GENERAL EDUCATION ASSESSMENT PLAN
2011/12 – 2014/15

State University of New York College at Cortland

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SUNY CORTLAND GENERAL EDUCATION ASSESSMENT PLAN

2011/12 – 2014/15

Introduction

The goal of General Education Assessment at SUNY Cortland is to better understand student achievement in the specific areas, examine effectiveness of the program as a whole, and engage the campus community in dialogue about the purpose and outcomes of General Education. This plan looks to assess the entire program and categories and not focus on individual courses, departments or instructors. Building upon the previous three cycles of General Education Assessment (beginning in 2002), the General Education Assessment Plan for SUNY Cortland is based upon the following:

1. Establishing a timeframe and flexible structure for on-going assessment.
2. Supporting clarification and communication of learning outcomes of General Education.
3. Supporting use of different methods based on the faculty determinations of best assessment for category assessment.
4. Combining category assessment with institutional indicators from assessments including the National Survey of Student Engagement, Collegiate Learning Assessment, and Student Opinion Survey.

The plan follows a four-year assessment cycle, outlines assessment methods, clarifies roles, and makes recommendations for increasing the use of assessment data for on-going understanding and development of the General Education program. The goal is to support authentic and meaningful assessment in the most efficient methods possible while maintaining integrity throughout the process. A review of current trends in General Education, including the Association of American Colleges and Universities *Value: Valid Assessment of Learning in Undergraduate Education,* helped inform this work.

The SUNY Cortland General Education Program

The General Education program at SUNY Cortland reflects a merger of the college's longstanding general education learning outcomes with the 2000 SUNY General Education program required system wide. There are 13 categories fulfilled through coursework reviewed by the General Education Committee. A complete GE course roster is available online showing all approved coursework by

category. The GE program also includes two infused competency categories and outcomes are achieved by completion of the program as a whole—Critical Thinking and Information Management. Learning outcomes for each category and the competency areas are listed in Appendix 1.

Responsibility for General Education Assessment

The General Education Committee, a standing committee of the Faculty Senate, has primary responsibility for GE assessment including communication with faculty, review of materials, and coordination of various working committees across all of the categories. The Institutional Research and Assessment Office (IRA) has primary responsibility to support the implementation of GE assessment with additional support from the Associate Provost for Academic Affairs, Dean of Arts and Sciences, and Provost and Vice President for Academic Affairs.

The GE Committee reviews, endorses and approves the GE assessment procedures for the College to assure best practices exist. The Committee meets bi-weekly and relies on the administrative structure and responsibilities of IRA in carrying out all tasks of the Committee. Such tasks include, but are not restricted to sampling procedures, implementation of assessment procedures, analysis of results, and assessment reporting. The office of Institutional Research and Assessment conducts all General Education assessment tasks with the approval and support of the GE Committee. The success and viability of the GE Assessment Plan at SUNY Cortland is dependent on the cooperation and coordination between the entire College faculty, GE Committee, and office of Institutional Research and Assessment.

All faculty teaching General Education have responsibility for participation in General Education assessment and support of the learning outcomes by:

1. Ensuring that course syllabi include the specific course category and learning outcomes for the GE category of the course
2. Participating in assessment activities as relevant to the category assessments
3. Participating in review of assessment results and discussions on implications for category

Assessment Levels

In following the current discussions on General Education outcomes and assessment, we have looked to support multiple methods of assessment to add dimension to our assessment (Leskes and Wright, 2005).

Syllabi Review

As a part of each assessment cycle, selected course syllabi will be collected and reviewed by the General Education Committee to ensure that syllabi reflect the GE category, learning outcomes, minimum writing requirements, and clarity of connection between the course content and category outcomes.

Student Performance

Depending upon the nature of the category, there will be different options for assessment driven by faculty interest and expertise in the related areas. The options for assessment include:

1. Standing committees or ad hoc groups create common assessment to be administered and reviewed across all sections. Examples of this include the Writing Committee's oversight of Written Basic Communication.
2. In-class embedded assessment where faculty of selected course sections submit assignments (single or combination of assignments) that reflect student understanding for each of the GE learning outcomes (SLO). The instructor will submit the assignment, scoring guide, raw scores, and scaled scores to the GE rubric (Appendix 2 or Appendix 5 for GE1) for each SLO. The faculty will also be asked to submit samples of student work on these assessments. This process allows multiple sections to "use the same outcomes and rubrics, thereby guaranteeing consistency without the use of cookie-cutter syllabi or methods" (Gerretson and Golson, 2005, p.139).

