability can be considered and applied, small groups of students will work together [**Area 2: GROUP or APPLIED**] to create and pitch an idea to the UTK Office of Sustainability that would save money and resources and be consistent with modern visions for sustainability.

1. **CREATIVE PRODUCT:** The written / oral "pitch" to the Sustainability office, and any supporting materials needed
2. **Area 1: INTEGRATIVE:** Course explicitly integrates biology and economics
3. **Area 2: COLLABORATIVE or APPLIED:** Course likely meets applied, given its focus on developing a solution that could be presented to the office of sustainability. Depending on the assessment of students' effectiveness in their smaller groups and emphasis on developing collaborative skills within those groups, the course might also meet the COLLABORATIVE learning outcomes.

Existing course: PSYC 399: Supervised Research / Field Work

This is a service-learning course in which students contract to volunteer in a supervised practicum, internship, or other field placement with a community agency. Structured assignments facilitate students' transfer of learning from psychology coursework to the "real world."

1. **CREATIVE PRODUCT:** Students are required to produce either a science op-ed (to share relevant psychological science with the general public) or a report for their placement (to share relevant psychological science with their placement).
2. **Area 1: APPLIED:** Students volunteer 6-9 hours / week with a community partner to apply their knowledge and skills. Students submit regular written assignments (*Integration / Application papers*) in which they articulate the ways in which they are applying knowledge and skills acquired in their previous coursework to the placement experience.
3. **Area 2: REFLECTIVE:** Students also complete (a) pre- and post- placement reflective assignments in which they reflect on their career goals, how the placement will (and actually did) inform those goals, the qualifications they bring to the placement, develop during the placement, and need to continue to develop after the placement; and (b) a professionalism assignment in which they reflect on three areas of professionalism they want to develop during the placement. Students are also asked to reflect in their *Integration / Application papers* on the ways in which they are achieving / developing their professionalism goals throughout the semester.

Possible new course: Introduction to the Social or Natural Sciences

This "sampler pack" course would combine 3 different perspectives (e.g., sociology, political science, and anthropology; biology, chemistry, and geology) to introduce students broadly to disciplinary ways of knowing. (*See the yoked course model on the handout in Appendix A.*)

1. **CREATIVE PRODUCT:** Students could write a final paper discussing the similarities and differences across the three perspectives, or integrating the three perspectives to address a real-world issue; students could develop brief videos to explain cross-cutting themes; students could write op-eds or letters to future students explaining the value of the social (natural) sciences or general education.
2. **Area 1: INTEGRATIVE:** Students are drawing on and integrating three separate fields.
3. **Area 2: REFLECTIVE:** Students could be asked to regularly reflect on the ways in which concepts from the three perspectives connect to each other and to the students' own experiences, as well as how the perspectives challenge students' existing ways of thinking and beliefs.

Contemporary Issues & Solution Course Suggestions

Course Ideas: How to convert an existing course or experience into a VOL-designated experience

EXAMPLE 1: An arts major already requires students to complete a major performance / recital / exhibition of work as a graduation requirement.

- The student might complete the performance in the community, perhaps in a non- traditional setting (retirement center, elementary school with a large immigrant population, a hospital).
- The contemporary issue might be the value of the arts to the public in general, and to the members of that specific community.
- In addition to the performance / exhibition itself, the student might also incorporate relevant information to educate the audience about the history, influences, etc. of the work.
- Throughout the semester, students would reflect in writing on how they are integrating and applying knowledge, awareness, and skills from broad General Education coursework to the performance / exhibition, as well as on possible solutions to the contemporary issue.

EXAMPLE 2: Existing capstone courses within a major in which students integrate and apply material.

- Addition of a reflective written assignment in which students integrate broad knowledge, awareness, and skills acquired in General Education to the major.

EXAMPLE 3: Study abroad experiences

- Upon return, students participate in a Town Hall style event in which they produce and share a presentation describing their experiences abroad and how they integrated the knowledge, awareness, and skills from General Education and their major to understand contemporary issues encountered in their study abroad experience.
- Students would also reflect in writing on how they are integrating and applying knowledge, awareness, and skills from broad General Education coursework to the issue(s) encountered, as well as on possible solutions to the contemporary issue(s).

APPENDIX A: Reports and results from the April 8, 2016 Roundtable Event

RETHINKING GENERAL EDUCATION AT UT: A ROUNDTABLE APRIL 8, 2016

On Friday April 8, over 120 faculty (tenure line and non-tenure line), students, administrators, and staff participated in a roundtable event to engage in a big-picture discussion about what General Education is and could be at UT. The participants represented 100% of colleges and more than 80% of departments that serve undergraduates, along with more than 15 offices.

