Proposed General Education Program Assessment Plan

Program Description

Program Mission
The University of Toledo’s General Education curriculum is a foundation for undergraduate education. It exposes the student to a range of disciplines that gives breadth to the learning experience, prepares students for their degree programs, and develops students as life-long learners who will thrive in and contribute significantly to a constantly changing global community.

The General Education curriculum gives students critical reasoning skills to explore complex questions, grasp the essence of social, scientific and ethical problems, and arrive at nuanced opinions. It hones their ability to communicate orally and in writing. It allows them to recognize their place in history and culture, and to appreciate their connection to others in a multicultural world. It prepares them to be thoughtful, engaged citizens in participatory democracy. It requires them to explore the whole range of the liberal arts, both for the intrinsic value of doing so, and also in preparation for study in their degree programs. Specifically, they gain insights into the social and behavioral sciences, become familiar with the history, aesthetics, and criticism of the fine arts, gain experience in the scientific method through laboratory work, and use philosophical and mathematical processes to examine theoretical and natural phenomena.

The University of Toledo’s university-wide general education curriculum is designed to:
1. Broaden the range of experiences open to students
2. Help students develop the disciplined, analytical and critical skills necessary for intellectual development throughout life
3. Prepare students to make better-informed and humane decisions and to be able to communicate those decisions to others
4. Cultivate students’ potential for creative expression

Structure of the General Education (Core) Curriculum
The curricular components through which these goals are met are as follows:

- Skill areas (9 Semester Hours)
  - English composition (1100 or higher) 6 semester hours
  - Mathematics (1180 to 2600) 3 semester hours

- Subject areas (21-24 Semester Hours)
  - Includes at least two courses totaling 6 hours in each of the following areas:
    - Humanities and Fine Arts
    - Social Sciences
    - Natural Sciences (including at least one lab)
o Diversity: one course in Diversity of U.S. Culture and one course in Non-U.S. Culture.

Students may satisfy one of the two multicultural requirements with at least one course that simultaneously fulfills a second area of the general education curriculum.

Courses designated as included in the General Education Curriculum are listed in the University of Toledo’s General Catalog.

**Program Components and Objectives Assumptions on which the Plan is Based**
Each of the Skills Areas has established student learning outcomes that are aligned with the Ohio Transfer Module learning module. Each of the Subject Areas has established student learning outcomes aligned with the University’s mission. These learning outcomes are used to assess the effectiveness of the General Education curriculum. The learning outcomes are as follows:

**SKILLS AREAS**

**I. English Composition**
English Composition Courses emphasize expository prose writing. Pre-college level courses, such as SKLS 0990 and ENGL1020 (English as a Second Language, or ESL), creative writing, and speech courses will not fulfill this requirement. Specifically, after completing the English Composition Courses, a student should be able to:
- Identify the purpose and thesis in both their own writing and in the writing of others;
- Display knowledge about multiple ways to arrange a text, including the successful use of organizational patterns, transitional and topic sentences, and audience awareness;
- Develop arguments and perspectives through the successful incorporation of research, examples, details, and counter-arguments;
- Demonstrate effective revision skills (global revision, editing, and proofreading) that leads to clear, concise and error-free prose;
- Develop critical reading skills, including the ability to locate rhetorical features in a text, identify the audience for a given text, and identify strengths and weaknesses in an author’s arguments and reasoning; and
- Understand academic researching skills, including how to locate scholarly source, evaluate the reliability of a source, and effectively use sources within a text. The ability to cite sources in-text and develop a works cited page must be shown.

**II. Mathematics**
Mathematics Courses will extend beyond three years of college preparatory math (including algebra II). Pre-college level math courses such as arithmetic,
plane geometry, beginning and intermediate algebra will not fulfill this requirement.
Courses intended to fill the requirements in Mathematics fall into two broad categories:

A. Those intended to meet specific program requirements for calculus and its applications, as determined by individual programs. This category includes courses designed for students in Mathematics, the Sciences, Engineering, Math and Science Education, and Business, where calculus is a requisite skill.