Institutional Research and Assessment will oversee the collection of all data, norming, and analysis of normed scores on the GE Rubric. The table below outlines each category, the type of assessment, and the group overseeing the specific category assessment.

Category	Type of Assessment	Oversight of Assessment for Category
1. Quantitative Skills	Embedded Assessment	Quantitative Skills Committee
2. Natural Sciences	Embedded Assessment	General Education Committee
3. Social Sciences	Embedded Assessment	General Education Committee
4. US History and Society	Embedded Assessment	General Education Committee

5. Western Civilization	Embedded Assessment	General Education Committee
6. Contrasting Cultures	Embedded Assessment	General Education Committee
7. Humanities	Embedded Assessment	General Education Committee
8. The Arts	Embedded Assessment	General Education Committee
9. Foreign Language	Embedded Assessment	General Education/Modern Languages Department
10 a. Basic Communication: Writing	Embedded Assessment	Writing Committee
10 b. Basic Communication: Presentation Skills	Embedded Assessment	Presentation Skills Committee
11. Prejudice and Discrimination	Embedded Assessment	General Education Committee
12. Natural Sciences: second course assessed with category 2	See number 2	
Information Management		Institutional Research and Assessment with Information Management ad hoc committee
Critical Thinking	CLA: Collegiate Learning Assessment Instrument	Institutional Research and Assessment and GE Committee

Institutional Measures Related to General Education

This year, the General Education Committee will be including a review of three major instruments and their findings to augment the GE assessment. Not only does this give us added dimension to our assessment, but it provides national and peer institution comparisons. All three are national surveys administered on our campus every three years:

1. National Survey of Student Engagement administered every three years
2. Student Opinion Survey administered every three years
3. Collegiate Learning Assessment

Appendix 4 shows the related questions to be reviewed for the NSSE and SOS.

Assessment Procedures

Timetable

The GE categories will be assessed on a four-year plan as outlined in Appendix 3. This schedule allows for ongoing assessment and disburses the work of assessing 14 areas across a manageable timeframe for all involved with the work. Given that it takes a year from the start of assessment of a category to the review of results, this will allow time for implantation of changes before the category is assessed again. The move to a four-year cycle from the previous three-year cycles was also in acknowledgement of the multiple assessments that faculty face within GE and for program assessment and other accreditations.

The table below outlines a sample timeline for use of in-class assessments.

Activity for In-class (artifact) Assessments	**Timeframe**
Courses randomly selected from spring 2011 schedule	October 15
Faculty notified	October 17
Syllabi (previous or draft) requested for selected courses	October 17
Syllabi reviewed by GE committee	November 7
Faculty receive feedback from committee	December 15
Faculty submit GE Assessment Participation Sheet and assignment description(s)	January 31
Faculty submit grades and rubric and 2-5 student samples	May 30
IRA norms all submitted grades/rubrics	August
Findings submitted to GE Committee	September (following year)
GE Committee disseminates to campus	September (following year)
GE Committee surveys departments in relevant categories for feedback on findings and assessment process	September (following year)
GE Committee coordinates discussions and recommendations based on feedback as needed	October/November (following year)
IRA documents in GE assessment report	Yearly

If a standard assessment is being used across sections in a category, the following sample timeframe would apply.

Activity for Standard Assessment	**Timeframe**
Courses randomly selected from spring 2011 schedule	October 15
Faculty notified	October 17
Syllabi (previous or draft) requested for selected courses	October 17
Syllabi reviewed by GE committee	November 7
Faculty receive feedback from committee on syllabi	December 15
Specific Category Assessment Committee (e.g., Quant Skills group) review assessment, directions	
Assessment distributed to selected course section instructors	March 1
Assessments due to IRA	May 1
Category Assessment Committee coordinates grading	
Grades/rubrics submitted to IRA	June
Findings submitted to GE Committee	September (following year)
GE Committee disseminates to campus	September (following year)
GE Committee surveys departments in relevant categories for feedback on findings and assessment process	September (following year)
GE Committee coordinates discussions and recommendations based on feedback as needed	October/November (following year)
IRA documents in GE assessment report	Yearly

Course Samples

IRA will select the sample of courses to be included in the assessment based on the course schedule. The categories that are course-embedded will use a stratified random sampling procedure to ensure that the samples are representative of the population of students enrolled in GE courses in any semester. Specifically, this will be a two-level process: (1) a course-level cluster sampling procedure will

be used to identify 25% of courses per knowledge, skill, or competency area; (2) a stratified random sampling approach (stratified according to course level, class size, time of class, and course content) will be used to identify and assess at least 20% of all students taking courses in a GE category in the assessment semester.

