

General Education Program (F2011-S2012)

Date of report: **February 6, 2014**
[Table of Contents](#)
[Collapse All](#)

About this Improvement Project

Settings

Improvement Project Place: General Education

Assessment Unit Information

* Select Assessment Planning Form [2010-2012] Daytona Beach College of Arts & Sciences Academic Plans

* Program Name: General Education Program (F2011-S2012)

Contact Name: Alan Pratt

Contact Email: pratta@erau.edu

Contact Phone: 226 7779

* Public? Yes

Status of Assessment Plan

* Status of Assessment Plan Planning = Ready for Approval; Improvement = Draft

Program Mission Statement

* Program Mission Statement

Recognizing its general and special missions in education, Embry-Riddle Aeronautical University embraces a General Education Program. This course of study ensures that students possess the attributes expected of all university graduates. The General Education Program enables students, regardless of their degree program, to understand the significance of acquiring a broad range of knowledge.

Throughout the General Education Program, students gain and enhance competence in written and oral communication. They practice reasoning and critical thinking skills and demonstrate computer proficiency. As students engage in this course of study, they familiarize themselves with and investigate ideas and methodologies from several disciplines. These include the arts and humanities, the social sciences, economics, the natural sciences and mathematics. The program also helps students recognize interrelationships among the disciplines.

Promoting the appreciation of varied perspectives, the General Education Program provides intellectual stimulation, ensuring that students are broadly educated. This course of study empowers students to make informed value judgments, to expand their knowledge and understanding of themselves, and to lead meaningful, responsible, and satisfying lives as individuals, professionals, and concerned members of their society and the world. Over 4500 students are enrolled in the General Education Program at Daytona Beach.

Alignment of Program Mission Statement to University Mission

Select checkboxes below for all of the appropriate elements that indicate how your Unit Mission aligns with the University Mission Statement.

University Mission Statement:

At Embry-Riddle, our mission is to teach the science, practice and business of aviation and aerospace, preparing students for productive careers and leadership roles in service around the world.

Our technologically enriched, student-centered environment emphasizes learning through collaboration and teamwork, concern for ethical and responsible behavior, cultivation of analytical and management abilities, and a focus on the development of the professional skills needed for participation in a global community. We believe a vibrant future for aviation and aerospace rests in the success of our students. Toward this end, Embry-Riddle is committed to providing a climate that facilitates the highest standards of academic achievement and knowledge discovery, in an interpersonal environment that supports the unique needs of each individual. Embry-Riddle Aeronautical University is the world's leader in aviation and aerospace education. The University is an independent, non-profit, culturally diverse institution providing quality education and research in aviation, aerospace, engineering and related fields leading to associate's, baccalaureate's, master's and doctoral degrees.

Preparing Students for Productive Careers Yes

Preparing students for leadership roles in service around the world Yes

Technologically enriched environment Yes

Emphasize learning through collaboration and teamwork Yes

Concern for ethical and responsible behavior Yes

Cultivate analytical abilities Yes

Cultivate management abilities Yes

Develop the professional skills needed for participation in a global community Yes

Facilitating the highest standards of academic achievement Yes

Facilitating knowledge discovery Yes

Providing an interpersonal environment that supports the unique needs of each individual Yes

Assessment Year in Review

Ad Hoc Improvements in Past Year (optional)

Collaboration with Others to Evaluate Assessment Results and Recommend Improvements All course assessment plans are created by course monitors and approved by department chairs and the General Education Committee. Necessary tools, such as rubrics and surveys, are designed by faculty teaching the courses. Improvements are discussed with course faculty and department chairs.

Changes to Assessment Organization, Processes,

Participants (optional)

Additional Information (optional)

Attached: **Indicator Courses for General Education Assessment 2nd 3-year cycle (F 2012 - S 2014).**

Also attached: Assessment plans for this year's six courses.