B. All others, including statistics having no calculus prerequisite. This includes courses designed for students in the Arts and Humanities, Health and Social Services, and Elementary Education, wherever calculus is not a requisite skill.

Nevertheless all mathematics core courses (Categories A and B) must have the following shared characteristics.

- The courses must develop each student's mathematical power and problem-solving ability beyond a level consistent with the 12th grade high school exit standards. Explicitly excluded are courses consisting solely of pre-college and developmental mathematics such as college arithmetic, plane geometry, beginning and intermediate algebra.
- Upon successful completion of the course students should be able to employ functions in problem solving and modeling, where solutions to problems are formulated, validated, and analyzed using some combination of mental, paper-and-pencil, algebraic or technology-based techniques as appropriate using a variety of mathematical language and notation.
- The courses must develop mathematical thinking and communication skills and autonomous thought processes. Upon successful completion of the course students should be able to apply precise, logical reasoning to problem solving.

Upon successful completion of mathematics courses in Category A, students should also be able to do the following.
- Employ both geometric and algebraic methods in the solution of a problem.
- Provide approximate as well as exact solutions.
SUBJECT AREAS

I. Humanities and Fine Arts

Humanities

Humanities Courses that fulfill this requirement typically reside in the classics, literature, history, language, religion, or philosophy. Humanities general education courses are broad-based and narrowly focused courses do not fulfill this requirement. In order to qualify for the general education curriculum, a humanities course must fulfill at least one, but should strive for a preponderance of the five criteria below:

A. Provide an introduction to a particular humanities discipline
B. Provide historical perspectives of our world
C. Provide an overview of philosophical systems that compete for our attention
D. Provide a broad understanding of literary or cultural currents of the past and/or the present
E. Present cross-cultural perspectives

After completing the humanities general education curriculum, a student should be able to:

- Comprehend and interpret various artistic and humanistic “texts” – i.e., works of literature, art, music, film, history, philosophy, etc.
- Demonstrate a knowledge of ethical concerns or issues inherent in various contexts from everyday life to public policy
- Demonstrate a knowledge of the major trends, figures, and events in the development of world culture
- Recognize and critically appraise arguments and develop arguments of one’s own
- Demonstrate an understanding of the intricacies, complications, and uncertainties of historical explanation
- Think critically about cultures of the past and present
- Demonstrate the ability to communicate effectively in both oral and written forms of expression

Fine Arts

Fine Arts Courses that fulfill this requirement will introduce students to the basic principles, history, concepts, criticism, and techniques of the fine or performing arts. Such courses typically reside in the visual arts, music, theatre and film.

In order to qualify for the general education curriculum, a fine arts course must fulfill at least one, but should strive for a preponderance of the criteria below:

a. Provide an introduction to a particular artistic discipline
b. Provide a broad understanding of artistic currents of the past and/or the present
c. Present cross-cultural perspectives on the arts

After completing the fine arts general education curriculum, a student should be able to:
Critically evaluate works of art
Demonstrate creative skills in a fine or performing art or an appreciation of the arts as a significant human activity or expression
Recognize how the arts are integrated with the values of individuals and cultures

Social Sciences
Courses intended to fulfill the requirement should be broad, survey-type courses that emphasize methods of thinking and approaches to problems rather than merely material specific to that field. A general education course in Social Science should integrate factual, institutional, methodological and basic theoretical issues involved in the study of society or human behavior. The course should emphasize critical thinking across a broad range of social and behavioral topics. Ideally, such a course will be interdisciplinary—for example, an economics course might deal not only with principles of economics but with politics, psychology, geography, anthropology and/or sociology. Generally, such courses may not be suitable for prospective majors.

