

General Education Course Coordinator's Handbook

Fall 2022

**Council on General Education and
Intercollegiate Programs**

General Education Course Coordinator's Handbook

Table of Contents

Introduction: Course Review Overview and Outline of Procedures

- **Principles for Course Review**
- **Purpose of Course Review**
- **Recent Changes in General Education Course Review**
- **Outline of the Process**

Section 1. Responsibilities of General Education Coordinators

Section 2. General Education Areas and Schedule for Course Reviews

Section 3. General Education Courses, Areas, and General Goals

Section 4. General Goals and Sample Learning Outcomes

- **General Goal 1/2: Critical Inquiry, Analysis, and Creative Problem Solving**
- **General Goal 3: Written Communication**
- **General Goal 4: Oral Communication**
- **General Goal 5: Quantitative Literacy**
- **General Goal 6: Information Literacy**
- **General Goal 7: Collaboration**
- **General Goal 8: Social and Behavioral Sciences**
- **General Goal 9: Humanities and the Arts**
- **General Goal 10: Life Sciences**
- **General Goal 11: Physical Sciences**
- **General Goal 12: Community Engagement**
- **General Goal 13: Cultural Competence**
- **General Goal 14: Ethical Leadership**
- **General Goal 15: Integrative and Applied Learning**

Section 5. Types of Assessment Data to Collect

- **Overview**
- **Types of Assessment Data**
- **Assessment Timing**
- **Bloom's Taxonomy Goals and Keywords**

Section 6. Annotated Biennial Report Form

Section 7. Steps in the Review Process

Section 8. Accessing Original General Education Proposals and Reports

Appendix: General Goals, Sample Learning Achievements, and Sample Rubrics

Introduction: Course Review Overview and Outline of Procedures

Principles for Course Review

1. General education assessment should be meaningful and useful to those teaching the course.
2. General education assessment should be ongoing and cyclical.
3. General education assessment is collaborative and should not fall on the shoulders of one faculty member or department head but should promote conversations about student learning.
4. General education courses submitted an assessment plan with the course proposal¹.
 - Assessment should focus on the course's General Goals.
 - The council understands that assessment plans may need to be modified and streamlined to promote the ease and efficacy of the process.
5. Assessment of student learning is broadly defined to include both qualitative and quantitative, and both direct and indirect measures of student learning.

Purpose of Course Review

Course review should:

1. Allow faculty to find out if students are providing evidence that they have met the General Goals.
2. Provide useful and meaningful information for the instructors of the general education course.
3. Offer evidence that student learning has been looked at in a thoughtful way.
4. Allow faculty to share successes of student learning, identify areas for improvement, and document the process of assessment changes.

Recent Changes in General Education Course Review

During Spring 2022, Faculty Senate approved a series of changes to general education. The following is a brief summary:

1. What was changed, what was not?
 - The basic framework for MSU's general education program was not changed, but the focus is shifting from Student Learning Outcomes (SLOs) to General Goals (GGs).
 - Reports are now biennial (rather than annual + periodic).
2. Why did CGEP want to make these change?
 - The former system was overly burdensome to both coordinators writing reports and CGEIP members reviewing reports.
 - The changes are intended to both simplify reports and make them more useful for both coordinators and CGEIP.
3. How will reports change?
 - The focus of reports has been shifted from the SLOs (Student Learning Outcomes) to the GGs (General Goals), allowing coordinators to determine the best ways to demonstrate how their courses' learning objectives fulfill the general education goals. This should make assessment more flexible.
 - Reports should emphasize evidence of student learning rather than the assessment process.

¹ The original proposals are available on the "MSU General Education Assessment" SharePoint site. Details for accessing these are provided in [Section 7](#).

Outline of the process:

1. Review the basic expectations of the coordinator, described in [Section 1](#).
2. Identify the requirements for your course. [Section 2](#) shows the basic areas and subdivisions of the General Education Program, and [Section 3](#) shows all of the courses currently in the system along with the General Goals (GGs) they are committed to addressing.
 - Each course entered the General Education Program based on a proposal¹ specifying its area in the general education program, and which GGs it would address. (In the original proposals, specific Student Learning Outcomes (SLOs) were also identified. The focus of assessment is now on the General Goals, but the old SLOs may still be useful for many courses.)
3. The biennial schedule for reports is specified in both [Section 1](#) and [Section 2](#).
 - Group I (Foundations, Human Cultures): December of even-numbered years.
 - Group II (Natural World, Public Affairs): December of odd-numbered years.
4. Review the General Goal(s) for your course and decide how you will address them in the context of your class's learning goals. The GGs are provided in [Section 4](#).
 - [Section 4](#) includes sample learning outcomes for the GGs in form of Student Learning Outcomes (SLOs). Most of the items are SLOs are from the earlier version of the General Education Program, which mandated specific numbers of the SLOs for each GG.
 - The current expectation is that the course (and report) focus on how the course (more specifically, how student learning achievement) meets the General Goal. The old SLOs are given simply as examples of specific learning targets that might be evaluated as part of the process. Each list (old SLOs) ends with a general statement that discipline-specific goals that mesh with the General Goal are acceptable and encouraged.
 - **Ideally, some of the class's learning goals should inherently also meet the GG.** The General Education component of the course should be a natural part of the class's discipline-specific goals, and need not be an "add-on" to the course.
5. In collaboration with the course's instructors, the coordinator should collect data on student learning outcomes related to the GGs.
 - Details on how this is done will vary across courses.
 - Communication with other instructors during this process, identifying what worked well and what might be improved, is very useful.
6. The coordinator should complete the report and submit it to CGEIP.
 - More information about the report, per se, and the steps in the review process, is given in [Section 6](#) and [Section 7](#).
7. The coordinator should share feedback with the course's instructors.

Section 1. Responsibilities of General Education Coordinators

Duties of a course's general education coordinator are described below. However, CGEIP recognizes that responsibilities for general education courses may vary significantly across different departments, and the duties described below may be shared with others within the department. The real requirement is that the key expectations described below be met.

1. The coordinator's chief responsibility is to be the liaison between CGEIP and those in the Department involved in the general education course (Department Head, other faculty).
2. The coordinator, in collaboration with the department head, should communicate with instructors for the course:
 - The course's General Goals (GGs) and how those goals will be assessed.
 - The type of data meaningful for assessing the General Goals.
 - The need to have general education goals in their syllabi, and to tie those to the course's learning goals. For many courses, it is helpful to have a syllabus template that provides the key information, and to ask all instructors to include that in their syllabi.
3. At some point (each semester or each year), the coordinator should solicit from instructors input relevant to assessment of student learning tied to the General Goals.
 - It is not necessary to collect all information on all General Goals every semester. Collecting information about student learning relevant to different Goals may be spread out over the two year period between reports.
4. The general education coordinator is primarily responsible for writing the biennial report. However, the report ideally should represent a collaborative effort between the coordinator and instructors.
 - Ideally, the coordinator should facilitate discussion among the course's instructors regarding General Goals, student successes and shortcomings, etc.
 - Feedback to CGEIP from coordinators has indicated that getting faculty together to discuss teaching and learning in their shared courses was particularly valuable.
5. Dual credit classes *are* MSU classes and they should meet general education goals. Ideally, dual credit teachers should receive the same information as on-campus instructors and their sections should be included in evaluations.

Section 2. General Education Areas and Schedule for Course Reviews

Courses are to be reviewed biennially, on the schedule shown below. Reports will be due on the **first Monday in December**.

GENERAL EDUCATION AREAS	REPORTS
FOUNDATIONS <ul style="list-style-type: none"> • First-Year Seminar • Written Communications & Information Literacy (Writing I) • Oral Communication • Quantitative Literacy • Written Comm. & Integrative & Applied Learning (Writing II) 	Fall 2022 (Fall even years)
NATURAL WORLD <ul style="list-style-type: none"> • Life Sciences • Physical Sciences 	Fall 2023 (Fall odd years)
HUMAN CULTURES <ul style="list-style-type: none"> • Social & Behavioral Sciences • Humanities • The Arts 	Fall 2022 (Fall even years)
PUBLIC AFFAIRS <ul style="list-style-type: none"> • US and MO Constitutions / American History & Institutions • Cultural Competence • Public Issues 	Fall 2023 (Fall odd years)

Section 3. General Education Courses, Areas, and General Goals

The Areas and General Goals (GGs) are based on each course’s application to the general education program. (FN = Foundations; HC = Human Cultures; NW = Natural World; PA = Public Affairs)

Course	General Education Area	General Goals	Review Schedule
AAS 100: Introduction to African-American Studies	HC: Humanities	9	FA-even
AGR 100: Food Security	HC: Social and Behavioral Sciences	8	FA-even
AGR 320: Writing II: Writing in the Applied Sci.	FN: Written Comm /Integrative ...	3, 15	FA-even
ANT 100: World Cultures	PA: Cultural Competence	13, 14	FA-even
ANT 125: Exploring Our Human Ancestry	HC: Social and Behavioral Sciences	8	FA-even
ART 200: Art in Context	HC: Arts	7, 9	FA-even
ART 271: History of Western Art I	HC: Humanities	9	FA-even
ART 272: History of Western Art II	HC: Humanities	9	FA-even
ART 273: Survey Art of Africa Oceania & Americas	HC: Humanities	9	FA-even
ART 274: Survey of Asian Art	HC: Humanities	9	FA-even
AST 113: Modern Astronomy	NW: Physical Sciences	11	FA-odd
AST 114: Survey of Astronomy	NW: Physical Sciences	11	FA-odd
AST 115: Basic Astronomy	NW: Physical Sciences	11	FA-odd
BIO 100: Biological Sciences for Educators	NW: Life Sciences	10	FA-odd
BIO 101: Biology in Your World	NW: Life Sciences	10	FA-odd
BIO 111: Lab for Biology in Your World	NW: Life Sciences	10 ²	FA-odd
BIO 121: General Biology I	NW: Life Sciences	10	FA-odd
BMS 100: Concepts and Issues in the NW: Life Sci.	NW: Life Sciences	10	FA-odd
BMS 101: Concepts and Lab in the NW: Life Sci.	NW: Life Sciences	10 ²	FA-odd
BMS 110: Intro into Biomedical Sciences	NW: Life Sciences	10	FA-odd
BMS 111: Intro Lab in Biomedical Sciences	NW: Life Sciences	10 ²	FA-odd
CFD 155: Principles of Human Development	HC: Social and Behavioral Sciences	8	FA-even
CFD 163: Relationships in Today’s Families	HC: Social and Behavioral Sciences	8	FA-even
CHM 107: Chemistry for the Citizen	NW: Physical Sciences	11	FA-odd
CHM 108: Chemistry for the Citizen Lab	NW: Physical Sciences	11 ²	FA-odd
CHM 116: Fundamentals of Chemistry	NW: Physical Sciences	11	FA-odd
CHM 117: Fundamentals of Chemistry Lab	NW: Physical Sciences	11 ²	FA-odd
CHM 160: General Chemistry I	NW: Physical Sciences	11	FA-odd
CHM 161: General Chemistry I Lab	NW: Physical Sciences	11 ²	FA-odd
COM 115: Fundamentals in Public Speaking	Oral Communication	4, 6	FA-even
COM 260: Communicating w Cultural Competence	PA: Cultural Competence	12, 13	FA-odd
CRM 210: Intro to the American Criminal Justice Sys	PA: Public Issues	1, 2, 12	FA-odd
CRM 220: Criminology	HC: Social and Behavioral Sciences	8	FA-even