Administration of Assessments

Faculty will be required to participate in the assessment if selected, using one of the assessment methods identified by the ad hoc faculty group for that GE category. Since most of the assessment tasks will be chosen by individual instructors and course-embedded, they will be integral to course requirements. A major advantage is that students will give their best effort because the activity is a part of course assessment and their final grade. IRA will be responsible for producing and distributing assessment materials, recruitment and training of groups of faculty to grade essay assessments, and coordinating the work of ad hoc faculty groups who will interpret the instructors' marks for application of the rubrics.

Validity and Reliability Indices

Validity and reliability information has been collected since the start of Cortland's GE Assessment Program. Expert opinion by faculty teaching in specific GE categories and ad hoc faculty groups will be used to assess face validity. We expect that face validity will increase during this new four-year cycle, as faculty members are more directly involved in the process, as individual instructors can determine the assessment tasks and be part of faculty groups for each GE category, reviewing proposed assessment tasks and assessment results in their fields of specialization. The IRA office is also conducting validity studies of course grades to explore the utilization of course grades as indicators of student learning in the General Education categories.

Aggregation and Documentation of Findings

Institutional Research and Assessment will be responsible for analyzing the results of the assessment and for reporting the results to external constituents as appropriate. At all stages of dissemination, data will be treated in aggregate form and anonymity of students, faculty members, and courses will be maintained. IRA will maintain historical data on the assessment process.

Results, Review, Recommendations: Closing the Loop

A major focus of the assessment efforts in this coming cycle will be on providing the findings for categories in timely manner and foster dialogue on each category assessment as well as the entire General Education program. Recent efforts to hold meetings to discuss findings have been consistently met with limited interest. The committee will look at ways to make the information more engaging including:

1. Summary information will go to the entire campus
2. Feedback from faculty teaching in categories collected electronically using survey software
3. Hold a meeting on General Education findings as a whole open to the campus
4. All feedback will be then shared to look for possible changes and to inform individual faculty reflection and course development
5. Look to integrate all sources of data (outcome measures, survey data) and present to campus

In addition, we will look to identify peer institutions and further research best practices in General Education assessment to inform our work.

Appendix 1
General Education Category Learning Outcomes

GE 1. Quantitative Skills
The student will demonstrate the ability: 1.) to interpret and draw inferences from mathematical models such as formulas, graphs, tables and schematics; 2.)to represent mathematical information symbolically, visually, numerically and verbally; 3.) to employ quantitative methods, such as arithmetic, algebra, geometry or statistics, to solve problems; 4.) to estimate and check mathematical results for reasonableness; 5.) to recognize the limits of mathematical and statistical methods.

GE 2. Natural Sciences
Students will demonstrate: 1.) an understanding of the methods scientists use to explore natural phenomena, including observation, hypothesis development, measurement and data collection, experimentation, evaluation of evidence, and employment of mathematical analysis; 2.) knowledge of the principles of one or more of the natural sciences; and 3.) the application of scientific data, concepts and models in one or more of the natural sciences and relate the relevant technology and principles they have studied to modern life.

GE 3. Social Sciences
Students will demonstrate: 1.) an understanding of the methods social scientists use to explore social phenomena, including observation, hypothesis development, measurement and data collection, experimentation, evaluation of evidence, and employment of mathematical and interpretive analysis; 2.) knowledge of major concepts, models and issues of at least one discipline in the social sciences.

GE 4. United States History and Society
Students will demonstrate: 1.) knowledge of a basic narrative of American history such as: political, economic, social, and cultural, including knowledge of unity and diversity in American society; 2.) an understanding of common institutions in American society and how they have affected different groups (including ethnic minorities and women); 3.) an understanding of America's evolving relationship with the rest of the world; and 4.) an understanding of the American Republic by examining relationships among the state, intermediary institutions, and civil society.

GE 5. Western Civilization
Students will be able to: 1.) describe within an historical context major Western political, geopolitical, economic, social, and/or intellectual developments; 2.) analyze the relationship between the development of ideas and historical change in Western and other regions of the world; and 3.) discuss distinctive features of contemporary Western civilization in terms of such areas as history, institutions, economy, society and culture.

GE 6. Contrasting Cultures
Students will be able to: 1.) demonstrate an understanding of the distinctive features of the history, institutions, economy, society, culture, etc., of one non-Western civilization; 2.) compare and/or contrast another contemporary culture or other contemporary cultures with the dominant themes of U.S. culture; and 3.) demonstrate an understanding of cultural differences in world views, traditions, cultural institutions, values, social systems, languages and means of communication.