Roundtable participants considered 5 broad perspectives of General Education:

1. What should all students know or be able to do upon graduation?
2. An "effective citizen" model
3. A set of techniques, perspectives, and generalizable skills, rather than a survey of foundational ideas
4. An integrative, interdisciplinary focus that provides students a framework for learning within and beyond their major
5. The relationship between liberal learning and professional skills

The General Education Redesign Taskforce had two major goals for this event:

- Goal 1: Engage the campus community in thinking about General Education
Goal 2: Gather information to guide the General Education Redesign Taskforce

Both goals were successfully achieved.

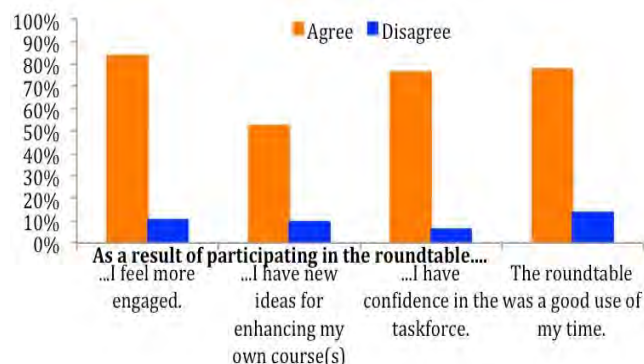
Goal 1: Engage the campus community in thinking about General Education

Of the ~70 participants who completed the post-event survey,

- 83% felt more engaged in General Education redesign as a result of participating in the event
- 52% left with new ideas for enhancing their own courses

Moreover,

- 79% rated the roundtable experience as excellent (48%) or good (31%)
- 75% rated the 3+ hour meeting as a good use of their time

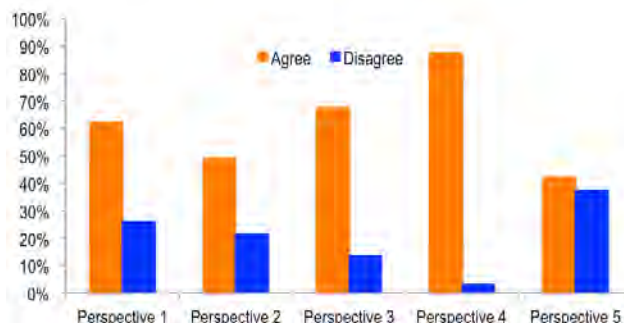


Goal 2: Gather information to guide the Taskforce

Several key themes emerged from both the roundtable discussions and the post-event survey:

- **Develop an integrative, interdisciplinary focus for General Education: the clear favorite among all perspectives**

- o 87.5% of respondents Strongly or Somewhat Agreed this perspective should guide General Education Redesign.
- o However, there are significant concerns about barriers to and institutional support for implementing an integrative, interdisciplinary approach that will need to be addressed.
- o Aspects of the other perspectives were also endorsed by the majority of respondents.



- *"The focus going forward should be on an inter-disciplinary model for Gen Ed, but given the strong support for Ways of Knowing (Perspective 3) and Knowledge and Skills (Perspective 1) these should be explicitly built into whatever framework is ultimately developed. This should not be difficult since explicitly seeking to address cross-disciplinary differences in ways of knowing almost certainly should be part of any inter- disciplinary approach to Gen Ed as a matter of course. Making it explicit may be necessary to ensure that it is consistently a part of the Gen Ed classes but it should be easy to build in. It would take a little more work to build in specific expectations about knowledge and skills the students acquire from the Gen Ed classes, but shouldn't be too difficult."*

- **Integrate Gen Ed with the major as a way to support an interdisciplinary perspective and carry Gen Ed into upper-division courses**

- o *"General education needs to be integrated into the overall experience and throughout the student's learning experience vs the current focus on basics or lower level courses."*
- o *"I like the idea that students can take a GenEd class and apply it directly to their major (ie, a speech class - useful in most majors). Having students think about how GenEd classes directly (or indirectly) relate to their major and/or career goal will make GenEd more relevant to students."*

- **Focus on *who* teaches Gen Ed courses, *how* to teach Gen Ed courses, and how to ensure the quality of Gen Ed courses over time**

- o More support and respect needed for non-tenure line faculty who bear the primary load of Gen Ed teaching
- o More support needed for tenure-line faculty to teach Gen Ed courses
- o Campus-wide workshops and conversations needed about effective General Education teaching and learning practices
 - *I think we particularly need to pay attention to improving students' understanding of what gen ed is, why they take gen ed courses, how a particular course might enhance life-long learning, etc. and perhaps something at the end of the course to reinforce this. Perhaps all faculty teaching these courses need to attend some workshop about this.*
- o Learn from exemplary General Education courses that already exist
 - *"Every Department should challenge their faculty to make every gen ed course the equivalent of 'The History of Rock and Roll.' This is a course that explores history, civil rights and other topics in a way that students are engaged almost without realizing it!"*
- o Develop a process for regular re-certification of Gen Ed courses to make sure courses remain true to the learning goals
 - *"... gen ed courses really need to be reviewed every few years to make sure they are being taught in accordance with the guidelines."*

Next Steps

- Continue to solicit feedback and support from as many members of the campus community as possible.
- Develop a working draft that articulates the principles of General Education redesign and identifies curricular and administrative needs for implementation. The General Education Redesign Taskforce has a retreat planned for May 18-19.
- In Fall 2016, a proposal for will be presented to the General Education Committee for consideration.