² Lab-only classes associated with lecture courses do not need to provide separate reports. Information about student learning relevant to the General Goals may be incorporated into the assessment of the lecture class.

Course	General Education Area	General Goals	Review Schedule
DAN 180: Introduction to the Dance	HC: Arts	7, 9	FA-even
DTN 130: Social & Behav. App. of Human Nutrition	HC: Social and Behavioral Sciences	8	FA-even
ECO 101: Economics of Social Justice	PA: Public Issues	1, 2, 13	FA-odd
ECO 155: Principles of Macroeconomics	HC: Social and Behavioral Sciences	8	FA-even
ECO 165: Principles of Microeconomics	HC: Social and Behavioral Sciences	8	FA-even
EDC 249: Schooling in America	PA: Public Issues	1, 2, 13	FA-odd
ENG 110: Writing I	FN: Written Comm. & Info Literacy	3, 6	FA-even
ENG 200: Great Books and Instant Classics	HC: Humanities	9	FA-even
ENG 201: Public Issues in Popular Culture	PA: Public Issues	1, 2, 14	FA-odd
ENG 203: Creative Writing: Poetry	HC: Arts	7, 9	FA-even
ENG 205: Creative Writing; Nonfiction	HC: Arts	7, 9	FA-even
ENG 210: Writing II: Writing Across the Disciplines	FN: Written Comm /Integrative ...	3, 15	FA-even
ENG 215: Creative Writing: Short Story	HC: Arts	7, 9	FA-even
ENG 221: Writing II: Writing for the Professions	FN: Written Comm /Integrative ...	3, 15	FA-even
ENG 222: Writing for Social Change	PA: Public Issues	1, 2, 12	FA-odd
ENG 282: Literature by Women	HC: Humanities	9	FA-even
ENG 283: Folklore and Cultural Engagement	HC: Humanities	9	FA-even
ENG 289: Literature, Culture, and Conflict	PA: Cultural Competence	13, 14	FA-odd
ENG 310: Writing II: Writing for Grad/Professional	FN: Written Comm /Integrative ...	3, 15	FA-even
GEO 200: Exploring our Digital Earth	PA: Public Issues	1, 2, 12	FA-odd
GEP 101: First-Year Foundations	FN: First-Year Seminar	6, 7, 12, 13, 14	FA-even
GER 180: Successful Aging	PA: Cultural Competence	13, 14	FA-odd
GLG 110: Principles of Geology	NW: Physical Sciences	11	FA-odd
GLG 115: Life of the Past	NW: Life Sciences	10	FA-odd
GLG 171: Environmental Geology	NW: Physical Sciences	11	FA-odd
GLG 358: Writing II: Reporting Geological Info.	FN: Written Comm /Integrative ...	3, 15	FA-even
GRY 100: World Regional Geography	PA: Cultural Competence	12, 13	FA-odd
GRY 108: Principles of Sustainability	HC: Social and Behavioral Sciences	8	FA-even
GRY 135: Principles of Weather and Climate	NW: Physical Sciences	11	FA-odd
GRY 142: Introductory Physical Geography	NW: Physical Sciences	11	FA-odd
HST 103: World History to Circa 1600 C.E.	HC: Humanities	9	FA-even
HST 104: World History Since 1600 C.E.	HC: Humanities	9	FA-even
HST 121: Survey of History of the US to 1877	PA: US & MO Constitutions/ Hist...	12, 13	FA-odd
HST 122: Survey of History of the US Since 1877	PA: US & MO Constitutions/ Hist...	12, 13	FA-odd
HST 210: Writing II: Historical Inquiry	FN: Written Comm /Integrative ...	3, 15	FA-even
IDS 297: International Culture and Study Abroad	PA: Cultural Competence	12, 13	FA-odd
ITC 200: Critical/Creative Thinking Using Info Tech	PA: Public Issues	1, 2, 12	FA-odd
KIN 210: Healthy Lifestyles: Preventative Approaches	PA: Public Issues	1, 2, 14	FA-odd
KIN 286: Ethics and Diversity in American Sport	PA: Public Issues	1, 2, 14	FA-odd
LLT 121: Classical Mythology	HC: Humanities	9	FA-even

Course	General Education Area	General Goals	Review Schedule
LLT 180: The Heroic Quest	PA: Cultural Competence	13, 14	FA-odd
MCL 200: Global Perspectives Language/Culture ...	PA: Cultural Competence	12, 13	FA-odd
MED 120: Mass Media and Society	HC: Social and Behavioral Sciences	8	FA-even
MED 274: Introduction to Film	HC: Humanities	9	FA-even
MTH 121: Multicultural Views of History & Math	PA: Cultural Competence	13, 14	FA-odd
MTH 130: Contemporary Mathematics	FN: Quantitative Literacy	5	FA-even
MTH 134: Algebraic Reasoning and Modeling	FN: Quantitative Literacy	5	FA-even
MTH 136: Pre-Calculus I	FN: Quantitative Literacy	5	FA-even
MTH 137: Pre-Calculus II	FN: Quantitative Literacy	5	FA-even
MTH 138: Pre-Calculus Mathematics	FN: Quantitative Literacy	5	FA-even
MTH 261: Analytic Geometry and Calculus I	FN: Quantitative Literacy	5 ³	FA-even
MTH 287: Comp. Calculus w/ Analytic Geometry I	FN: Quantitative Literacy	5 ³	FA-even
MUS 239: Introduction to World Music	HC: Arts	7, 9	FA-even
MUS 241: The Language of Music	HC: Humanities	9	FA-even
NUR 472: Writing II: Nursing Research, Scholarly ..	FN: Written Comm /Integrative ...	3, 15	FA-even
PHI 105: Critical Thinking	PA: Public Issues	1, 2, 14	FA-odd
PHI 110: Introduction to Philosophy	HC: Humanities	9	FA-even
PHI 115: Ethics and Contemporary Issues	PA: Public Issues	1, 2, 14	FA-odd
PHY 100: Survey of Physics with Laboratory	NW: Physical Sciences	11	FA-odd
PHY 101: Physics by Inquiry for Educators	NW: Physical Sciences	11	FA-odd
PHY 123: Introduction to Physics I	NW: Physical Sciences	11	FA-odd
PHY 203: Foundations of Physics I	NW: Physical Sciences	11	FA-odd
PLN 100: Understanding Cities	PA: Public Issues	1, 2, 12	FA-odd
PLS 101: American Democracy & Citizenship	PA: US & MO Constitutions/ Hist.	12, 13	FA-odd
PSY 121: Introductory Psychology	HC: Social and Behavioral Sciences	8	FA-even
REL 100: Introduction to Religion	PA: Cultural Competence	13, 14	FA-odd
REL 101: Old Testament/Hebrew Bible	HC: Humanities	9	FA-even
REL 102: New Testament	HC: Humanities	9	FA-even
REL 131: Religion in America	HC: Social and Behavioral Sciences	8	FA-even
REL 210: Paths of World Religion	PA: Cultural Competence	13, 14	FA-odd
SOC 150: Introduction to Society	HC: Social and Behavioral Sciences	8	FA-even
SOC 152: Social Problems in the Community	PA: Public Issues	1, 2, 12	FA-odd
SWK 219: Human Diversity	PA: Cultural Competence	13, 14	FA-odd
THE 101: Introduction to Theatre and Drama Arts	HC: Arts	7, 9	FA-even
UHC 110: Freshman Honors Seminar	FN: First-Year Seminar	6, 7, 12, 13, 14	FA-even

³ Reports are not required for MTH 261 and MTH 287. These courses have general education courses as prerequisites, and it is assumed that students who have qualified for these courses have met the Quantitative Reasoning GG.

Section 4. General Goals and Examples of Specific Learning Achievements

The General Goals (GGs) shown here are as approved by Senate (2013) with some editing for the sake of clarity. Courses in each of the general education areas should ideally have content that matches the specified GGs, and the GGs should be the main emphasis in any assessment.

When deciding how a course might demonstrate how it meets a GG, it is often helpful to have some specific student achievement targets that support the GG. Below are listed each of the GGs with *examples* of specific learning achievements relevant to the GG. Each list includes an option for other discipline-specific achievements relevant to the General Goal to emphasize that there is considerable flexibility in how the GGs are met.

A couple of comments about the suggested learning achievements:

- Most of these are the old Student Learning Outcomes (SLOs) that had previously been mandated. (Some have been edited for clarity.) “A” generally corresponds to the old SLO1, “B” to SLO2, etc.
- The A, B, C, etc., designations do not in any way indicate priority.
- Courses should generally use about three specific achievements (formerly “SLOs”).

For each of the sample learning achievements listed, there is also a set of suggested assessment rubrics for “Benchmark,” “Milestone,” and “Capstones” level of achievements.