In order to qualify for the general education curriculum in Social Science, a course need not contain all of the elements, but should strive for a preponderance of the following criteria:

A. Provide an introduction to social science theory and/or methodology.
B. Reveal, describe, analyze and critically evaluate the connections between and among human beings and their place in the world, whether ethical, cultural, physical, or social.
C. Demonstrate knowledge of the diversity of social, economic, and political institutions, processes, and their interrelationship within the U.S. and/or world.
D. Provide orientations toward collective behavior.
E. Present cross-cultural orientations.
F. Provide multi-variable explanations of social issues.
G. Provide macro (institutional/societal) and micro (individual and small group) approaches.
H. Provide frameworks or settings for applied learning, knowledge, or skills.

After completing the Social Sciences general education a student should be able to:

• Think critically about their own societies and the larger global community.
• View issues from a multiple holistic perspective.
• Demonstrate knowledge of multiple methodologies
• Demonstrate knowledge of multiple theoretical approaches.
• Synthesize and apply social science concepts.
• Make informed, reasoned, and ethical personal and public choices.
II. Natural Sciences (including at least one lab)
Courses that fulfill the Natural Science competency expose students to the process of scientific inquiry and encourage development of a perspective of science in the world. Such courses provide not mere facts, but an understanding of the basic issues, methodologies, and theories that drive inquiry in the major disciplinary areas of the sciences.

The courses are normally drawn from the biological sciences, environmental sciences, geology, chemistry, physics and astronomy. Emphasis is placed on reasoning skills rather than recall of scientific content or a high level of skill in mathematics or reading.

In order to qualify for the general education curriculum in Natural Science, a course need not contain all of the elements, but should strive for a preponderance of the following criteria:

A. Provide an understanding of the nature of science in general and of major scientific concepts
B. Provide analysis and evaluation of scientific information
C. Provide discipline specific principles and information
D. Present applications and demonstrate the value of the discipline to society in general
E. Introduce scientific reasoning skills

After completing the Natural Sciences general education curriculum, a student should be able to:
- Identify scientific language, concepts, assumptions, and processes.
- Demonstrate knowledge of scientific methods and reasoning in science
- Analyze and interpret scientific evidence
- Determine when scientific information supports a given conclusion
- Demonstrate knowledge of the impact of scientific discovery on human thought and society.

III. DIVERSITY REQUIREMENTS
This requirement aims to foster an understanding of and respect for different cultures and peoples, both within and outside the US, through the study of their beliefs, customs, histories, values and interrelationships.

Diversity of US Culture
A diversity of US Culture course includes but is not restricted to an examination of the economic, political, philosophical, social or artistic life of distinct cultural communities in the United States. Communities may include but are not limited to communities based on race, ethnicity, class, gender, sexual orientation, beliefs, and disability.
A student who completes the diversity of US culture requirement should be able to:

- Explain the cultural relationships between dominant and non-dominant cultures within the U.S.
- Describe how diverse cultural communities contribute to the development of U.S. culture.
- Compare complex social structures within diverse US cultural communities

**Non-US Culture**

A Non-US Culture course includes but is not restricted to an examination of the economic, political, philosophical, social or artistic life of communities outside the United States that did not contribute to the dominant culture in the US.

- A student who completes the Non-US culture requirement should be able to:
  - Demonstrate awareness of cultural communities outside the US
  - Demonstrate knowledge of responsible citizenship in a global society.
  - Explain the cultural relationships between dominant and non-dominant populations outside the US.
  - Compare complex social structures within diverse cultural communities outside the US.
  - Recognize contemporary global issues facing a non-U.S. culture.
General Education Program Assessment Plan

The student learning outcomes for the Skills and Subjects Areas form the basis upon which the effectiveness of the general education may be assessed. The University of Toledo Core Curriculum Committee is charged with assessing the General Education Program and uses multiple methods to do so. Furthermore, the assessment plan is designed to assure broad assessment annually, in-depth assessment on a three-year rotational pattern, and focused program review every five years.