Surveys and additional information are available on our webpage:
<http://gened.utk.edu>

In our April 8 roundtable event, nearly 90% of participants supported **AN INTEGRATIVE, INTERDISCIPLINARY FOCUS THAT PROVIDES STUDENTS A FRAMEWORK FOR LEARNING WITHIN AND BEYOND THEIR MAJOR** (Hothem, 2016)

Themes and quotes from the feedback we gathered from our roundtable participants:

Advantages:

- Fosters understanding and appreciation of diverse perspectives and experiences
- *"I think helping students to integrate specific knowledge into a broader view of the world is the best way to encourage students to be able to think for themselves and that people who can not only gain knowledge, but can also draw informed conclusions from that knowledge make the best citizens."*
- Mirrors realities of the job market *"The real world is interdisciplinary."*
- Offers opportunities to integrate general education with major
- Allows opportunity to explore more disciplines and ideas, perhaps finding interests they didn't know.
- Exciting and engaging for instructors, not just students

Disadvantages

- Students need to know something before they can integrate it; to some extent must acquire basic foundation of knowledge first.
- Too many barriers in current system and structure. *"UT does not offer the administrative incentives or structure to encourage and cultivate collaborative teaching, teaching outside of one's department. Department bylaws, for example, do not mention this kind of collaboration as an integral part of tenure and promotion. Junior faculty are discouraged from engaging in anything that might take them away from [their scholarship]"*.

Thinking about interdisciplinary and integrative course experiences on a continuum may help address many of these disadvantages:



Below we list several ideas for course experiences along this full range of the continuum. What other ideas do you have?

Below we list several ideas for course experiences along this full range of the continuum. What other ideas do you have?

Linked courses

Linked courses involve 2 or more course sections whose instructors intentionally make cross-course connections. Linked courses involve pedagogical creativity, instructor communication and coordination, and potentially coordination with the registrar or advising. However, no additional curricular approvals are needed for existing courses that want to explore linkages. There are several possible formats:

1. Two courses that meet at the same time occasionally meet together, swap / mix students, etc.
2. Instructors of 2 or more courses get together, look at each other's syllabi, talk about ways to make connections between the classes (*we'll both be talking about similar topics in week 4....when I talk about this topic in my class, I can make reference to that topic from 2 weeks before in your class*)
 - Work with advisors to direct students into both sections as much as possible?
3. Instructors of 2 or more courses come up with a shared assignment, service learning experience, group project, etc. that helps students connect the courses.

One example: **a Town hall experience**

- Modeled on Cal State Chico: <http://www.csuchico.edu/fye/thm/>
- Students in a variety of courses each pick a contemporary issue (gun control, human trafficking, etc.) and spend the semester researching / thinking about the issue from that disciplinary perspective.
- At the end of the semester, students get together in a town hall roundtable event, where students from different classes share their research about the same problem
 - o Example: poetry, psychology, geography students each considered human trafficking. They come together to share what they've learned, then put it together to come up with a shared action plan for

- an intervention or awareness campaign. Community expert (e.g., an attorney who specializes in immigration and human trafficking) participates and gives feedback.
- o Inspired by an example from Shenandoah University with students enrolled in *Dance and World Literature and Contemporary World Fiction* <http://www.su.edu/event/town-hall-performances-open-dialogue/>

Yoked courses

Yoked courses involve having the same students enroll simultaneously in multiple course sections. Varying degrees of integration could be implemented. Depending on the specific courses involved, curricular approval of new courses may be required. Examples:

- Departments within or across divisions develop new 1-credit courses. Students enroll simultaneously in 3 of them (e.g., psychology, sociology, economics).
 - o Group A has psychology on Monday, sociology on Wednesday, and economics on Friday. Group B has sociology on Monday, economics on Wednesday, psychology on Friday, etc.
 - o Faculty teach 3 sections = 3 credits = easy teaching load management (also broadens possibilities for grad students to teach or for faculty to balance teaching loads from co-taught courses, etc.)
 - o Ideal world – coordinated sections, all examining the same problem / topic, from the three perspectives.
 - o Adequate world – student gets sampler pack experience of exposure to basic perspective of three disciplines.
- Connection packages – students take 3+ courses that all address a common theme from multiple perspectives. Modeled on the Arts & Sciences curriculum: http://catalog.utk.edu/content.php?catoid=20&navoid=2293#College-wide_Reg_Connections.