Note: GG1 and GG2 have been combined into “GG1/2”.

GG1/2: Critical Inquiry, Analysis, and Creative Problem Solving. Students will develop the disposition and skills to gather, organize, refine, analyze, and critically evaluate information and ideas in pursuit of new ideas, solutions, approaches, or products. [Sample rubrics](#)

- A. Identify and explore problems of wide concern.
- B. Identify diverse information sources, consider the implications of the source’s viewpoints, and make reasoned choices among them.
- C. Use evidence, statements, alternative viewpoints, graphics, and other forms of information to address an issue.
- D. Draw and defend conclusions reached through the analysis of information.
- E. Develop creative and novel ideas, products, or solutions that address problems of wide concern.
- F. Other discipline-specific achievement(s) supporting the General Goal.

GG3: Written Communication. Students will be able to express themselves clearly and appropriately in writing for a range of social, academic, and professional contexts and use appropriate writing technologies. [Sample rubrics](#)

- A. Demonstrating consideration of context, audience, and purpose with a clear focus on the assigned tasks (e.g., the writing aligns with context, audience, and purpose).
- B. Demonstrating consistent use of important conventions particular to specific disciplines and writing tasks, including organization, content, presentation, and stylistic choices.
- C. Correctly using language that conveys meaning to readers.
- D. Finding, evaluating, analyzing, and synthesizing appropriate sources and effectively integrating that information into their writing.
- E. Other discipline-specific achievement(s) supporting the General Goal.

GG4: Oral Communication. Students will be able to listen critically and speak thoughtfully, clearly, and appropriately to a variety of social, academic, and professional audiences. [Sample rubrics](#)

- A. Convey the central message clearly and consistently, using supporting material.

- B. Demonstrate clearly and consistently an organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) within the presentation.
- C. Demonstrate language choices that support the effectiveness of the communication and are appropriate to the intended audience(s).
- D. Employ interesting and effective delivery techniques (e.g., posture, gesture, eye contact, and vocal expressiveness).
- E. Employ supporting materials (e.g., explanations, examples, illustrations, statistics, analogies, and quotations from relevant authorities) in a manner that establishes the speaker's credibility/authority on the topic.
- F. Other discipline-specific achievement(s) supporting the General Goal.

GG5: Quantitative Literacy. Students will be able to reason and solve quantitative problems from a wide array of contexts and everyday life situations; understand and create logical arguments supported by quantitative evidence; and clearly communicate those arguments in a variety of formats (e.g., words, tables, and mathematical equations) as appropriate. [Sample rubrics](#)

- A. Interpret and communicate information presented in mathematical forms (e.g., equations, functions, graphs, diagrams, tables, or words).
- B. Convert relevant information into various mathematical forms (e.g., equations, functions, graphs, diagrams, tables, or words).
- C. Calculate numerically and symbolically to solve a problem.
- D. Analyze data quantitatively as the basis for competent, valid, and reliable inferences in order to draw reasonable and appropriate conclusions.
- E. Use appropriate mathematical tools to explicitly describe assumptions, mathematical relationships, and conclusions.
- F. Express evidence in support of an argument by employing appropriate forms of presentation (e.g., equations, functions, graphs, diagrams, tables, or words).
- G. Other discipline-specific achievement(s) supporting the General Goal.

GG6: Information Literacy. Students will be able to identify and evaluate appropriate information and effectively and responsibly use that information for a particular problem as necessary.

- A. Designs a well-defined research question or thesis utilizing relevant information sources.
- B. Uses a variety of search strategies to select relevant information sources. [Sample rubrics](#)
- C. Critically evaluates the accuracy and validity of information sources and the relevant contexts in which they are presented.
- D. Organize, synthesize, and communicate information from sources so the intended purpose is achieved.
- E. Distinguishes between common knowledge and ideas requiring citation and correctly uses paraphrasing, summarizing, or quoting.
- F. Demonstrate a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.
- G. Other discipline-specific achievement(s) supporting the General Goal.

GG7: Collaboration. Students will be able to summarize the collaborative process and how working collaboratively with others affects problem solving and informed decision making. [Sample rubrics](#)

- A. Identifies patterns in the roles, skills, and behaviors required for effective teamwork and goal attainment.
- B. Describes how values, knowledge, and skills, such as building upon the ideas of others and treating team members with respect, create a collaborative culture.
- C. Describes conflict and responses that strengthen collaboration; states productive response(s) to criticism and conflict.
- D. Evaluates and applies alternative solutions or courses of action that build on the ideas of others.
- E. Other discipline-specific achievement(s) supporting the General Goal.

GG8: Social and Behavioral Sciences. Students will be able identify and distinguish various institutions (e.g., cultural, political, economic, religious, and educational) and their historical backgrounds, as well as principles of human behavior and social interaction. [Sample rubrics](#)

- A. Describes and compares social institutions, structures, and processes historically, culturally, or globally.
- B. Describes the past and how it influences present world societies and/or contemporary problems.
- C. Describes social science methods that explain and/or predict human behavior and/or decision-making.
- D. Describes interdependence of people and places around the globe.
- E. Identifies and differentiates biological, environmental, cognitive, and/or social factors that influence human behavior.
- F. Applies behavioral science principles to personal, social, and/or organizational issues.
- G. Other discipline-specific achievement(s) supporting the General Goal.

GG9: Humanities and the Arts. Students will develop intellectual, imaginative, and/or creative thinking, as they explain how relevant contexts (e.g., social, cultural, linguistic, artistic, religious, philosophical, and/or historical) have shaped the thoughts and actions of people worldwide. [Sample rubrics](#)

- A. Explains how various forms of expression (e.g., written, oral, musical, bodily, and visual) contribute to human knowledge and experience.
- B. Utilize knowledge of various critical and theoretical frameworks to analyze and interpret works in humanities and the arts.
- C. Creates an entirely new object, solution, or idea.
- D. Relates texts and/or cultural products to appropriate contextual influences, traditions, perspectives and/or behavioral patterns
- E. Describes the influence of community, institutions, and/or other social constructs (e.g., social class, gender, race) on thoughts, values, and/or behaviors in cultural and historical settings other than one's own.
- F. Other discipline-specific achievement(s) supporting the General Goal.

GG10: Life Sciences. Students will understand basic concepts of living things, the nature of scientific knowledge, and relevance of biological knowledge to human affairs. [Sample rubrics](#)

- A. Understand living systems by describing their nature, organization, and evolution.
- B. Understand and use the processes by which scientific knowledge of living things is generated.
- C. Develop knowledge of living things through hypothesis testing and gain the ability to draw defensible conclusions regarding living things.
- D. Make logical connections between key concepts in the life sciences and describe the interaction between human lives and other living things.
- E. Understanding the human species as a biological organism.
- F. Understand the ways the environment impacts humanity and how human actions affect the environment.
- G. Other discipline-specific achievement(s) supporting the General Goal.

GG11: Physical Sciences. Students will understand and actively explore fundamental principles in physical sciences and methods of developing and testing hypotheses used in the analysis of the physical universe. [Sample rubrics](#)

- A. Demonstrate knowledge of the physical universe and its physical processes.
- B. Understand and use the processes by which knowledge of the physical world is generated.
- C. Develop knowledge about principles of the physical world through hypothesis testing and gain the ability to draw defensible conclusions regarding the physical world.
- D. Make logical connections between key concepts in the physical sciences and describe the interaction between the physical world and human lives.

- E. Understand the ways the physical environment impacts humanity and how human actions affect the environment.
- F. Apply scientific models to make both qualitative and quantitative predictions about the behavior of matter.
- G. Other discipline-specific achievement(s) supporting the General Goal.

General Goal 12: Community Engagement. Students will be able to recognize the importance of contributing their knowledge and experiences to their own communities and the broader society. [Sample rubrics](#)

- A. Identify the rights and responsibilities they have in their own communities and/or the broader society.
- B. Recognize the ways in which they can exercise their rights and responsibilities.
- C. Identifies knowledge from academic fields and how it connects to civic and/or political participation.
- D. Recognize the needs of the communities to which they belong and state how to address those needs.
- E. Other discipline-specific achievement(s) supporting the General Goal.

GG13: Cultural Competence. Students will be able to recognize and consider multiple perspectives and cultures. [Sample rubrics](#)

- A. Compares perspectives and behaviors they acquire in their homes, schools, and communities.
- B. Describes key similarities and differences between their own cultural practices and perspectives and those of other cultures, past and present.
- C. Identifies the importance and best practices of developing skills for working/interacting with others.
- D. Compares the role that different languages, cultures, institutions, and/or beliefs have in shaping individual and collective behavior.
- E. Other discipline-specific achievement(s) supporting the General Goal.

GG14: Ethical Leadership. Students will be able to articulate their value systems, understand the ethical implications of their actions based on those values, and develop skills consistent with having a positive impact on individuals, groups, or communities. [Sample rubrics](#)

- A. Assesses own ethical values and describes how those values and behaviors are congruent.
- B. Summarizes the foundations for ethical thought and action.
- C. Identify difficult/complex challenge(s) in responding to situations demanding ethical inquiry.
- D. Summarizes complex ethical dilemmas facing the world.
- E. Describes the causes of societal problems and states potential solutions.
- F. Recognize the importance of ethical actions and relates them to effective leadership skills.
- G. Other discipline-specific achievement(s) supporting the General Goal.

GG15: Integrative and Applied Learning. Students will be able to synthesize information and integrate material from a variety of courses, as they apply their knowledge, abilities, and skills to specific situations. [Sample rubrics](#)

- A. Use academic knowledge to develop solutions to complex problems.
- B. Integrate knowledge, abilities, and skills across disciplines to understand real life experiences and/or social situations.
- C. Evaluate and integrate examples, facts, or theories from more than one field of study in order to develop creative solutions or better understanding of specific situations/issues.
- D. Adapt and apply knowledge gained in one situation to different contexts.
- E. Other discipline-specific achievement(s) supporting the General Goal.