Reporting for F 2011 - S 2012 due Sept. 2012

Attach File(s) (optional)

Attachments	Type
Indicator Courses 2012-14.doc	Attachment
11 Gen Ed Plan PS250_Nykyri.docx	Attachment
11-12 Gen Ed Plan AS 472 Halleran.docx	Attachment
Assessment Planning for CIV 460.docx	Attachment
BA120GenEdAssessment2011-2012.doc	Attachment
gen_ed_assessment_hu338_revised.docx	Attachment
EGR 115.pdf	Attachment

System Information

Last Modified Date Tuesday, September 4, 2012 1:03:34 PM EDT

Last User to Modify pratta

Improvement Project Objectives

Name	Description	Status	Public
Communication Technology			No
Ethical Responsibility			No
Human Experience			No
Mathematics			No
Oral Communication			No
Scientific Inquiry			No
Written Documents			No

[^ Back to top](#)**Improvement Project Objectives**⤴ **Communication Technology****Select Outcome to Assess from Master List of Outcomes****Instructions:** Below, click the "BROWSE" button to:1. **(REQUIRED)** Select an outcome to assess from Master List of Program Outcomes ("BROWSE" -> "Master List of Program Outcomes" -> "GO" button).2. **(OPTIONAL)** Align outcome with any other applicable standards such as AABI, ABET, General Education Outcomes: ("BROWSE" -> "Standards" -> "GO" button).

✳ Select Outcome from Master List of Outcomes

✳ Assessment Outcome Communication Technology
Title**Assessment Measures, Criteria for Success and Results****Measurement One**

Outcome Title Communication Technology

✦ Means of Assessment Rubric-scored artifact in non-culminating course(s)

Description of 'Other' Means of Assessment BA 120 Intro. to Computer-Based Systems Primary and Guest faculty members will independently review randomly selected student projects and assign value points (0 to 5). Those scores will later be compared and totaled for a representative overall course success "grade" in addition to a normalizing of the selected student's ratings. This is similar to a portfolio review system.

Details of Assessment Measurement (Timeframe of Data Collection, Participants/Roles, etc.)

✦ Criterion for Success 70% of students in each of the four examined classes will produce acceptable (average or above) final reports and corresponding subsections of the project.

Assessment Results / Data Collected Instructor One rated 89% of student projects "Excellent to Good" and Instructor Two rated 78% of student projects "Excellent to Good." Both evaluations were well above the 70% success rate assessment goal.

Eighty-two percent of the students enrolled in the 3 sections of BA 120 (AY 2011—2012) were considered to have achieved the majority of the course outcomes earning grades of A, B, or C, equivalent to the "Excellent to Good" categories described in the evaluation. The final course grade also included the final student project which accounts for 30% of the students' final grade.

Based upon the results of this measurement, no action is recommended.

The current approach is being slightly modified to include more collaboration on a final project. A group Wiki report and final presentation is replacing the individual word processed paper and the individual final presentation. The Wiki will include the same requirements as the formal project but will involve group participation. The attractiveness of a Wiki project is that group participation is transparent since member contributions and editing are both traceable and measurable. In addition, a contemporary, web-based collaborative technology will be introduced into the course.

Measurement Two

Means of Assessment Other (please specify below)

Description of 'Other' Means of Assessment BA 120 Student Survey

Details of Assessment Measurement IR Graduating Student Survey Responses on the following questions asked of seniors during the week preceding graduation will be used to determine if the courses that address computer literacy have prepared graduates for technological communication in the world of work. "To what extent has your experience at ERAU helped you to: access, analyze, and communicate information using multiple means/media?"

Criterion for Success 20% or fewer graduates will answer "Very Little" or "Not at All"

Assessment Results / Data Collected The graduating student response rates for AY 2010--11 were 16 students and 21 students for AY 2011--12. As a college we need to continue to encourage our students to participate in the survey. If we review all years combined beginning with Academic Years 2008-09 to Academic Year 2011-12 a total of 68 students completed the survey. A total of 48% (Very Much) of respondents and a total of 38% (Quite a bit) respondents agree with the statement that ERAU contributed to their skills in knowledge of how to access, analyze, and communicate information using multiple means/media.

Measurement Three

Means of Assessment Other (please specify below)

Description of 'Other' Means of Assessment

Details of Assessment

Measurement

Criterion for Success

Assessment Results /
Data Collected

Measurement Four

Means of Assessment

Description of 'Other'
Means of Assessment

Details of Assessment
Measurement

Criterion for Success

Assessment Results /
Data Collected

Measurement Five and Up

For Outcomes with more than four measurements, select means of assessment for measures five and up from the list below (check all that apply). Then list the details for measurements 5 and up in the areas below. Please number them appropriately in each text area, starting with number 5.