Team-taught courses

- Faculty from multiple disciplines get together to talk about contemporary issues and problems. Students watch / listen in / participate.
 - o Hybrid course option: Faculty discussion could be delivered entirely online, synchronously or asynchronously. See *UT Austin Introductory psychology model; not interdisciplinary, but ideas could be adapted:* <http://www.chron.com/opinion/outlook/article/Pennebaker-Gosling-New-generation-of-online-4756600.php>.
 - Could be videotaped and re-used for a year or two; students watch the interdisciplinary discussions outside of class
 - o Graduate students – from any of the disciplines -- facilitate smaller group discussions/ recitation sections with the students, handle grading, etc.
 - o Option for very large groups of students to be exposed to super-star faculty having engaging, interdisciplinary conversations in ways that work with teaching loads / demands.
- Truly interdisciplinary team-taught courses, with multiple instructors simultaneously present and engaging with students.



APPENDIX B: Department-specific examples

APPENDIX: ANIMAL SCIENCES

Note: The following courses from the 2017-2018 course catalog are included here as examples of courses that we suspect might be readily adapted for inclusion in the new General Education. Their inclusion here does not indicate they are or will be approved for inclusion. The exclusion of any course does not indicate anything about its potential appropriateness for inclusion.

AOC: existing course

ANSC 495 - Ethics in Animal Agriculture 1 Credit Hour

Discussion and presentations on issues related to ethics in animal research and industry. Topics may include transgenics, cloning, xenotransplantation, animal waste, animal welfare, research ethics and use of animals in medical research.

Registration Restriction(s): Minimum student level – senior.

This is a debate-and-discussion course in which small teams of students debate current issues in animal agriculture; little modification to meet AOC guidelines is likely to be needed.

EI: existing courses

ANSC 48* capstones, such as: ANSC 483 - Swine Management 3 Credit Hours

Integration of principles of nutrition, breeding, physiology, and marketing into complete production and management programs. Structure of industry, enterprise establishment, systems of production, production practices, and improvement program. Management evaluated in terms of production responses and economic returns.

Contact Hour Distribution: 2 hours and 1 lab.

(RE) Prerequisite(s): 320 and 340.

(RE) Corequisite(s): 330 and 380.

EI: applied learning, integrative

- **Applied learning** -- In this course, students actively participate in the care and management of pregnant sows, lactating sows, and newborn pigs. Procedures practiced by students may include immunizations, castrations, breeding, physical examinations, induction of and assistance in labor and delivery.
- **Integrative Learning** -- Students work in teams to produce "Perfect Farm" scenarios. All aspects of farm management, including facility design and layout, animal care, nutrition, marketing, contingency plans, and a five-year budget are researched, developed, and presented by each team.

EI: existing course

ANSC 492 - Animal Science Experiential Learning

1-6 Credit Hours

Off-campus work experience approved by the department. Objective is to compliment traditional classroom activities and give the student an opportunity to gain experience in industry. Students must submit official approval form prior to registration. The student will be evaluated based on feedback from the student's supervisor.

Repeatability: May be repeated. Maximum 6 hours.

Registration Restriction(s): Minimum student level – sophomore.

Registration Permission: Consent of undergraduate coordinator.

EI: applied learning, reflective development

- **Applied Learning** -- Internships serve to develop experience and comfort with professional responsibilities associated with positions in Animal Science. Students are required to use the knowledge gained in classrooms to work on real issues or challenges.
- **Reflective Learning** -- Students will present a poster at the (planned) end-of- semester symposium or file a written report detailing their experiences and their perceptions of change or growth within themselves as a result of participating in the internship.

APPENDIX: BIOLOGICAL SCIENCES

Note: The following courses from the 2017-2018 course catalog are included here as examples of courses that we suspect might be readily adapted for inclusion in the new General Education. Their inclusion here does not indicate they are or will be approved for inclusion. The exclusion of any course does not indicate anything about its potential appropriateness for inclusion.

EI: existing course

BIOL 159* - Skills of Biological Investigation

2 Credit Hours

Intended for science majors, an exploration of the skills necessary to conduct research in biology. Emphasis will be on reading primary literature, designing and carrying out experiments, summarizing and analyzing data, coming to conclusions from data, and presenting investigations in oral and written forms.

Satisfies General Education Requirement: (NS with lab) if taken with Biology 150, 158, 160, or 168.

Contact Hour Distribution: 1 hour discussion and one 3-hour lab.

Recommended Background: 150 or 160 or equivalent.

EI: collaborative & applied learning

- **Collaborative Learning:** In this course, students work in small groups to apply knowledge in scientific investigations to create new knowledge / understandings.
- **Applied learning:** Students apply skills and knowledge to carry out directed research projects.
- The oral and written presentations of these projects server as the scholarly product.