Section 5. Types of Assessment Data to Collect

Overview: What type of assessment data is appropriate? The details will vary from course to course. In some cases, there might be some common questions on exams (especially on final exams) that relate to the General Goal(s). For some courses, common assignments (e.g., papers, projects, presentations) might be used. Some important points:

- General education goals should be a natural extension of your course goals. There should be learning goals that are intrinsic to your course that are also applicable to general education. You generally should *not* need to create special assignments that pertain only to general education!
- Ideally, the assessment should provide not just a simple yes/no answer about student learning, but should allow some evaluation of students' depth of knowledge:
 - Benchmark level: Basic knowledge level, primarily factual learning; evaluates questions / problems from a single (or limited) point of view or context.
 - Milestone level: Displays ability to understand, apply concepts; can apply ideas across different contexts; can find suitable information to support ideas and to evaluate alternatives. (Note: The milestone level is often split into two levels.)
 - Capstone level: Displays insight into interconnections between different topics, able to critically analyze and evaluate different viewpoints, able to develop and evaluate new ideas and solutions.

Overall, a university education should strive to bring students to the capstone level. However, for most general education classes, particularly those taught at the introductory level, the goal should be to get students past the benchmark level and into the milestone level, with capstone level achievement sometimes aspirational for introductory classes.

- Rubrics may be helpful for evaluating student work. A number of example rubrics are provided in the [Appendix](#).
 - Many of the rubrics were adapted from those posted by the AAC&U (American Association of Colleges and Universities).
 - In addition, it may be helpful to reference Bloom's Taxonomy when devising learning objectives for a course (not just for general education assessment). A short summary of Bloom's Taxonomy levels, goals, and keywords is provided at the end of this section.

Types of Assessment Data

- Common exam questions.
 - Common multiple choice questions on exams (particularly final exams) are appropriate for some classes, and the data for all students in multiple sections is often readily compiled. When using this approach, it is helpful to have questions that query at both the benchmark and capstone levels.
 - Common exam questions may also take the form of essay questions. See the comments on papers/projects/presentations later in this section.
- Pretest / posttest.

- Pretest / posttest approaches are often a good way to evaluate student gains from the start of a semester to the end, and in many cases, data for most if not all students in a class may be collected readily.
- As with common exam questions, it is best if the tests include questions that address both benchmark and milestone levels.
- Papers / projects / presentations.
 - Student papers, projects, and presentations (“products”) typically provides the richest sources of information about student learning. (Note: This also applies to essay questions on exams.)
 - Unfortunately, detailed evaluation of such projects for general education goals for all student in a class, particularly for larger, multi-section courses, is probably prohibitively “expensive” in terms of faculty time and effort. In such cases, CGEIP recommends that evaluation be limited to a limited number of such products, e.g, two randomly selected papers from each section. This type of approach allows a representative assessment of achievement toward general education learning goals without being overly burdensome.

Timing of Assessments

- It is not essential to evaluate all learning goals every semester! It is okay to spread out the work over the two year period between reports.

Bloom’s Taxonomy Goals and Keywords

Level	Remember	Understand	Apply	Analyze	Evaluate	Create
Goal	Recall facts, basic concepts	Explain ideas or concepts	Use information in new situations	Draw connections among ideas	Justify a stand or decision	Produce new or original work
Keywords	define duplicate list memorize repeat	classify describe discuss explain identify locate recognize report select translate	demonstrate execute implement interpret operate schedule sketch solve use	compare contrast differentiate distinguish examine experiment organize relate question test	appraise argue critique defend judge select support value weigh	assemble author conjecture construct design develop formulate investigate

Adapted from Vanderbilt University Center for Teaching: <https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/>

Section 6. Annotated Biennial Report Form

Accessing the report form:

Note: At some point in this process, you may need to log in. Your ID is your normal MSU login UserID with @MissouriState.edu added, e.g., **ABC1234@MissouriState.edu**. Your password is your usual MSU password.

- 1. On the MissouriState.edu website, search for CGEIP and then navigate to the main CGEIP page.

Council on General Education and Intercollegiate Programs ...

- 2. Select the General Education Report Process option from the menu on the left side.
- 3. The Report Process page will have a link to the report form:

▪ **Link for report form:** [General Education Course Report](#)

Click the link to open the report. You can also access the report directly from the following link:

[General Education Course Report](#)

CGEIP RESOURCES

- CGEIP Members
- [CGEIP Meetings, Agendas & Minutes](#)
- Application for General Education (New Courses)
- General Education Course Review (Reports)
- General Education Report Process**
- General Education Course Coordinators
- Contact Information

Report form:

CGEIP Biennial Report

Hi _____, when you submit this form, the owner will be able to see your name and email address.

Required

1. Submitted by: *

This will usually be the course coordinator, but may be a designee.

2. Official course coordinator if someone different:

If coordinator is someone

3. Course Number **and** Title *

E.g. ENG 222: Writing for Social Change

Course title helpful when reviewing report. Reviewers don't know all courses by their numbers!

4. What time period (e.g., FA17-SP19) is covered in this report? Were all sections of the course for each semester covered? *

If not, briefly clarify what was/was not reviewed.

Reviews should ideally cover a two-year period (period between biennial reviews).

5. Did you have a meeting with other course instructors to discuss data collected? Who participated in the discussions? *

Reviews are most useful when a range of instructors is included in the discussions.

The course has one or more specific General Goals (from when the course joined Gen Ed, approved by Faculty Senate). Select the GGs from the pull-down menu. **If you are unsure about your course’s goal(s), check the General Education Coordinator’s Handbook!**

6. General Goal *

Select each of the General Goals specifically assigned for your course. See the General Education Coordinators Handbook: <https://www.missouristate.edu/cgeip/genedcoursereview.htm>

General Goal (1/2): Critical Inquiry, Analysis, and Creative Problem Solving. Students will develop the disposition and skills to gather, organize, refine, analyze, and critically evaluate information and ideas in

Heart of the report: Relate a set of the course’s learning goals to the GGs, and describe concisely what data you looked at when evaluating student learning relative to each GG. What did each of these tell you about student learning relevant to the goal? You may simply summarize your observations (*without* detailed data presentation and statistics). A few illustrative examples may be appropriate – specific examples can help CGEIP reviewers better understand what you did. There is room for six such entries, each focusing on a particular learning outcome, but **most reports will need only three of the six**. Each response is limited to 4,000 characters.

Learning Outcomes

What did you want students to learn that supported the General Goal(s)? List specific learning outcomes (typically three distinct outcomes unless another number was specified) supporting the goal. For each of these, describe the type of data you collected. (Be specific, e.g., evaluated essays to gauge students’ ability to view a problem from multiple perspectives...; evaluated short answers responses to determine whether students could identify reliable source. Providing some details, e.g., examples of assignments, writing prompts, etc., is very helpful!). What did you learn about student learning for each of these? (**Spaces are provided for reporting on up to six learning outcomes. However, courses with a single General Goal will typically have just three outcomes.**)


7. 1st learning outcome *

Type of data collected:

What did the data tell you about student learning toward the desired outcome

Limit: 4,000 characters including spaces

(Items 8 – 12 are boxes for additional learning outcomes – most courses will only use three.)

13. Overall, how would you rate the students' achievements/progress relative to the General Goal(s)? Where have students shown the most success? Have you noted any areas of weakness in student learning relative to the General Goal(s)? * 

How did your students do? How well did they reach benchmark, milestone, and capstone levels of achievement toward the learning goals? Highlight your successes! This is also where you might recognize areas where students struggle.



14. What do you plan to do in the future? What worked well and will be continued? If you noted any deficiencies, how do you anticipate addressing them? *

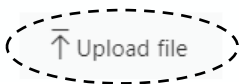
Many gen ed courses are pretty well tuned and may not need much more than an occasional “tweak” – that is normal. Occasionally, assessment helps to reveal issues that can be addressed in future years.

15. Faculty Senate has charged CGEIP with examining the diversity content in all general education courses. **If applicable**, describe any ways that you include diversity content in your general education course:

If your course *does* include significant diversity content, please let us know. If it does, is that content covered in your course assessments?

16. Optional: If you used a rubric or other assessment tool for your evaluations and felt that it was particularly effective, please attach that. CGEIP may post (or otherwise make available) assessment tools that might serve as models for coordinators of other general education courses.

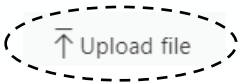
(Non-anonymous question  )



This is in the spirit of sharing ideas. If you came up with ideas that you think might benefit others, tell us!

17. Please upload a representative course syllabus to facilitate the the review process.

(Non-anonymous question )



Syllabi for all sections in the course should contain information about gen ed content – what the General Goals are and how they relate to course learning goals.

18. Are dual credit sections of this course offered? If so, have you received data or other feedback from dual credit sections of the course regarding the general education components in these classes? If so, please describe this.

Many general education courses are taught as dual credit courses. As such, they *are* MSU classes and should meet the same goals as courses taught on campus. If you have information about what those courses are doing relative to gen ed, let us know!

Send me an email receipt of my responses

Section 7. Steps in the Review Process

The basic steps in the process are as follows.

6. Prior to the report due date (first Monday in December), CGEIP will invite general education coordinators to sessions where topics related to general education goals, assessment, and reports are discussed.
7. Coordinators (or a designee) submits the report to CGEIP.
8. CGEIP will use its next three regular meetings (December, January, and February) to review the reports.
 - Each report will be reviewed by at least two different CGEIP members, who will annotate the reports with comments and observations.
 - Each report and the comments of reviewers will be presented to the entire CGEIP group and, where appropriate, additional comments / observations may be added.
9. Each report will be scanned with comments included, and for each, a transcribed version of the comments will be prepared.
 - Both forms of the report will be sent to the person submitting the report and also to the Department Head from the originating department(s).
 - In some cases, copies may also be sent to Deans.
10. The coordinator (or Head) should share any feedback with the course's instructors.