Capstone course / senior design project **No**

Exam in non-culminating course(s) **No**

Rubric-scored artifact in non-culminating course(s) **No**

End of course evaluations **No**

Focus group/structured interviews (students, faculty) **No**

ERAU Student Satisfaction Survey **No**

ERAU Graduating Student Survey **No**

ERAU Alumni Survey **No**

ERAU Employer Feedback Survey **No**

National Survey of Student Engagement (NSSE) **No**

Incoming Freshmen Survey (CIRP) **No**

Other national survey **No**

External or internal peer review **No**

Retention / graduation rates **No**

Employment placement / continuing education **No**

rates

Other (Please specify below) **No**

Description of 'Other' Means of Assessment

Details of Assessment Measurement

Criterion / Criteria for Success

Assessment Results / Data Collected

Improvements

Assessment Outcome Title

Outcome Title **Communication Technology**

Use of Assessment Results

Have assessment results been used to make improvements? **Yes (Select all that apply below, then describe)**

Pedagogical modifications were made **Yes**

Course sequence was altered **No**

Technology-related changes were made **No**

Personnel-related changes were made **No**

Other **No**

Description of Improvements **The current approach is being slightly modified to include more collaboration on a final project. A group Wiki report and final presentation is replacing the individual word processed paper and the individual final presentation. The Wiki will include the same requirements as the formal project but will involve group participation. The attractiveness of a Wiki project is that group participation is transparent since member contributions and editing are both traceable and measurable. In addition, a contemporary, web-based collaborative technology will be introduced into the course.**

Attach File(s) (optional)

Attachments	Type
DB_GENED COMM [2012-13] ASMEAS MEAS3 DET.pdf	Attachment
BA120 Assessment Results.docx	Attachment

Planned Future Improvements

Indicate and describe any planned improvements. If new funds are required for planned improvements, you will also need to complete the next tab, "Mission Critical Budget Request".

Do assessment results indicate any critical improvements that must be made in the next fiscal year? **No**

Description of Planned Improvements

Mission-Critical Budget Request

Assessment Outcome Title

Outcome Title Communication Technology

Mission-Critical Budget Request

Title of Budget Request

Details of Budget Request

Are capital funds No
required?Total Amount of Operating
Funds Requested

Salaries: \$

Duration:

Benefits: \$

Duration:

Professional
Development: \$

Duration:

Computer Hardware: \$

Duration:

Computer Software: \$

Duration:

Other Operating Funds: \$

Duration:

[^ Back to top](#)**⤴ Ethical Responsibility****Select Outcome to Assess from Master List of Outcomes****Instructions:** Below, click the "BROWSE" button to:**1. (REQUIRED)** Select an outcome to assess from Master List of Program Outcomes ("BROWSE" -> "Master List of Program Outcomes" -> "GO" button).**2. (OPTIONAL)** Align outcome with any other applicable standards such as AABI, ABET, General Education Outcomes: ("BROWSE" -> "Standards" -> "GO" button).✳ Select Outcome from
Master List of Outcomes✳ Assessment Outcome Ethical Responsibility
Title**Assessment Measures, Criteria for Success and Results****Measurement One**

Outcome Title Ethical Responsibility

✳ Means of Assessment Other (please specify below)

Description of 'Other' AS 472 Operational Applications in Aeronautical Science. End of course survey.
Means of Assessment

Details of Assessment Measurement (Timeframe of Data Collection, Participants/Roles, etc.) See attachment: [DB_GENED ETH \[2012-13\] ASMEAS MEAS1 DET.pdf](#)
Selected student portfolios will contain at least one example of research signaling the author's recognition of the importance of ethical responsibility both professionally and socially.

✳ Criterion for Success Criterion for Success: 80% of selected student portfolios will contain at least one example of research signaling the author's recognition of the importance of ethical responsibility both professionally and socially.

Assessment Results / Data Collected Method one involved the students doing a self-assessment of their professional ethics and is an indirect evaluation of this program outcome. Below is the student self evaluation of ethics analyses.

In the above chart, 54 students self evaluated their ethical standards in five categories; Altruism, Duty, Excellence, Respect, and Honor. With the established criteria for success requiring that 80% of students meet or exceed the criteria established by the faculty, no more than 43 students should fail to achieve the expected level of success. The performance of the students did not fall below the 80% criteria in any of the chosen areas of ethical responsibilities.