EI: existing course

BIOL 269 - Ecology Field-Based Laboratory

2 Credit Hours

Field-based activities that illustrate the relations between organisms and their environment, including human environmental problems.

Contact Hour Distribution: One hour of discussion and one 3-hour lab each week.

(RE) Corequisite(s): 260.

EI: collaborative & applied learning

- **Collaborative Learning:** In this course, students work in small groups to apply knowledge in scientific investigations to create new knowledge / understandings.
- **Applied learning:** Students apply skills and knowledge to carry out directed research projects.
- The oral and written presentations of these projects server as the scholarly product.

EI: existing course**EEB 415 - Field Ecology****4 Credit Hours**

Study of the field methods to examine fundamental concepts in ecology, including development of skills in hypothesis development, experimental design, field observation, plant, animal and microbial sampling techniques, data reduction and statistical analysis, and written and oral presentations.

Contact Hour Distribution: Lectures and field trips.

(RE) Prerequisite(s): Biology 260.

EI: collaborative & applied learning

- **Collaborative Learning:** In this course, students work in small groups to apply knowledge in scientific investigations to create new knowledge / understandings.
- **Applied learning:** Students apply skills and knowledge to carry out directed research projects.
- The oral and written presentations of these projects serve as the scholarly product.

EI: existing course**BIOL 105* - Parasites, Pathogens, and Pandemics: Infectious Disease and Society****3 Credit Hours**

Explores the nature of human infectious disease, including diseases such as bubonic plague, tuberculosis, malaria, AIDS, influenza, and Ebola, and non-human diseases and zoonoses. How diseases emerge and spread, how they can be controlled, and what diseases may shape future life on the planet (zombie apocalypse?) will also be discussed.

Satisfies General Education Requirement: (NS)

EI: collaborative & integrative learning

- **Collaborative Learning:** In this course, students work in small groups to apply knowledge in scientific investigations to create new knowledge / understandings.
- **Integrative learning:** Students are required to think about the intersections between science and society.
- Course might need to add a scholarly / creative product.

EI: existing course**BIOL 106* - The Living City****3 Credit Hours**

More than half the world's population lives in cities and is directly involved in ecological and evolutionary processes governing urban environments. Cities are unique ecosystems that develop novel organismal communities, alter weather patterns, and concentrate resources. The course will investigate urban ecosystems, and the health and financial implications for people.

Satisfies General Education Requirement: (NS)

EI: collaborative & integrative learning

- **Collaborative Learning:** In this course, students work in small groups to apply knowledge in scientific investigations to create new knowledge / understandings.
- **Integrative learning:** Students are required to think about the intersections between science and society.
- Course might need to add a scholarly / creative product.

APPENDIX: BIOSYSTEMS ENGINEERING

Note: The following courses from the 2017-2018 course catalog are included here as examples of courses that we suspect might be readily adapted for inclusion in the new General Education. Their inclusion here does not indicate they are or will be approved for inclusion. The exclusion of any course does not indicate anything about its potential appropriateness for inclusion.

AOC: Applied Oral Communication / VOL: Contemporary Issues & Solutions Existing Courses**BSE 400 - Design Project I****2 Credit Hours**

With 402, this course comprises the biosystems engineering two-semester project sequence, in which student teams must tackle a stated problem, designing, building, and testing a prototype to determine success at meeting client performance criteria. This culminates the curriculum with a major design experience based on knowledge and skills acquired in earlier coursework and incorporating engineering standards and multiple realistic constraints. Includes development of a major design proposal, including engineering analyses, extensive documentation, and a culminating group presentation.

(RE) Prerequisite(s): Three of 411 or 417, 416 or 418 or Civil Engineering 495 or 498, 431 or 437, 451 or 457.

BSE 402 - Design Project II**2 Credit Hours**

Culmination of capstone design sequence. Intensive design experience on project chosen and approved in 401. Analysis, construction, testing, evaluation, and reporting required. Periodic oral and written reports and submission of design to external

engineering design competition or display required.

Contact Hour Distribution: 2-hour lecture, 2-hour recitation, 4-hour lab.

(RE) Prerequisite(s): 400 and 404 and 444.

AOC: With formal assessment of and feedback on students' oral communication skills within their project teams, in class, and at presentation, these courses are likely to fulfill AOC requirements.

VOL: These courses would likely need only to add explicit written reflection on the integration of General Education knowledge, awareness, and skills into the project.

APPENDIX: BUSINESS ADMINISTRATION

Note: The following courses from the 2017-2018 course catalog are included here as examples of courses that we suspect might be readily adapted for inclusion in the new General Education. Their inclusion here does not indicate they are or will be approved for inclusion. The exclusion of any course does not indicate anything about its potential appropriateness for inclusion.