GE 7. Humanities
Students will: 1.) be able to critically respond to works in the humanities; 2.) be able to discuss major human concerns as they are treated in the humanities; and 3.) demonstrate an understanding of the conventions and methods of at least one area in the humanities.

GE 8. The Arts
Students will demonstrate an understanding of: 1.) at least one principal form of artistic expression and the creative process inherent therein; and 2.) the significance of artistic expression in past and/or present civilizations.

GE 9. Foreign Language
Students will demonstrate: 1.) basic proficiency in the understanding and use of a foreign language; and 2.) an understanding of the distinctive features of culture(s) associated with the language they are studying.

GE 10a. Basic Communication: Writing
The student will: 1.) produce coherent texts within common college-level written forms; 2.) demonstrate the ability to revise and improve texts; and 3.) research a topic, develop an argument, and organize supporting details.

GE 10b. Basic Communication: Presentation Skills
Students will: 1.) develop proficiency in oral discourse; and 2.) demonstrate the ability to evaluate an oral presentation according to established criteria.

GE 11. Prejudice and Discrimination
Students will demonstrate an understanding of: 1. issues such as power and bias as they relate to prejudice and discrimination and how these issues have determined attitudes, institutions, dominance and subdominance; 2. how various beliefs can lead to conflicting conclusions about a society and its norms, values and institutions.

GE 12 Science, Technology, Values and Society
Students will demonstrate an understanding of: 1. the manner in which value judgments are justified and how interpretation of technical information can lead to different conclusions, and/or; 2. issues at the interface of science and society that impact the modern world.

GE 13: Natural Sciences Laboratory (second course complimenting GE 2)
See GE 2 for learning outcomes.

GE Competency: Critical Thinking (no specific courses)
Students will: 1. identify, analyze, and evaluate arguments as they occur in their own or others' work; and 2. develop well-reasoned arguments.

GE Competency: Information Management (no specific courses)
Students will: (a) perform the basic operations of personal computer use; (b) understand and use basic research techniques; and (c) locate, evaluate, and synthesize information from a variety of sources.

Appendix 2
Cortland General Education Rubric

The following rubric is used for all categories except General Education 1: Quantitative Skills.

CORTLAND RUBRIC ALIGNED WITH SUNY REPORTING CATEGORIES						
Reporting Category	Not Meeting Standard	Approaching Standard		Meeting Standard	Exceeding Standard	
Cortland Rubric	1	2	3	4	5	6
Standard	Provides minimal or no evidence of understanding; makes no connections between Goals, Assumptions, & Objectives of the GE Category; and makes unclear or unwarranted connections to the assigned task.	Conveys a confused or inaccurate understanding of the course material; alludes to the Goals, Assumptions, & Objectives of the GE Category but makes unclear or unwarranted connections to the assigned task.	Conveys a basic understanding of the course material; makes few or superficial connections between the Goals, Assumptions, & Objectives of the GE Category and the assigned task.	Conveys a basic understanding of the course material; makes implicit connections between the Goals, Assumptions, & Objectives of the GE Category and the assigned task.	Conveys a thorough understanding of the course material; makes clear and explicit connections between the Goals, Assumptions, & Objectives of the GE Category and the assigned task.	Reveals an in-depth analysis of the course material; makes insightful connections between the Goals, Assumptions, & Objectives of the GE Category and the assigned task.

Appendix 3: GE Assessment Schedule

General Education Category	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015
1. Quantitative Skills	RRR				Syllabus Review	Assessment	RRR	
2. Natural Sciences	Syllabus Review	Assessment	RRR					
3. Social Sciences	Syllabus Review	Assessment	RRR					
4. United States History and Society	RRR				Syllabus Review	Assessment	RRR	
5. Western Civilization	Syllabus Review	Assessment	RRR					
6. Contrasting Cultures			Syllabus Review	Assessment	RRR			
7. Humanities			Syllabus Review	Assessment	RRR			
8. The Arts	RRR						Syllabus Review	Assessment
9. Foreign Language	RRR						Syllabus Review	Assessment
10 a. Basic Communication: Writing Studies			Syllabus Review	Assessment	RRR			
10 b. Basic Communication: Presentation Skills	RRR						Syllabus Review	Assessment
11. Prejudice and Discrimination					Syllabus Review	Assessment	RRR	
12. Science, Technology, Values and Society			Syllabus Review	Assessment	RRR			
Information Management	Syllabus Review	Assessment	RRR					
Critical Thinking					Syllabus Review	Assessment	RRR	

Fall Semesters
Syllabi review will begin in the fall semester for courses that have been randomly selected for review in the upcoming spring._Results, review and recommendation meetings will take place for the course assessed the prior spring semester.

