DRAFT General Education Learning Outcomes & Implementation Plan

General Education Revision Steering Committee Report to the Faculty Senate
Draft General Education Learning Outcomes and Implementation Plan

Context:

The proposed general education requirements for undergraduates are defined in terms of learning outcomes. These outcomes are set at the foundational level and their achievement is documented after specific general education courses or specified experiences are completed. Institutional documentation of the achievement of these learning outcomes is accomplished via the proposed Assessment Plan.

It is intended that the specified outcomes will be expanded and built upon during the remainder of the student’s baccalaureate degree work, including the student’s major. A capstone experience of some type for all bachelor’s degrees is recommended as a culmination of the educational process.

This proposal is a shift in approach for the university’s undergraduate curriculum. It proposes to ensure students have achieved foundational learning outcomes so that instruction in the major can focus on development of subject-specific and higher-order learning outcomes that are extensions of the foundational competencies.

Criteria for Learning Outcomes:

The learning outcomes

1. Must reflect the foundational skills and knowledge that the faculty actually want students to achieve.
2. Must be sufficiently broad to be achievable by a variety of means and disciplines.
3. Must be defined in terms that allow observation, evidence collection and eventually measurement.
4. Must reflect a high standard of expectation.

Implementation of Learning Outcomes

The proposed learning outcomes and the suggested credit hour implementation requirements will be operationalized via a campus-level course approval process. In this process, teams of faculty who are disciplinary experts will evaluate proposed General Education courses in terms of whether they meet the stated learning outcomes for the General Education requirement to which each proposed course is intended to apply. Also evaluated will be whether there is a stated commitment and plan for assessment of those learning outcomes.
Learning Outcome 1: Communication Skills and Information Literacy - Students will demonstrate foundational competency in written communication, oral communication, and information literacy.

a) As writer or speaker, students:
   i) Demonstrate an understanding of context, purpose, and audience.
   ii) Develop content using credible sources, as appropriate to the communication task.
   iii) Organize a presentation coherently and logically.
   iv) Use appropriate conventions.
      (1) Writing: Use style appropriate to genre and discipline.
      (2) Speaking: Use verbal and nonverbal conventions appropriate to audience and purpose of speech.
   v) Use appropriate syntax, grammar, and
      (1) Writing: punctuation and spelling.
      (2) Speaking: pauses, intonation, and pronunciation.

b) As writer, students:
   i) Collaborate with others to improve writing through feedback and revision.
   ii) Use writing for multiple purposes, such as improving learning, critical thinking, and reflection.

c) As speaker, students:
   i) Demonstrate behavioral flexibility in response to unexpected variations in audience or context.
   ii) Employ appropriate nonverbal behavior

d) As reader or listener, students:
   i) Identify a writer’s or a speaker’s purpose(s) and rhetorical technique(s).
   ii) Critically analyze claims, appeals, and evidence in arguments.

e) Students demonstrate information literacy by effectively, ethically, and responsibly using appropriate sources and technologies to accomplish an intended purpose.
   i) Use appropriate tools and technologies to identify, access, analyze, evaluate, and document information.
   ii) Use information effectively and appropriately to accomplish an intended purpose.
   iii) Access and use information responsibly, ethically, and legally in accordance with disciplinary standards.

Implementation of Learning Outcome 1:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Writing Skills and Information Literacy I &amp; II</td>
<td>6</td>
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<tr>
<td>Speaking Skills and Information Literacy</td>
<td>3</td>
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Learning Outcome 2: Critical Thinking and Complex Reasoning Skills - Students will demonstrate foundational competency in creating and evaluating reasoned arguments, and employing quantitative, qualitative, and normative information in such arguments.

a) Students create reasoned arguments and evaluate the reasonableness of arguments. They
   i) State the nature of controversies as propositions, including fact (i.e., what is), value (i.e., what should be), and policy (i.e., what steps can be taken) propositions;
   ii) Recognize and choose the premises, purposes, audiences, and contexts of propositions;
   iii) Recognize and choose the appropriate logic to support propositions, including symbolic, deductive, and inductive logic;
   iv) Recognize and choose the appropriate information to support propositions, including the sources, authority, and biases of information;
   v) Recognize and be able to argue both sides of a proposition, and employ logic and information to challenge opposing propositions.

b) Students employ the appropriate analysis and application of
   i) Quantitative information, such that they:
      (1) Identify the value and limitations of magnitude (i.e., how large) and multitude (i.e., how many) measures;
      (2) Manipulate and express such measures with arithmetic, algebraic, geometric, and statistical methods;
      (3) Manipulate and express such measures with graphs, charts, and tables;
      (4) Manipulate and express such measures to solve practical and multistage problems;
   ii) Qualitative information, such that they:
      (1) Identify the value and limitations of character (i.e., the nature of a thing) and capacity (i.e., what a thing can do) assessments;
      (2) Interpret and express assessments with a contrary structure, such as truth versus falsehood or good versus evil;
      (3) Interpret and express assessments with a relational structure, such as the degree of beauty or the level of success;
      (4) Interpret and express assessments with a unique structure, such as cultural ethos or historical eras;
   iii) Normative information, such that they:
      (1) Identify the value and limitations of prescriptive (i.e., how things should be) and proscriptive (i.e., how things shouldn’t be) claims;
      (2) Acknowledge and express claims concerning personal behavior, such as honesty and virtue;
      (3) Acknowledge and express claims concerning social life, such as pluralism and justice;
      (4) Acknowledge and express claims concerning mental life, such as respect for evidence and open-mindedness;
      (5) Describe how such claims are used to make ethical decisions