EI: existing course

BUAD 205 - Business Ethics

3 Credit Hours

An in-depth focus on business ethics that combines philosophical theory and empirical social science. This course examines the process of identifying, understanding, and effectively addressing contemporary ethical issues in the business enterprise.

Perspectives from individual, organizational, societal and international levels are considered.

Registration Restriction(s): Majors in the Haslam College of Business.

EI: Integrative & Collaborative learning

- **Integrative learning:** Students are required to think about the intersections between ethics, philosophy, social science, etc.
- **Collaborative learning:** If students worked in small groups throughout the semester, with assessment of students' effectiveness in their smaller groups and emphasis on developing collaborative skills within those groups, the course might also meet the COLLABORATIVE learning outcomes.
- Course might need to add a scholarly / creative product.

AOC: existing course

BUAD 300 - Insight: Becoming Personally and Professionally Aware as a Leader

1 Credit Hour

Course will focus on equipping students with career, industry, and professional development knowledge necessary to becoming competitive for internships and other professional opportunities. Areas of content may include interviewing, personal branding, and business case analyses.

(RE) Prerequisite(s): 200.

Registration Restriction(s): Majors in the Haslam College of Business.

Course appears to include emphasis on oral skills including interviewing and discussing cases.

VOL: Contemporary Issues & Solutions Existing Course

BUAD 453 - Global Strategic Management: Integrating Concepts and Applications

4 Credit Hours

This capstone course integrates strategic management concepts and cases with application through a comprehensive simulation. The course is a fully integrated strategy/simulation experience and will also draw on student's major, concentration, and collateral studies, as well as their broad business knowledge acquired in previous courses in the curriculum.

(RE) Prerequisite(s): 331, 332, 341, 342; Finance 301.

Course appears to already require integration of knowledge, awareness, and skills from within and outside the major (including General Education); might need to add explicit written reflection on the integration of General Education. Course appears to address a range of contemporary issues relevant to business students in a global context.

APPENDIX: MATHEMATICS

Note: The following courses from the 2017-2018 course catalog are included here as examples of courses that we suspect might be readily adapted for inclusion in the new General Education. Their inclusion here does not indicate they are or will be approved for inclusion. The exclusion of any course does not indicate anything about its potential appropriateness for inclusion.

AOC: existing course

MATH 307 - Honors: Introduction to Abstract Mathematics

3 Credit Hours

Honors version of 300.

(RE) Prerequisite(s): 142 or 148.

Comment(s): For current and prospective math majors, honors students, and well-prepared students.

Throughout the semester, students are selected to present their solutions to problems to the class. The presentation simulates the conditions of a talk to present one's mathematical ideas to an audience familiar with the problem and answer questions from the students and myself. Students learn how to present orally and backed by written details on a whiteboard, think on their feet and respond clearly to questions.

VOL: Contemporary Issues & Solutions Existing Courses

MATH 475 - Industrial Mathematics

3 Credit Hours

Modeling, analysis, and computation applied to scientific/technical/industrial problems.

(RE) Prerequisite(s): 231.

Recommended Background: Familiarity with operating system and programming language.

In this capstone course, students work on a Team Project (in groups of 3, preferably from different majors). They choose and formulate a problem and a math model, submit a "Proposal for funding", work on it during the term, and at the end submit a Project Report, and present it to the class (during finals time). It is also writing-intensive, and modeling and computation intensive, and very interdisciplinary.

APPENDIX: MUSIC

Note: The following courses from the 2017-2018 course catalog are included here as examples of courses that we suspect might be readily adapted for inclusion in the new General Education. Their inclusion here does not indicate they are or will be approved for inclusion. The exclusion of any course does not indicate anything about its potential appropriateness for inclusion.

GCUS: existing course

MUCO 125* - Jazz in American Culture

3 Credit Hours

The historical study of jazz as part of American culture, including its styles, key performers, and musical practices. Writing-emphasis course.

Satisfies General Education Requirement: (AH)

Course would need to demonstrate it meets the GCUS learning outcomes.

GCUS: existing course

MUCO 411 - Music of Appalachia

3 Credit Hours

Explores the diverse, complex and frequently misunderstood music and culture of the Appalachian region. Topics include balladry, early fiddle and banjo styles, religious music, bluegrass, early country music, and Americana.

(Same as American Studies 411.)

Course would need to demonstrate it meets the GCUS learning outcomes.

GCI: existing course

MUCO 413 - Music and the African Diaspora

3 Credit Hours

Introduces music and related cultural expressions of the African diaspora connecting Africa, the Americas (especially North America) and Europe. Introduces interdisciplinary social theories, evaluates critical debates, and explores several case studies of African and African American music and performance.

(Same as Africana Studies 413.)

Comment(s): Students who have taken 310 cannot receive credit for 413.

Course would need to demonstrate it meets the GCI learning outcomes.