Section 8. Accessing Original General Education Proposals and Prior Reports

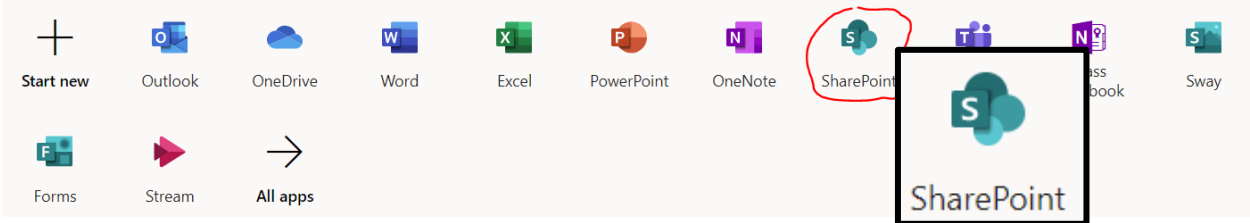
The following directions will get you to your course’s original proposal for entry into the MSU General Education program. Those proposals details what General Goals were selected and how Student Learning Outcomes were to be evaluated (the current system allows greater flexibility). Also available are prior reports.

Note: At some point in this process, you may need to log in. Your ID is your normal MSU login UserID with @MissouriState.edu added, e.g., ABC1234@MissouriState.edu. Your password is your usual MSU password.

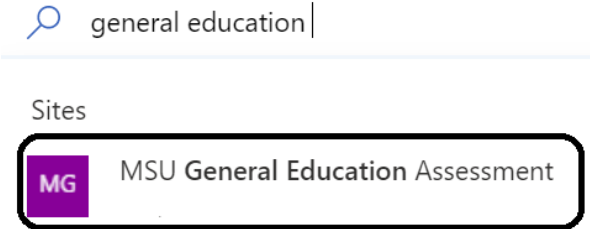
- 1. At the MissouriState.edu website, select Log In and then Office 365 and Email.



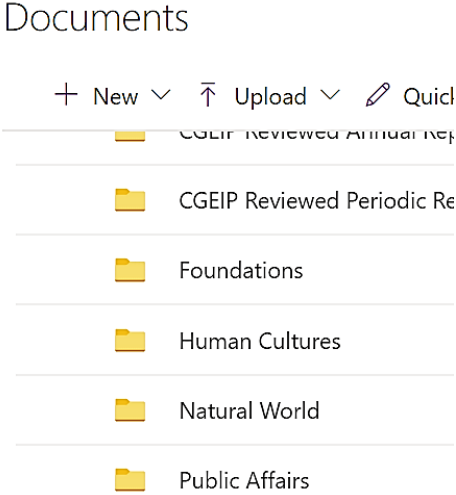
- 2. Select SharePoint.



- 3. In the SharePoint search bar, enter “general education” and then select the option for MSU General Education Assessment. (Note: If you have used accessed this before, it might already be displayed in your list of recent sites.



- 4. The MSU General Education Assessment site should open in its Documents folder. From there, you should be able to select your course’s general area (Foundations, Human Cultures, Natural World, Public Affairs) and then navigate to the specific course and its proposal. The folders also include previous annual and periodic reports for the courses.



Appendix: General Goals, Sample Learning Achievements, and Sample Rubrics

This appendix lists each of the General Goals with suggested learning achievements, along with example rubrics for each. Many of the rubrics are based on those published by AAC&U (American Association of Colleges and Universities).

Note that both the suggestion learning achievements and associated rubrics are all *suggested* as examples. These can be altered and supplemented as appropriate for each course. The key requirement is that achievements supporting the General Goal be assessed.

<p>GG1/2: Critical Inquiry, Analysis, and Creative Problem Solving. Students will develop the disposition and skills to gather, organize, refine, analyze, and critically evaluate information and ideas in pursuit of new ideas, solutions, approaches, or products.</p> <p>Benchmark: Students demonstrate skills to gather and organize information, but with limited analysis of the information.</p> <p>Milestone: Students go beyond basic information gathering and demonstrate ability to organize and analyze the information.</p> <p>Capstone: Students develop the disposition and skills to gather, organize, refine, analyze, and critically evaluate information and ideas in pursuit of new ideas, solutions, approaches, or products.</p> <p>A. Identify and explore problems of wide concern.</p> <p>Benchmark: Students identify a problem of concern but with limited range of information.</p> <p>Milestone: Students identify and explore problems of wide concern.</p> <p>Capstone: Students identify and critically explore problems of wide concern.</p> <p>B. Identify diverse information sources, consider the implications of the source’s viewpoints, and make reasoned choices among them.</p> <p>Benchmark: Students identify limited information sources when making choices about issues.</p> <p>Milestone: Students identify multiple information sources when making choices about issues.</p> <p>Capstone: Students identify diverse information sources, consider the implications of the sources’ viewpoints, and make reasoned choices among them.</p> <p>C. Use evidence, statements, alternative viewpoints, graphics, and other forms of information to address an issue.</p> <p>Benchmark: Students use a single type of information to address an issue.</p> <p>Milestone: Students use evidence, statements, alternative viewpoints, graphics, and other forms of information to address the issue.</p> <p>Capstone: Students consistently and critically use and evaluate evidence, statements, alternative viewpoints, graphics, and other forms of information to address the issue.</p> <p>D. Draw and defend conclusions reached through the analysis of information.</p> <p>Benchmark: Students state a conclusion based on limited supporting evidence.</p> <p>Milestone: Students draw and explain conclusions reached based on supporting evidence.</p> <p>Capstone: Students draw and defend conclusions reached using a range of credible information sources.</p> <p>E. Develop creative and novel ideas, products, or solutions that address problems of wide concern.</p> <p>Benchmark: Students show limited ability to propose creative or new ways to address problems.</p> <p>Milestone: Students propose creative ways to address problems of wide concern, but with limited development.</p> <p>Capstone: Students develop creative and novel ideas, products, or solutions that address problems of wide concern.</p> <p>F. Rubrics for discipline-specific achievements should be consistent with the overall rubrics for the General Goal</p>
--

GG3: Written Communication. Students will be able to express themselves clearly and appropriately in writing for a range of social, academic, and professional contexts and use appropriate writing technologies.

Benchmark: Students do not consistently express themselves clearly and appropriately in writing for a range of social, academic, and professional contexts.

Milestone: Students express themselves clearly and appropriately in writing for a range of social, academic, and professional contexts.

Capstone: Students express themselves clearly, fluidly, and appropriately in writing for a range of social, academic, and professional contexts, with careful attention to conventions for the particular discipline(s).

A. Demonstrating consideration of context, audience, and purpose with a clear focus on the assigned tasks (e.g., the writing aligns with context, audience, and purpose).

Benchmark: Students demonstrate limited attention to context, audience, purpose, and to the assigned tasks(s) (e.g., expectation of instructor or self as audience).

Milestone: Students demonstrate consideration of context, audience, and purpose and a clear focus on the assigned task(s) (e.g., the task aligns with audience, purpose, and context).

Capstone: Students demonstrate a thorough understanding of context, audience, and purpose that is responsive to the assigned task(s) and focuses all elements of the work.

B. Demonstrating consistent use of important conventions particular to specific disciplines and writing tasks, including organization, content, presentation, and stylistic choices.

Benchmark: Students attempt to use a consistent system for basic organization and presentation.

Milestone: Students generally demonstrate use of important conventions particular to a specific discipline and/or writing task(s), including organization, content, presentation, and stylistic choices.

Capstone: Students demonstrate detailed attention to and successful execution of a wide range of conventions particular to a specific discipline and/or writing task(s) including organization, content, presentation, formatting, and stylistic choices.

C. Correctly using language that conveys meaning to readers.

Benchmark: Students use language that sometimes impedes meaning because of errors in usage.

Milestone: Students use straightforward language that generally conveys meaning to readers with clarity, although writing may include some errors.

Capstone: Students use graceful language that skillfully communicates meaning to readers with clarity and fluency and is virtually error free.

D. Finding, evaluating, analyzing, and synthesizing appropriate sources and effectively integrating that information into their writing.

Benchmark: Students demonstrate an attempt to use sources to support ideas in their writing.

Milestone: Students demonstrate use of credible, relevant sources to support ideas that are situated within the discipline and genre of their writing.

Capstone: Students demonstrate skillful analysis and synthesis of high quality, credible, relevant sources to develop ideas that are appropriate for the discipline and genre of their writing.

E. Rubrics for discipline-specific achievements should be consistent with the overall rubrics for the General Goal.

<p>GG4: Oral Communication. Students will be able to listen critically and speak thoughtfully, clearly, and appropriately to a variety of social, academic, and professional audiences.</p>	
Benchmark:	Students demonstrate limited ability to make presentations that are consistently clear, organized, use appropriate language choices and presentation techniques, and effectively use supporting materials.
Milestone:	Students demonstrate ability to make presentations that are generally clear, organized, use appropriate language choices and presentation techniques, and effectively use supporting materials.
Capstone:	Students demonstrate ability to make presentations that are compelling, memorable, cohesive, polished, and authoritative.
<p>Note: For these, there is an overall milestone rubric is shown, along with a low and a high performance rubric, consistent with the AAC&U rubrics for oral communications.</p>	
<p>A. Convey the central message clearly and consistently, using supporting material.</p>	
Benchmark:	Students make presentations for which the central message can be inferred but is not explicitly stated in the presentation.
Milestone:	Students make presentations for which the central message is clear and consistent with the supporting material.
<p>Low: Central message is basically understandable but is not often repeated and is not memorable.</p> <p>High: Central message is clear and consistent with the supporting material.</p>	
Capstone:	Students make presentations for which the central message is compelling (precisely stated, appropriately repeated, memorable, and strongly supported.)
<p>B. Demonstrate clearly and consistently an organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) within the presentation.</p>	
Benchmark:	Students make presentations for which the organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is not observable within the presentation.
Milestone:	Students make presentations for which the organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is usually observable within the presentation.
<p>Low: Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is intermittently observable within the presentation.</p> <p>High: Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is clearly and consistently observable within the presentation.</p>	
Capstone:	Students make presentations for which the organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is clearly and consistently observable and is skillful and makes the content of the presentation cohesive.
<p>C. Demonstrate language choices that support the effectiveness of the communication and are appropriate to the intended audience(s).</p>	
Benchmark:	Students make presentations for which the language choices are unclear and minimally support the effectiveness of the presentation. Language in presentation is not consistently appropriate to audience.
Milestone:	Students make presentations for which the language choices are usually thoughtful and generally support the effectiveness of the presentation. Language in presentation is appropriate to audience.