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<th>Implementation of Learning Outcome 2:</th>
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<tr>
<td>Quantitative Reasoning: Math</td>
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<td>Reasoning Process</td>
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<tr>
<td>And Embedded in Learning Outcome 4 Attributes (credits variable)</td>
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Learning Outcome 3: The Arts, Humanities, Natural Sciences, and Social Sciences - Students will demonstrate foundational competency in knowledge of representative content and methods of inquiry of the arts, humanities, natural sciences, and social sciences.

a) Knowledge/Content competency
   i) Demonstrate knowledge of major concepts, findings, and historical perspectives in each disciplinary area
   ii) Find information resources in each disciplinary area and evaluate their reliability.
   iii) Articulate the role of ethics in each disciplinary area.
   iv) Demonstrate an understanding of scientific and technical issues at a functional level and articulate how they impact our society and economy.
   v) Demonstrate a basic knowledge of major cultures/societies of the world including their art, history, and geography

b) Methods of Inquiry competency
   i) Articulate the nature of the scientific method (in the natural and social sciences and humanities), apply it through hands-on laboratory experiments, and critically evaluate applications of the scientific method.
   ii) Solve quantitative and qualitative problems in the natural and social sciences
   iii) Use rhetorical skills in the analysis of creative works (arts and humanities) including their social, political, emotional and psychological components.
   iv) Demonstrate effective written and oral communication appropriate to each disciplinary area.

Implementation of Learning Outcome 3:

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<th>Disciplinary Knowledge:</th>
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<tr>
<td>Fine Arts</td>
<td>3 credits</td>
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<tr>
<td>Humanities</td>
<td>3 credits</td>
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<tr>
<td>Natural Sciences</td>
<td>4 credits (includes lab)</td>
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<tr>
<td>Social Sciences</td>
<td>3 credits</td>
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Learning Outcome 4: Responsible Citizenship in an Interconnected World - Students will demonstrate foundational competency in knowledge and skills that promote personal, social and environmental responsibility. This foundational competency shall include an understanding of systemic relationships, and the collateral effects and consequences within and across systems. Students will demonstrate learning in all four outcomes listed here (i.e., a., b., c., and d.), but we expect variation in the specific learning objectives (e.g., b.i., b.ii., b.iii., b.iv.) for each outcome as it is covered across varied disciplines.

a) Awareness of Multiple Dimensions of Diversity (broadly defined to include age, disability, gender, education, ethnicity, nationality, race, sexuality, social class, religion), such that students:
   i) Recognize multiple perspectives on cross-cultural difference, both within the United States and across countries.
   ii) Articulate the ways that diversity impacts the understanding and application of knowledge.
   iii) Work successfully in teams, composed of diverse people, to complete desired projects or to reach desired goals.
   iv) Recognize interrelationships of dimensions of diversity.

b) Recognize the importance of, and understand the elements of, financial literacy, so as to appreciate short and long-term consequences of financial decisions:
   i) Understand the fundamentals of savings, investments, debt, credit, and money management.
   ii) Understand the fundamentals of financial markets and financial institutions.
   iii) Understand the elements of financial statements and the basic meaning of reported financial data.
   iv) Recognize and appreciate the personal and societal implications of financial scams and fraud.

c) Understand the connections between personal and societal health, and appreciate short and long term health consequences.
   i) Understand the technical and scientific foundations for personal health outcomes (e.g., the relationship between nutrition, exercise, health and well-being, the role of social relationships).
   ii) Recognize the importance of societal and physical infrastructure and environmental context on health.
   iii) Understand the social and economic challenges of providing health care.

d) Recognize the complex interconnectedness of individual, organizational and governmental choices for environmental sustainability.
   i) Understand the technical and scientific foundations of environmental sustainability (e.g., the environmental impact of particular agricultural policies).
   ii) Understand the connectedness of local decision to global sustainability.
   iii) Understand the importance of transparent processes to achieving environmental sustainability.
   iv) Recognize the costs and benefits of environmental sustainability.

Implementation of Learning Outcome 4:

This learning outcome is met by a distribution requirement that involves collecting “attributes” in courses, workshops, etc.; these courses/experiences should contribute from 6-15 additional credits to the General Education curriculum. These courses may cover more than one attribute, and must be outside of the General Education “Core” but may be embedded in the student’s major or minor or elective courses, may vary in credit hours, and are expected to involve critical reasoning or writing intensive work.

Attributes: Courses with these Attributes are expected to include at least one of the following skills:

- Diversity-Domestic (4a) Be Writing Intensive
- Diversity-Global (4a) Include Qualitative Reasoning
- Financial Literacy (4b) Include Normative Reasoning
- Personal and Societal Health (4c)
- Environmental Sustainability (4d)
Assessment Plan

Assessment refers to the process of using students’ work to verify that learning outcomes desired by the faculty and institution are being achieved and that appropriate action is being taken to assure continuous improvement. All students who have completed their general education requirements will be deemed to have the skills described in the learning outcomes and able to apply those skills to coursework within the major.

Each of the four learning outcomes is demonstrated by means of formal student expression; this may be written, oral, artistic, ASL, or Braille as appropriate. These student products will be kept in a centralized university repository. They may be used by the instructor as part of a grading scheme and will be sampled by the institution for institutional level assessment. Such assessment will be shared with the campus as a whole to inform subsequent practice.

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<td>All approved General Education courses will collect predetermined, course embedded learning artifacts.</td>
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<td>Samples of artifacts will be evaluated by faculty experts who will use agreed upon rubrics. The General Education Revision Steering Committee has identified potential types of artifacts and created/adapted rubrics for most Learning Outcomes</td>
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<td>After evaluation of sampled artifacts, a summary of findings will be shared with campus for consideration and action.</td>
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<td>There will be a regular schedule of assessment and feedback for each Learning Outcome. The General Education Revision Steering Committee suggests a four year cycle whereby each Learning Outcome is evaluated every four years.</td>
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