1) **Annual review of General Education course offerings and enrollments**
The Core Curriculum Committee will annually review the list of general education courses that are offered. The purpose of this review will be to determine if sufficient numbers of courses are being offered in each of the areas and at times that accommodate students.

**Feedback and action:**
If deficiencies are found, suggestions will be passed to the dean and department chairs.

The Core Curriculum committee will annually review courses to assure that general education courses are being offered at least once a year. A course which has been accepted into the general education curriculum must be offered at least once every two years, barring extenuating circumstances such as sudden, unexpected loss of teaching faculty or resources which prevent the offering of a particular course.

**Feedback and action:**
If, during its annual reviews, the University Core Curriculum Committee determines this requirement has not been met, it shall have the authority to “inactivate” the course, which means the course will not appear in the university’s schedule of course offerings. If a department wishes to reactivate a course in the future, they can petition the committee with a definitive plan for future course offerings. If the committee approves the reactivation, the department will submit a course modification plan to the appropriate curriculum committees.

2) **Review of General Education course syllabi**
General Education course (both Skills and Subject Areas) syllabi will be reviewed annually to assess compliance with the general education curriculum, as approved by the University of Toledo Faculty Senate in April 2008. Specifically, all general education courses must have a written course syllabus, which at a minimum must contain the following elements:
• A statement identifying the course as a general education course and specifying which requirement(s) are being fulfilled
• Learning objectives supportive of the general education learning objectives
• Course requirements
• Evaluation methods

Feedback and action:
If these requirement are not met, the University Core Curriculum Committee shall return the syllabi to the appropriate department for corrective action.

3) Review of General Education course Student Learning Outcomes
The University Core Curriculum Committee will annually review the overall coverage of student learning outcomes in the General Education Curriculum on a rotating four-year schedule. The committee will poll instructors of general education courses to determine the level of coverage of the student learning outcomes for a given general education area. Each general education course instructor will be asked to indicate which “skill area” or “subject area” student learning outcomes their course covers. The committee will then examine the overall coverage of the outcomes to ensure a broad representation across the general education curriculum, and will then look to determine that most of the outcomes for each area are covered by each course within the area, and that all outcomes are covered in multiple courses.

The following is an anticipated schedule for core curriculum course review:

<table>
<thead>
<tr>
<th>Year of Review</th>
<th>Skill or Subject Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>AY2009-2010</td>
<td>All Subject Areas – Initial Review</td>
</tr>
<tr>
<td>AY2010-2011</td>
<td>All Diversity Courses</td>
</tr>
<tr>
<td>AY2011-2012</td>
<td>Humanities and Fine Arts &amp; English Composition</td>
</tr>
<tr>
<td>AY2012-2013</td>
<td>Social Sciences</td>
</tr>
<tr>
<td>AY2014-2015</td>
<td>Natural Sciences and Mathematics</td>
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</tbody>
</table>

Starting with the 2015-2016 academic year, the schedule will repeat itself and all diversity courses will be re-examined, with all subsequent areas to be reviewed at least once every four years, or as deemed necessary by the Core Curriculum Committee.

Feedback and action:
If the committee identifies a problem with the coverage of the student learning outcomes, recommendations will be made to Faculty Senate referral to and action by the appropriate subject or skills area department(s).
4) **Demonstration of Student Attainment of Learning Outcomes**

Each semester, instructors of general education courses will identify assignments and activities in their courses that support the coverage of the general education student learning outcomes. During the semester, the instructors will collect examples of student work on these assignments or activities that demonstrate student attainment of the learning outcomes. These examples should include graded work from three different students for each covered outcome that is deemed good, fair, and poor. Instructors may wish to redact the students’ names from the graded work. Additionally, the instructor will tabulate the performance of the class as a whole on such activities, to support the assessment of the outcome attainment.