	<p>Low: Language choices are mundane and commonplace and partially support the effectiveness of the presentation. Language in presentation is appropriate to audience. High: Language choices are thoughtful and generally support the effectiveness of the presentation. Language in presentation is appropriate to audience.</p>
Capstone:	Students make presentations for which the language choices are imaginative, memorable, and compelling, and enhance the effectiveness of the presentation. Language in presentation is appropriate to audience.
D. Employ interesting and effective delivery techniques (e.g., posture, gesture, eye contact, and vocal expressiveness).	
Benchmark	Students’ delivery techniques (posture, gesture, eye contact, and vocal expressiveness) detract from the understandability of the presentation, and speakers appear uncomfortable.
Milestone	Students’ delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation interesting, and speaker usually appears comfortable. Low: Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation understandable, and speakers appear tentative. High: Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation interesting, and speakers appear comfortable.
Capstone	Students’ delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation compelling, and speakers appear polished and confident.
E. Employ supporting materials (e.g., explanations, examples, illustrations, statistics, analogies, and quotations from relevant authorities) in a manner that establishes the speaker’s credibility/authority on the topic.	
Benchmark:	Students present insufficient supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) that make reference to information or analysis that minimally supports the presentation or establishes the presenter's credibility/authority on the topic.
Milestone:	Students present supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) that make appropriate reference to information or analysis that generally supports the presentation or establishes the presenter's credibility/authority on the topic. Low: Supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make appropriate reference to information or analysis that partially supports the presentation or establishes the presenter's credibility/authority on the topic. High: Supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make appropriate reference to information or analysis that generally supports the presentation or establishes the presenter's credibility/authority on the topic.
Capstone	Students present a variety of types of supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) that make appropriate reference to information or analysis that significantly supports the presentation or establishes the presenter's credibility/authority on the topic.
F. Rubrics for discipline-specific achievements should be consistent with the overall rubrics for the General Goal.	

GG5: Quantitative Literacy. Students will be able to reason and solve quantitative problems from a wide array of contexts and everyday life situations; understand and create logical arguments supported by quantitative evidence; and clearly communicate those arguments in a variety of formats (e.g., words, tables, and mathematical equations) as appropriate.

Benchmark: Students demonstrate limited ability to solve quantitative problems and to interpret or create information presented in mathematical forms.

Milestone: Students reason and solve quantitative problems from a wide array of contexts and everyday life situations; understand and create logical arguments supported by quantitative evidence; and clearly communicate those arguments in a variety of formats (e.g., words, tables, and mathematical equations) as appropriate.

Capstone: Students reason and solve complex quantitative problems from a wide array of contexts and everyday life situations; understand and create logical arguments supported by quantitative evidence; and clearly communicate those arguments in a variety of formats (e.g., words, tables, and mathematical equations) as appropriate.

A. Interpret and communicate information presented in mathematical forms (e.g., equations, functions, graphs, diagrams, tables, or words).

Benchmark: Students demonstrate limited ability to interpret and communicate information presented in mathematical forms.

Milestone: Students interpret and communicate information presented in mathematical forms.

Capstone: Students interpret and clearly communicate complex information presented in mathematical forms.

B. Convert relevant information into various mathematical forms (e.g., equations, functions, graphs, diagrams, tables, or words).

Benchmark: Students demonstrate limited ability to convert information into mathematical forms.

Milestone: Students convert information into various mathematical forms (equations, functions, graphs, diagrams, tables, or words).

Capstone: Students readily convert complex information into various mathematical forms.

C. Calculate numerically and symbolically to solve a problem.

Benchmark: Students demonstrate the ability to calculate numerically and symbolically to solve only simple problems.

Milestone: Students can calculate numerically and symbolically to solve problems.

Capstone: Students can calculate numerically and symbolically to solve complex problems.

D. Analyze data quantitatively as the basis for competent, valid, and reliable inferences in order to draw reasonable and appropriate conclusions.

Benchmark: Students demonstrate the ability to quantitatively analyze data and draw conclusions only for simple applications.

Milestone: Students analyze data quantitatively as the basis for competent, valid, and reliable inferences in order to draw reasonable and appropriate conclusions.

Capstone: Students analyze and integrate complex data sets quantitatively as the basis for competent, valid, and reliable inferences in order to draw reasonable and appropriate conclusions for a variety of contexts.

E. Use appropriate mathematical tools to explicitly describe assumptions, mathematical relationships, and conclusions.

Benchmark: Students demonstrate limited ability to use mathematical tools to explicitly describe assumptions, mathematical relationships, and conclusions.

Milestone:	Students use appropriate mathematical tools to explicitly describe assumptions, mathematical relationships, and conclusions.
Capstone:	Students use appropriate mathematical tools to explicitly and clearly describe assumptions, mathematical relationships, and conclusions for complex problems.
F.	Express evidence in support of an argument by employing appropriate forms of presentation (e.g., equations, functions, graphs, diagrams, tables, or words).
Benchmark:	Students demonstrate limited ability to express evidence in support of an argument using appropriate forms of presentation (e.g., equations, functions, graphs, diagrams, tables, or words).
Milestone:	Students express evidence in support of an argument by employing appropriate forms of presentation (e.g., equations, functions, graphs, diagrams, tables, or words).
Capstone:	Students creatively express evidence in support of an argument by employing multiple appropriate forms of presentation (e.g., equations, functions, graphs, diagrams, tables, or words).
G.	Rubrics for discipline-specific achievements should be consistent with the overall rubrics for the General Goal.

GG6: Information Literacy. Students will be able to identify and evaluate appropriate information and effectively and responsibly use that information for a particular problem as necessary.

Benchmark: Students identify the need for information regarding a particular problem.

Milestone: Students identify appropriate information and use that information regarding a particular problem.

Capstone: Students identify and evaluate appropriate information and effectively and responsibly use that information for a particular problem as necessary.

A. Designs a well-defined research question or thesis utilizing relevant information sources.

Benchmark: Students identify a research topic using general information sources.

Milestone: Students state a research question or thesis utilizing relevant information sources.

Capstone: Students design a well-defined research question or thesis utilizing relevant information sources.

B. Uses a variety of search strategies to select relevant information sources.

Benchmark: Students identify search strategies to select information sources.

Milestone: Students use a variety of search strategies to select relevant information sources.

Capstone: Students differentiate a variety of search strategies to evaluate the accuracy and validity of the information sources.

C. Critically evaluates the accuracy and validity of information sources and the relevant contexts in which they are presented.

Benchmark: Students recognize varying levels of accuracy and/or validity of information sources.

Milestone: Students recognize varying levels of accuracy and validity of information sources and the influence of the context(s) in which they are presented.

Capstone: Students critically evaluate the accuracy and validity of information sources and the influence of the contexts in which they are presented.

D. Organize, synthesize, and communicate information from sources so the intended purpose is achieved.

Benchmark: Students organize information from source(s) but the intended purpose is unclear.

Milestone: Students organize and communicate information from source(s) so the intended purpose is achieved.

Capstone: Students organize, synthesize, and communicate information from multiple sources so the intended purpose is achieved.

E. Distinguishes between common knowledge and ideas requiring citation and correctly uses paraphrasing, summarizing, or quoting.

Benchmark: Students recognize the difference between common knowledge and ideas requiring citation but have errors in execution.

Milestone: Students distinguish between common knowledge and ideas requiring citation and correctly use paraphrasing, summarizing, or quoting.

Capstone: Students distinguish between common knowledge and ideas requiring citation and effectively use paraphrasing, summarizing, or quoting, to enhance their communication.

F. Demonstrate a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.

Benchmark:	Students recognize the ethical or legal restrictions on the use of published, confidential, and/or proprietary information.
Milestone:	Students recognize both ethical and legal restrictions on the use of published, confidential, and/or proprietary information.
Capstone:	Students demonstrate a full understanding of both the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.

G. Rubrics for discipline-specific achievements should be consistent with the overall rubrics for the General Goal.

GG7: Collaboration. Students will be able to summarize the collaborative process and how working collaboratively with others affects problem solving and informed decision making.

Benchmark: Students identify aspects of the collaborative process and/or work collaboratively with others.

Milestone: Students summarize the collaborative process and how working collaboratively with others affects problem solving and informed decision making.

Capstone: Students analyze the collaborative process and apply it to work with others to solve problems and make informed decisions.

A. Identifies patterns in the roles, skills, and behaviors required for effective teamwork and goal attainment.

Benchmark: Students recognize the roles, skills, and/or behaviors required for teamwork and goal attainment.

Milestone: Students identify patterns in the roles, skills, and behaviors required for effective teamwork and goal attainment.

Capstone: Students apply skills, and behaviors to fill roles required for effective teamwork and goal attainment.

B. Describes how values, knowledge, and skills, such as building upon the ideas of others and treating team members with respect, create a collaborative culture.

Benchmark: Students recognize that values, knowledge, and skills, such as building upon the ideas of others and treating team members with respect, affect a collaborative culture.

Milestone: Students describe how values, knowledge, and skills, such as building upon the ideas of others and treating team members with respect, create a collaborative culture.

Capstone: Students apply values, knowledge, and skills, such as building upon the ideas of others and treating team members with respect, to enhance a collaborative culture.

C. Describes conflict and responses that strengthen collaboration; states productive response(s) to criticism and conflict.

Benchmark: Students recognize conflict and/or state responses that strengthen collaboration.

Milestone: Students describe conflict and responses that strengthen collaboration; state productive response(s) to criticism and conflict.

Capstone: Students analyze conflict and responses that strengthen collaboration; develop productive responses to criticism and conflict.

D. Evaluates and applies alternative solutions or courses of action that build on the ideas of others.

Benchmark: Students recognize a need for alternative solutions or courses of action that build on the ideas of others.

Milestone: Students explain how alternative solutions or courses of action build on the ideas of others.

Capstone: Students evaluate and apply alternative solutions or courses of action that build on the ideas of others.