GCI: existing course

MUCO 380* - Music in World Cultures

3 Credit Hours

Examines music from an ethnomusicological perspective focusing on musical performance and the interrelationships of music, culture, and daily life. The course surveys music from a variety of cultures through a series of case studies.

Satisfies General Education Requirement: (WC)

(RE) Prerequisite(s): 210 and 220.

Course would need to demonstrate it meets the GCI learning outcomes.

EI/AAH: existing course**MUJZ 120 - Analysis of Jazz Styles****2 Credit Hours**

Individual improvisatory styles through analysis of their transcribed solos. Training and function of the ear in music. Transcription of solos from recordings and preparation of analysis.

(RE) Prerequisite(s): 110.

EI: Applied & reflective learning

- **Applied learning** -- In this course, students of jazz listen to and transcribe solos played by jazz artists. They may transcribe several different solos from 1 era or several different improvised solos of one song. Students then enter the transcriptions into the same musical notation file for comparison.
- **Reflective Learning** -- The students analyze each solo for elements of jazz vocabulary, labeling each element that they find (e.g., harmonic substitutions or alterations, extended sequences, prominent motives). Then the student compares the analysis of the two solos and reflects on why the choices were made by each soloist. Would need to add a component by which the students also reflect on their own thinking, learning, understanding, and competencies.

AAH

- Would work if the students perform some of the solos they have transcribed.

EI / AAH: existing course**MUTH 250 - Composition Class I****2-3 Credit Hours**

An introduction to compositional techniques.

Comment(s): Requires interview with theory/composition faculty.

Registration Restriction(s): Bachelor of Music or Bachelor of Arts – music major or music minor.

AAH

- Students in this course compose original works following criteria given by the instructors (e.g., length, form, instrumentation).

EI: Applied & Reflective Learning

- **Applied Learning** Students are using their knowledge of music theory and styles in music history.
- **Reflective Learning:** Students in the class listen to each other's composition and discuss what works and what does not in a classsetting.

EI/ AAH: existing course**MUEN 370 - Symphony Orchestra****1 Credit Hours**

Repeatability: May be repeated. Maximum 14 hours. Comment(s): Audition or consent of instructor required.

EI: Collaborative & Reflective Learning

- **Collaborative Learning** – students in orchestra learn to play in a large group (the full orchestra), and also in their section. Students in a section practice together to figure out how to play their part of the compositions. String players must propose and decide on the best bowings and methods for playing their part and fitting in with the rest of the orchestra.
- **Reflective Learning** – after each concert (and/or rehearsal), the director of the orchestra and the students review, reflect on, and discuss the students' performance to decide what worked and what did not and what needs to be worked on/improved for the next concert.

AAH

- Students in this class participate in 2-3 concerts per semester. They rehearse 6 hours per week to prepare for these concerts.

EI/AAH: existing course**MUTH 110 - Theory I****3 Credit Hours**

Materials of music, including basic elements through non-chord tones and 6/4 chords. Exercises in analysis, composition, and improvisation of music with emphasis on common practice.

Recommended Background: Successful completion of music theory placement test.

EI: applied & collaborative learning

- **Applied learning** – students will use their theory knowledge in compositional projects that reflect situations they may encounter while performing or teaching. Such exercises may include writing piano accompaniments for melodies (such as they may do when teaching) or writing out chords signified by lead sheet/pop chord/Nashville number

- symbols (as they might be required to do if they were a session musician in a recording studio) .
- **Collaborative learning** – students will work in a group on an analysis or creation of a piece of music and will present the results to the class.

AAH:

- Students in this course will compose short musical pieces (e.g., 8-16 measure melodies, contrapuntal exercises, accompaniments) to demonstrate concepts they are learning in class.

EI / AAH: existing course**MUTC 290 - Sound Recording Techniques****3 Credit Hours**

Theory and applications of tape recording's sound reproduction and reinforcement systems. Topics include room acoustics, audio measurements, microphones, studio and real-time processing, noise reduction, mixing, editing, monitors, system wiring, and maintenance.

AAH

- Students will record sounds (e.g. nature, people talking), and manipulate the sounds in some way to create a piece of music. This manipulation may be to edit extraneous sounds out of an existing recording.

EI: applied & reflective learning

- **Applied Learning** – In the musical world, students will need to record their music and produce clean recordings for auditions or job applications. Music educators may need to record their ensembles for teaching portfolios. Students must know how to use microphones and recording equipment to get the best sounds possible. This class will teach students how to record music for these real-world applications.
- **Reflective Learning** – students in this class listen to and comment on each other's projects. They talk about what worked and what did not and whether what they tried was the best way to produce the best recordings. They reflect on how these recordings would be received by the particular audience they are intended for. Would need to add a component by which the students also reflect on their own thinking, learning, understanding, and competencies.