As an example, in the Natural Sciences Core Area, one of the student learning outcomes is to be able to “analyze and interpret scientific evidence”. The instructor of one of the natural sciences courses uses a homework assignment that involves reading and interpreting some graphical data to draw conclusions about the result of an experiment as evidence of student competency in “Analyzing and interpreting scientific evidence”. The instructor would save actual examples of three different student’s work on the assignment (a good solution, a fair solution and a poor solution). In addition, the instructor would provide the grade distribution on this assignment for the entire class. (A tabular listing of student scores on the assignment will allow us to provide some quantitative evidence that students are learning this material. For example, from this data we might be able to say, 80% of the students (n=125) received a grade of 70% or higher on this assignment, which is satisfactory performance).

**Feedback and action:**

If, once the instructor has performed this analysis, the class performance is satisfactory in the instructor’s judgment, no action is required. If it is unsatisfactory, the instructor should describe some action to correct this (additional assignments in the future, review of the material, more class examples, etc)

If, upon review, the student learning attainment is deemed adequate, no further action is required and the University Core Curriculum Committee will be informed of the results. If, upon review, the department determines that the student learning outcomes need modification, they can submit a modification plan to the Core Curriculum for review. If the Core Curriculum Committee accepts the modification, they will make a recommendation to the Faculty Senate that a Core Learning Outcome be revised. If the Faculty Senate accepts the recommendation, they will make sure that the modification remains in compliance with state guidelines for OTMs and TAGS.
If, upon review however, there are areas of weakness in student attainment of particular outcomes, the committee(s) will initiate remedial action in the departments and notify the University Core Curriculum Committee of their recommendations. As changes are made, the results of these changes will be closely monitored by the course instructors in future semesters to evaluate the effectiveness of the modifications, with the intent of improving student learning outcome attainment. If after two terms, the Core Curriculum Committee determines that student learning outcomes are still not being attained, the course will be deleted from the General Education approved course inventory.

5. Core Curriculum overall assessment of student learning
Another tool we will use to assess the effectiveness of the general education curriculum is the Collegiate Learning Assessment (CLA). The following background information in this paragraph is excerpted from the CLA website (www.collegiatelearningassessment.org/): The CLA offers an authentic approach to the improvement of teaching and learning in higher education through a continuous improvement model. The stated goal of the CLA is to assist faculty interested in programmatic change to improve teaching and learning, particularly with respect to strengthening higher order skills. CLA Assessment Services provide a means for measuring an institution's contribution to the development of key higher order competencies, including the effects of changes to curriculum and pedagogy. To gauge summative performance, the CLA presents realistic problems that require students to analyze complex materials and determine the relevance to the task and credibility. Students' written responses to the tasks are evaluated to assess their abilities to think critically, reason analytically, solve problems and communicate clearly and cogently. Scores are aggregated to the institutional level to provide a signal to the institution about how their students as a whole are performing. The CLA allows institutions to benchmark where they stand and how much progress their students have made relative to the progress of students at other colleges. The CLA highlights differences between them that can lead to improvements in teaching and learning. This approach recognizes that faculty are the ultimate stakeholder of the assessment. Appropriate summative analyses, for instance, by comparing institutional performance, is necessary in order to give faculty and administrators information they need to help frame a well grounded formative assessment program.

The university will administer the CLA test to representative samples of freshmen and senior students across the institution each year. The Office of Institutional Research will help select appropriate representative freshman and senior candidates to take the CLA.
Feedback and action:
The results of the CLA testing will be reviewed by the University Core Curriculum Committee and the results of that review, along with the data, will be reported to the Faculty Senate. If the analysis of the CLA testing identifies areas of concern, the committee would develop a set of recommendations, in conjunction with the appropriate skills or subject area instructors to address the concerns.

Once the changes are implemented, the areas of concern will be closely monitored for two subsequent testing cycles to determine if the changes remedied any identified deficiency. If subsequent cycles show attainment of program objectives, no further action will be necessary. If, however, these deficiencies remain, the committee will develop further recommendations and monitor those until student learning is attained at acceptable levels.