E. Rubrics for discipline-specific achievements should be consistent with the overall rubrics for the General Goal.

GG8: Social and Behavioral Sciences. Students will be able identify and distinguish various institutions (e.g., cultural, political, economic, religious, and educational) and their historical backgrounds, as well as principles of human behavior and social interaction.

Benchmark: Students identify various institutions (e.g., cultural, political, economic, religious, and educational) and their historical backgrounds, as well as principles of human behavior and social interaction.

Milestone: Students identify and distinguish various institutions (e.g., cultural, political, economic, religious, and educational) and their historical backgrounds, as well as principles of human behavior and social interaction.

Capstone: Students analyze and critique various institutions (e.g., cultural, political, economic, religious, and educational) and their historical backgrounds, as well as principles of human behavior and social interaction.

A. Describes and compares social institutions, structures, and processes historically, culturally, or globally.

Benchmark: Students recognize social institutions, structures, or processes historically, culturally, and/or globally.

Milestone: Students describe and compare social institutions, structures, or processes historically, culturally, or globally.

Capstone: Students analyze and critique social institutions, structures, or processes historically, culturally, or globally.

B. Describes the past and how it influences present world societies and/or contemporary problems.

Benchmark: Students recognize that the past influences present world societies and/or contemporary problems.

Milestone: Students describe the past and how it influences present world societies and/or contemporary problems.

Capstone: Students analyze how the past influences present world societies and contemporary problems.

C. Describes social science methods that explain and/or predict human behavior and/or decision-making.

Benchmark: Students recognize social science methods that explain and/or predict human behavior and/or decision-making.

Milestone: Students describe social science methods that explain and/or predict human behavior and/or decision-making.

Capstone: Students critique social science methods used to explain and/or predict human behavior and/or decision-making.

D. Describes interdependence of people and places around the globe.

Benchmark: Students recognize interdependence of people in places around the globe.

Milestone: Students describe interdependence of people in places around the globe.

Capstone: Students analyze interdependence of people in places around the globe.

E. Identifies and differentiates biological, environmental, cognitive, and/or social factors that influence human behavior.

Benchmark: Students identify biological, environmental, cognitive, and/or social factors that influence human behavior.

Milestone: Students identify and differentiate among biological, environmental, cognitive, and/or social factors that influence human behavior.

Capstone: Students cite evidence of biological, environmental, cognitive, and/or social factors that influence human behavior.

F. Applies behavioral science principles to personal, social, and/or organizational issues.

Benchmark: Students identify behavioral science principles. (May not relate to specific issues.)

Milestone: Students recognize relevance of behavioral science principles to personal, social, and/or organizational issues.

Capstone: Students apply behavioral science principles to personal, social, and/or organizational issues.

G. Rubrics for discipline-specific achievements should be consistent with the overall rubrics for the General Goal.

GG9: Humanities and the Arts. Students will develop intellectual, imaginative, and/or creative thinking, as they explain how relevant contexts (e.g., social, cultural, linguistic, artistic, religious, philosophical, and/or historical) have shaped the thoughts and actions of people worldwide.

Benchmark: Students recognize that relevant contexts (e.g., social, cultural, linguistic, artistic, religious, philosophical, and/or historical) have shaped the thoughts and actions of people worldwide.

Milestone: Students develop intellectual, imaginative, and/or creative thinking, as they explain how relevant contexts (e.g., social, cultural, linguistic, artistic, religious, philosophical, and/or historical) have shaped the thoughts and actions of people worldwide.

Capstone: Students demonstrate intellectual, imaginative, and creative thinking, as they explain how relevant contexts (e.g., social, cultural, linguistic, artistic, religious, philosophical, and/or historical) have shaped the thoughts and actions of people worldwide.

A. Explains how various forms of expression (e.g., written, oral, musical, bodily, and visual) contribute to human knowledge and experience.

Benchmark: Students state that various forms of expression (e.g., written, oral, musical, bodily, and visual) contribute to human knowledge and experience.

Milestone: Students explain how various forms of expression (e.g., written, oral, musical, bodily, and visual) contribute to human knowledge and experience.

Capstone: Students critique how various forms of expression (e.g., written, oral, musical, bodily, and visual) contribute to human knowledge and experience.

B. Utilize knowledge of various critical and theoretical frameworks to analyze and interpret works in humanities and the arts.

Benchmark: Students state basic knowledge of various critical and theoretical frameworks in the humanities and arts

Milestone: Students utilize various critical and theoretical frameworks to analyze and interpret works in humanities and the arts.

Capstone: Students utilize various critical and theoretical frameworks to analyze, interpret, and critique works in the humanities and the arts.

C. Creates an entirely new object, solution, or idea.

Benchmark: Students reproduce an object, solution, or idea.

Milestone: Students create an entirely new object, solution, or idea.

Capstone: Students create and critique an entirely new object, solution, or idea and evaluate its creative process.

D. Relates texts and/or cultural products to appropriate contextual influences, traditions, perspectives and/or behavioral patterns

Benchmark: Students recognize that texts and/or cultural products are related to contextual influences, traditions, perspectives and/or behavioral patterns.

Milestone: Students relate texts and/or cultural products to appropriate contextual influences, traditions, perspectives and/or behavioral patterns.

Capstone: Students evaluate relationships of texts and/or cultural products with contextual influences, traditions, perspectives and/or behavioral patterns and acknowledge complexities of these relationships.

E. Describes the influence of community, institutions, and/or other social constructs (e.g., social class, gender, race) on thoughts, values, and/or behaviors in cultural and historical settings other than one's own.

Benchmark: Students recognize the influence of community, institutions, and/or other social constructs (e.g., social class, gender, race) on thoughts, values, and/or behaviors in cultural and historical settings other than one's own.

Milestone: Students describe the influence of community, institutions, and/or other social constructs (e.g., social class, gender, race) on thoughts, values, and/or behaviors in cultural and historical settings other than one's own.

Capstone: Students analyze and evaluate the influence of community, institutions, and/or other social constructs (e.g., social class, gender, race) on thoughts, values, and/or behaviors in cultural and historical settings other than one's own.

F. Rubrics for discipline-specific achievements should be consistent with the overall rubrics for the General Goal.

GG10: Life Sciences. Students will understand basic concepts of living things, the nature of scientific knowledge, and relevance of biological knowledge to human affairs.

Benchmark: Students identify basic concepts of life science and methods of developing scientific knowledge.

Milestone: Students demonstrate knowledge of fundamental concepts in life science and methods of developing scientific knowledge to summarize the relevance to human affairs.

Capstone: Students apply fundamental concepts of life science and scientific methods to demonstrate the relevance of biological knowledge to human affairs.

A. Understand living systems by describing their nature, organization, and evolution.

Benchmark: Students recall fundamental concepts (organization, systems, structure, function, stimulus production/response, energy transformation, and evolution) in life sciences.

Milestone: Students recognize how fundamental concepts in life sciences describe living systems.

Capstone: Students demonstrate knowledge of the interconnection of concepts in life science to describe the function and responses in living systems.

B. Understand and use the processes by which scientific knowledge of living things is generated.

Benchmark: Students identify the basic principles of the scientific method.

Milestone: Students recognize how the scientific method is used to generate knowledge in the life sciences.

Capstone: Students apply the scientific method to generate knowledge in the life sciences.

C. Develop knowledge of living things through hypothesis testing and gain the ability to draw defensible conclusions regarding living things.

Benchmark: Students test hypotheses to develop knowledge regarding living things.

Milestone: Students test hypotheses and draw defensible conclusions to develop knowledge regarding living things.

Capstone: Students use results of biological experiments to evaluate the validity of a hypothesis and develop alternative hypotheses as appropriate.

D. Make logical connections between key concepts in the life sciences and describe the interaction between human lives and other living things.

Benchmark: Students give examples of interaction between humans and other living things.

Milestone: Students recognize the interaction between humans and other living things through key concepts in the life sciences.

Capstone: Students describe the interaction between humans and other living things through key concepts and multiple facets in the life sciences (molecular, organismal, ecological, etc.).

E. Understanding the human species as a biological organism.

Benchmark: Students recognize some basic concepts in life sciences that demonstrate humans as biological organisms.

Milestone: Students demonstrate how fundamental concepts in life sciences relate to humans as biological organisms.

Capstone: Students apply experimental processes to show how fundamental concepts in life sciences relate to humans as biological organisms.

F. Understand the ways the environment impacts humanity and how human actions affect the environment.

- | |
|---|
| <p>Benchmark: Students identify how the environment impacts humanity or how human actions affect the environment.</p> <p>Milestone: Students recognize the interconnected relationship between human action and the environment.</p> <p>Capstone: Students describe the interconnected relationship between human action and the physical environment in multiple facets of life sciences (molecular, organismal, ecological, etc.).</p> <p>G. Rubrics for discipline-specific achievements should be consistent with the overall rubrics for the General Goal.</p> |
|---|

GG11: Physical Sciences. Students will understand and actively explore fundamental principles in physical sciences and methods of developing and testing hypotheses used in the analysis of the physical universe.

- Benchmark:** Students identify fundamental principles in physical sciences and methods of developing and testing hypotheses used in the analysis of the physical universe.
- Milestone:** Students demonstrate knowledge of fundamental principles in physical sciences and methods of developing and testing hypotheses used in the analysis of the physical universe.
- Capstone:** Students apply fundamental principles and methods in physical sciences to develop and test hypotheses that analyze the physical universe.

A. Demonstrate knowledge of the physical universe and its physical processes.

- Benchmark:** Students identify some basic facts related to the physical world.
- Milestone:** Students demonstrate knowledge of the physical world and its physical processes.
- Capstone:** Students demonstrate knowledge of multiple aspects of the physical world and its processes.

B. Understand and use the processes by which knowledge of the physical world is generated.

- Benchmark:** Students identify the basic principles and terminology of the scientific method.
- Milestone:** Students recognize how the scientific method is used to generate knowledge of the physical world.
- Capstone:** Students demonstrate ability to apply the scientific method to generate knowledge of the physical world.

C. Develop knowledge about principles of the physical world through hypothesis testing and gain the ability to draw defensible conclusions regarding the physical world.