APPENDIX: PSYCHOLOGY

Note: The following courses from the 2017-2018 course catalog are included here as examples of courses that we suspect might be readily adapted for inclusion in the new General Education. Their inclusion here does not indicate they are or will be approved for inclusion. The exclusion of any course does not indicate anything about its potential appropriateness for inclusion.

GCUS: existing course**PSYC 434* - Psychology of Gender****3 Credit Hours**

Biological, psychological, and social factors in gender. Importance of gender roles and stereotypes for behavior and experience.

(Same as Women, Gender, and Sexuality 434.)

Satisfies General Education Requirement: (WC)

(RE) Prerequisite(s): 110 or 117; and English 102, 132, 290, or 298. Registration Restriction(s): Minimum student level – junior.

Course would need to demonstrate it meets the GCUS learning outcomes.

GCUS: existing course**PSYC 435 - Multicultural Psychology****3 Credit Hours**

Issues of race, ethnicity, socioeconomic status, gender, spirituality, sexual orientation, and ability level as related to the theory, research, and practice of psychology will be examined. Focus will be on increasing personal self-awareness and knowledge of multicultural issues.

(RE) Prerequisite(s): 110.

Course would need to demonstrate it meets the GCUS learning outcomes.

GCUS: existing course**PSYC 471 - Psychology of Prejudice****3 Credit Hour**

Research and theory on the types of stereotyping and prejudice, their causes and consequences, and strategies for their reduction.

(RE) Prerequisite(s): 110 or 117.

Course would need to demonstrate it meets the GCUS learning outcomes.

EI /GCUS: existing course

PSYC 476 - African American Psychology**3 Credit Hours**

Introduction to the history, theory, research, and practice of African American psychology with a focus on the psychological, social, and educational realities of African Americans.

(Same as Africana Studies 476.) (RE) Prerequisite(s): 110 or 117.

Registration Restriction(s): Minimum student level – junior.

Course would need to demonstrate it meets the GCUS learning outcomes.

EI: applied & reflective learning

- **Applied Learning** -- In this course, students partner with a community agency (e.g., Beck Cultural Exchange Center) to conduct a service learning project.
- **Reflective Learning** – Throughout the semester, students reflect on their own cultural identities, experiences with racism, and ways in which the course content and class discussions challenge their attitudes, knowledge, and interpersonal skills.

EI /AOC: existing course**PSYC 409 - Group Facilitation****3 Credit Hours**

Study of theory and technique through supervised experience in small groups.

Repeatability: May be repeated. Maximum 6 hours. (RE) Prerequisite(s): 110 or 117.

Registration Restriction(s): Minimum student level – junior.

EI: Collaborative and reflective learning

- **Collaborative Learning** -- In this course, students engage in intergroup dialogue throughout the semester, giving and receiving feedback on their communication and functioning within the group. They are also trained to serve in a leadership role as small group facilitators.
- **Reflective Learning** – Throughout the semester, students reflect on their own cultural identities and ways in which the dialogues challenge their attitudes, knowledge, and interpersonal skills.
- *Course would need to add a creative / scholarly product.*

AOC

- The entire course is centered on specific oral communication /listening skills related to intergroup dialogue.

VOL: Contemporary Issues & Solutions Existing Course**PSYC 481* - Intimate Partner Violence****3 Credit Hours**

Introduction to research on the prevalence, course, causes, consequences, prevention, and treatment of psychological, physical, and sexual aggression in relationships.

Satisfies General Education Requirement: (WC)

(RE) Prerequisite(s): 110 or 117 or Sociology 120 or Sociology 127 or Social Work 200 or Social Work 207 or Educational Psychology 210; and English 102, 132, 290, or 298. Recommended Background: 295 or other research methods course.

Registration Restriction(s): Minimum student level – sophomore.

This course would likely need only to add explicit written reflection on the integration of General Education.

VOL: Contemporary Issues & Solutions Existing Course**PSYC 482 – Topics in Psychology: Sustainability****3 Credit Hours**

Description from catalog: Intensive analysis of special topics, such as sustainability psychology or intersectionality.

Extended description: Overcoming the negative effects of climate change involves not only the earth sciences (e.g., measuring changes in greenhouse gases in the atmosphere) and engineering (e.g., developing greener technologies), but also the behavioral sciences. After all, the rise in greenhouse gases is the result of human behavior and greener technologies will be most effective only if people change their behavior by adopting those technologies. Unfortunately, there are a host of psychological forces that make it difficult for people to believe that climate change is occurring, to believe that climate change is a result of human activities, and to take both collective and individual action to reduce those human activities. This course will focus on better understanding these psychological forces.

In this course, students receive training in and practice communicating with a variety of audiences both orally and in writing about climate change and partner with the sustainability office on campus to develop a service-learning project. *The course already includes reflective integration of General Education knowledge and skills (in addition to the above, students also reflect on how cultural worldviews contribute to attitudes and behaviors related to climate change); the course would likely need only to add explicit written reflection on this integration.*