Spring Semesters
March: Review of embedded assessment instruments
April: Assessment conducted **May - July**: Assessment scores **August**: Assessment results processed by IRA

RRR – Results, Review, Recommendations

Appendix 4

Related Items from Student Surveys with Related Categories or Competencies

National Survey of Student Engagement (NSSE)

- Worked on paper or project that required integrating ideas or information from various sources (critical thinking)
- Using computers in educational work (information management)
- Writing clearly and effectively (basic communication)
- Speaking clearly and effectively (basic communication)
- Thinking critically and analytically (critical thinking)
- Analyzing quantitative problems (quantitative skills)
- Using computing and information technology (information management)

Student Opinion Survey (SOS)

- Availability of General Education Courses (program in general)
- Been required to think critically in completing assignments (critical thinking)
- Had faculty who required you to make judgments about the value of information, arguments, or methods (critical thinking, information management)
- Acquiring information, ideas and concepts (critical thinking)
- Acquiring analytical thinking skills (critical thinking)
- Understanding and appreciating ethnic/cultural diversity and other individual differences (possible Contrasting Cultures and Prejudice and Discrimination)
- Writing clearly and effectively (basic communication)
- Speaking clearly and effectively (basic communication)
- Using computer and information technology effectively (information management)
- Understanding political and social issues
- Acquiring knowledge and skills for further academic study
- Acquiring knowledge and skills for lifelong learning

Appendix 5

Cortland Rubric for Assessing Quantitative Skills (GE1)

Elements	Target	Acceptable	Unacceptable
SLO 1: Interpret and draw inferences from mathematical models	The student demonstrates the ability to interpret and draw inferences that accurately represent the model or answer the question.	The student demonstrates the ability to interpret and draw inferences, but they are incomplete or inaccurate due to a minor conceptual flaw(s).	The student's interpretations and inferences are missing, incomplete, or inaccurate due to a major conceptual flaw(s) or do not address the question in any meaningful way.
SLO 2: Represent mathematical information symbolically, visually, numerically, & verbally	The student employs the required representations to display mathematical information (e.g. format, language, labels, scales, terminology, etc.). The response may have minor copying or labeling errors.	The student's representations to display mathematical information are lacking due to a minor conceptual or computational flaw(s).	The student's representations to display mathematical information are missing, or incorrect due to a major conceptual or computational flaw(s), or do not address the question in any meaningful way.
SLO 3: Employ quantitative methods	The student demonstrates an understanding of the problem by using a clear and logical method to solve the problem. The solution may contain minor copying or labeling errors.	The student demonstrates understanding of the problem and the correct method but the implementation is partially incorrect. The solution may contain a minor computational flaw(s).	The student's response was missing, incomplete, or incorrect, demonstrating little to no understanding of the problem. The solution contains a major computational flaw(s) or shows little or no correct work.
SLO 4: Estimate & check mathematical results for reasonableness	The student can completely and accurately estimate and justify a mathematical result to a problem.	The student can estimate and justify a mathematical result to a problem, but the student's response contains a minor conceptual flaw.	The student can estimate and justify a mathematical result to a problem, but the student's response contains a major conceptual flaw, or the student's response does not address the question in any meaningful way.
SLO 5: Recognize the limits of mathematical & statistical methods	The student provides a clear and accurate description of the assumptions/simplifications of a mathematical or statistical method.	The student provides a description of the assumptions/simplifications of a mathematical or statistical method, but the response contains a minor conceptual flaw.	The student provides a description of the assumptions/simplifications of a mathematical or statistical method, but the response contains a major conceptual flaw, or the student fails to realize that the results are not contextually appropriate.

Learning Outcome 1: Students will demonstrate the ability to interpret and draw inferences from mathematical models such as formulas, graphs, tables, and schematics.
Learning Outcome 2: Students will demonstrate the ability to represent mathematical information symbolically, visually, numerically, and verbally.

Learning Outcome 3: Students will demonstrate the ability to employ quantitative methods such as arithmetic, algebra, geometry, or statistics to solve problems.
Learning Outcome 4: Students will demonstrate the ability to estimate and check mathematical results for reasonableness.
Learning Outcome 5: Students will demonstrate the ability to recognize the limits of mathematical and statistical methods.

Created and endorsed by the QS Committee 2011

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