- Benchmark:** Students test hypotheses related to the behavior of the physical world.
- Milestone:** Students test hypotheses and draw conclusions to develop knowledge about principles of the physical world.
- Capstone:** Students use results of testing to evaluate the validity of hypotheses and propose alternate hypotheses as appropriate.

D. Make logical connections between key concepts in the physical sciences and describe the interaction between the physical world and human lives.

- Benchmark:** Students identify basic connections between the physical world and human lives.
- Milestone:** Students demonstrate knowledge of causal relationships between the physical world and human lives.
- Capstone:** Students assess complex connections between the physical world and human lives.

E. Understand the ways the physical environment impacts humanity and how human actions affect the environment.

- Benchmark:** Students recognize the ways the physical environment impacts humanity and how human actions affect the environment.
- Milestone:** Students can explain the ways the physical environment impacts humanity and how human actions affect the environment.
- Capstone:** Students analyze the ways the physical environment impacts humanity and how human actions affect the environment.

F. Apply scientific models to make both qualitative and quantitative predictions about the behavior of matter.

Benchmark: Students demonstrate that they can apply scientific models to make qualitative and quantitative predictions, but only for simple “one-step” problems.

Milestone: Students demonstrate that they can apply scientific models to make qualitative and quantitative predictions, including for problems where they need to apply multiple steps to problem solving.

Capstone: Students demonstrate that they can independently apply scientific models to make qualitative and quantitative predictions, even for problems where they need to combine models or select appropriate data from different information sources.

G. Rubrics for discipline-specific achievements should be consistent with the overall rubrics for the General Goal.

General Goal 12: Community Engagement. Students will be able to recognize the importance of contributing their knowledge and experiences to their own communities and the broader society.

Benchmark: Students recognize the importance of contributing knowledge and experience to their own communities and/or the broader society (may be general or vague in nature).

Milestone: Students relate importance of contributing knowledge and experiences to their own communities and/or broader society but examples of experiences may lack reflection on what was learned.

Capstone: Students contribute knowledge and experiences in their own community activities and broader society and describe what has been learned from the experience.

A. Identify the rights and responsibilities they have in their own communities and/or the broader society.

Benchmark: Students identify a narrow range of rights and responsibilities they have in their communities and/or the broader society.

Milestone: Students identify a broad range of rights and responsibilities they have to their communities and the broader society.

Capstone: Students demonstrate a depth of understanding of the rights and responsibilities they have to their communities and the broader society.

B. Recognize the ways in which they can exercise their rights and responsibilities.

Benchmark: Students can identify a limited number of ways in which they can exercise their rights and responsibilities.

Milestone: Students can identify a broad range of ways in which they can exercise their rights and responsibilities.

Capstone: Students reflect on the ways in which they have exercised their rights and responsibilities.

C. Identifies knowledge from academic fields and how it connects to civic and/or political participation.

Benchmark: Students identify knowledge from academic fields and how it connects to civic and/or political participation, though it may be general or vague in nature.

Milestone: Students show how knowledge from academic fields connects to civic and political participation.

Capstone: Students apply knowledge from academic fields to make relevant connections to civic and political participation.

D. Recognize the needs of the communities to which they belong and state how to address those needs.

Benchmark: Students recognize the needs of the communities to which they belong

Milestone: Students recognize the needs of the communities to which they belong and state how to address those needs.

Capstone: Students assess the needs of the communities in which they belong and address those needs.

E. Rubrics for discipline-specific achievements should be consistent with the overall rubrics for the General Goal.

GG13: Cultural Competence. Students will be able to recognize and consider multiple perspectives and cultures.

Benchmark: Students recognize their own perspectives and/or cultures.

Milestone: Students recognize and compare their own perspectives and/or cultures with others.

Capstone: Students connect multiple perspectives and cultures through experiences.

A. Compares perspectives and behaviors they acquire in their homes, schools, and communities.

Benchmark: Students recognize perspectives and behaviors they acquire in their homes, schools, or communities.

Milestone: Students compare perspectives and behaviors they acquire in their homes, schools, and communities.

Capstone: Students critique perspectives and behaviors they acquire in their homes, schools, and communities.

B. Describes key similarities and differences between their own cultural practices and perspectives and those of other cultures, past and present.

Benchmark: Students state key similarities and differences between their own cultural practices and/or perspectives and those of other cultures, past or present.

Milestone: Students describe key similarities and differences between their own cultural practices and perspectives and those of other cultures, past or present.

Capstone: Students critically examine and connect key similarities and differences between their own cultural practices and perspectives and those of other cultures, past and present.

C. Identifies the importance and best practices of developing skills for working/interacting with others.

Benchmark: Students identify the importance of developing skills for working/interacting with others.

Milestone: Students identify the importance and best practices of developing skills for working/interacting with others.

Capstone: Students demonstrate evidence of initiating and developing skills for working/interacting with others.

D. Compares the role that different languages, cultures, institutions, and/or beliefs have in shaping individual and collective behavior.

Benchmark: Students recognize that different languages, cultures, institutions, or beliefs shape individual or collective behavior.

Milestone: Students compare the roles that different languages, cultures, institutions, and/or beliefs have in shaping individual and collective behavior.

Capstone: Students analyze the roles that different languages, cultures, institutions, and beliefs have in shaping individual and collective behavior.

E. Rubrics for discipline-specific achievements should be consistent with the overall rubrics for the General Goal.

GG14: Ethical Leadership. Students will be able to articulate their value systems, understand the ethical implications of their actions based on those values, and develop skills consistent with having a positive impact on individuals, groups, or communities.

Benchmark: Students describe their own value systems and/or their impact on individuals, groups, or communities.

Milestone: Students describe their own value systems and the ethical implications of actions based on those values on individuals, groups, or communities.

Capstone: Students describe their own value systems and the ethical implications of actions based on those values, and demonstrate a positive impact on individuals, groups, or communities.

A. Assesses own ethical values and describes how those values and behaviors are congruent.

Benchmark: Students recognize ethical values and/or the impact on their behavior.

Milestone: Students assess their own ethical values and describe how those values and behaviors are congruent.

Capstone: Students demonstrate the application of their ethical values and describe how those values and behaviors are congruent.

B. Summarizes the foundations for ethical thought and action.

Benchmark: Students state foundations for ethical thought and/or actions.

Milestone: Students summarize the foundations for ethical thought and actions.

Capstone: Students investigate the foundations for ethical thought and action.

C. Identify difficult/complex challenge(s) in responding to situations demanding ethical inquiry.

Benchmark: Students state basic/obvious challenge(s) in responding to situations demanding ethical inquiry.

Milestone: Students identify difficult/complex challenge(s) in responding to situations demanding ethical inquiry.

Capstone: Students identify difficult/complex challenge(s) in responding to situations demanding ethical inquiry and assess full implications.

D. Summarizes complex ethical dilemmas facing the world.

Benchmark: Students recognize basic/obvious ethical dilemma(s) facing the world but may fail to grasp complexity and/or interrelationships.

Milestone: Students summarize complex ethical dilemmas facing the world and infer complexity and/or interrelationships.

Capstone: Students analyze complex ethical dilemmas facing the world and assess complexity and/or interrelationships.

E. Describes the causes of societal problems and states potential solutions.

Benchmark: Students recognize a cause of societal problem(s) and/or potential solutions.

Milestone: Students describe the causes of societal problems and state potential solutions.

Capstone: Students analyze the causes of societal problems and formulate potential solutions.

F. Recognize the importance of ethical actions and relates them to effective leadership skills.

Benchmark: Students recognize the importance of ethical actions and/or effective leadership skills.

Milestone: Students recognize the importance of ethical actions and relate them to effective leadership skills.

Capstone: Students demonstrate effective leadership skills through ethical actions.

G. Rubrics for discipline-specific achievements should be consistent with the overall rubrics for the General Goal.

GG15: Integrative and Applied Learning. Students will be able to synthesize information and integrate material from a variety of courses, as they apply their knowledge, abilities, and skills to specific situations.

Benchmark: Students show limited ability or inclination to seek information or use skills from different courses.

Milestone: Students seek and use information and skills from a variety of courses to apply when they address complex problems.

Capstone: Students synthesize information and integrate material and skills from a variety of courses when they address complex problems.

A. Use academic knowledge to develop solutions to complex problems.

Benchmark: Students do not consistently use academic knowledge when addressing complex problems.

Milestone: Students use academic knowledge when proposing solutions to complex problems.

Capstone: Students integrate academic knowledge from multiple disciplines when developing solutions to complex problems.

B. Integrate knowledge, abilities, and skills across disciplines to understand real life experiences and/or social situations.

Benchmark: Students identify connections between life experiences and academic texts and ideas.

Milestone: Students use knowledge, abilities, and skills from across disciplines to illuminate examples of life experiences drawn from a variety of contexts (e.g., family life, artistic participation, civic involvement, or work experience).

Capstone: Students meaningfully synthesize knowledge, abilities, and skills from across disciplines and integrate those ideas into their understanding of life experiences drawn from a variety of contexts (e.g., family life, artistic participation, civic involvement, or work experience).

C. Evaluate and integrate examples, facts, or theories from more than one field of study in order to develop creative solutions or better understanding of specific situations/issues.

Benchmark: When prompted, students present examples, facts, or theories from more than one field of study or perspective.

Milestone: Students connect examples, facts, or theories from more than one field of study or perspective in order to develop solutions or better understanding of specific situations/issues.

Capstone: Students meaningfully synthesize or draw conclusions by combining examples, facts, or theories from more than one field of study or perspective to develop creative solutions or better understanding of specific situations/issues.

D. Adapt and apply knowledge gained in one situation to different contexts.

Benchmark: Students use, in a basic way, skills, abilities, theories, or methodologies gained in one situation in a different context.

Milestone: Students adapt and apply skills, abilities, theories, or methodologies gained in one situation to a different context for understanding issues or solving problems.

Capstone: Students adapt and apply, independently, skills, abilities, theories, or methodologies gained in one situation to a different context to solve difficult problems or explore complex issues in original ways.

E. Rubrics for discipline-specific achievements should be consistent with the overall rubrics for the General Goal.