The two best areas of ethical responsibility were Excellence and Respect with no students receiving a "Below" ranking in this area and 43 students showing an "Exceeds". The category of Honor was in the middle of the rankings with 18 students "Meets" and 36 students with an "Exceeds". The weakest ethical areas were Altruism and Duty with one student receiving a "Below". This perceived weakness is not surprising to the faculty given the exceptional demands placed on students' time in the academic and flight training environment at Embry-Riddle.

These rankings may be unusually high compared to a national ranking in the United States, however, with the unique nature of Embry-Riddle and the focused student body, these high rankings do not differ from the faculty's expected results. With significantly more than 80% of the students receiving a "Meets" or "Exceeds" in every category of ethical responsibility, the faculty of Embry-Riddle is doing an exceptional job in teaching ethical responsibility both socially and professionally. While all credit cannot be given to the faculty for the life-long teaching of social ethical responsibility to these students, the faculty does contribute significantly to the development of the professional ethics of these students in the career field for which they are training.

Measurement Two

Means of Assessment Rubric-scored artifact in non-culminating course(s)

Description of 'Other' Means of Assessment

Details of Assessment Measurement AS 472 Method involved the professors rating each student using the professional assessment attachment to this document as an Appendix. This method serves as a direct evaluation of this program outcome. The students were also asked to give their assessment of their performance (indirect evaluation) in the areas of Bearing (Courtesy, Ego Control, Respect), Participation, and Reliability.

Criterion for Success 80% of the students will receive an above average grade for professionalism.

Assessment Results / Data Collected Fifty-six students completed the professionalism assessment, but only 52 ranked what they thought the professor would give them for a professionalism grade, therefore 52 surveys were analyzed. This professionalism grade counts 20% of the students' final grade.

In 19 cases, the student assessment for professionalism was higher than the professors' grades. In 21 cases, the professors' ranking were higher than the students. And in 12 cases the grades given by the professor were the same as the student assessment. The average score given by professors for this professionalism grade was 17. The average score given by student assessment for this professionalism grade was also 17. This analysis means that the average grade for professionalism in AS 472 for fall 2011 was an 85% on a scale of 100%. This analysis also meets the 80% criteria for success for this course as more than 80% of the students received an above average grade for professionalism.

Measurement Three

Means of Assessment

Description of 'Other' Means of Assessment

Details of Assessment
Measurement

Criterion for Success

Assessment Results /
Data Collected

Measurement Four

Means of Assessment

Description of 'Other'
Means of Assessment

Details of Assessment
Measurement

Criterion for Success

Assessment Results /
Data Collected

Measurement Five and Up

For Outcomes with more than four measurements, select means of assessment for measures five and up from the list below (check all that apply). Then list the details for measurements 5 and up in the areas below. Please number them appropriately in each text area, starting with number 5.

Capstone course / senior design project **No**

Exam in non-culminating course(s) **No**

Rubric-scored artifact in non-culminating course(s) **No**

End of course evaluations **No**

Focus group/structured interviews (students, faculty) **No**

ERAU Student Satisfaction Survey **No**

ERAU Graduating Student Survey **No**

ERAU Alumni Survey **No**

ERAU Employer Feedback Survey **No**

National Survey of Student Engagement (NSSE) **No**

Incoming Freshmen Survey (CIRP) **No**

Other national survey **No**

External or internal peer review **No**

Retention / graduation rates **No**

Employment placement / **No**

continuing education rates

Other (Please specify below) **No**

Description of 'Other' Means of Assessment

Details of Assessment Measurement

Criterion / Criteria for Success

Assessment Results / Data Collected

Improvements

Assessment Outcome Title

Outcome Title **Ethical Responsibility**

Use of Assessment Results

Have assessment results been used to make improvements? **No**

Pedagogical modifications were made **No**

Course sequence was altered **No**

Technology-related changes were made **No**

Personnel-related changes were made **No**

Other **No**

Description of Improvements

Attach File(s) (optional)

Attachments

Type

[DB_GENED ETH \[2012-13\] ASMEAS MEAS1 DET.pdf](#)

Attachment

[Gen Ed Plan AS 472 Halleran results for fall 2011.docx](#)

Attachment

[Gen Ed Plan AS 472 Halleran for spring 2012.docx](#)

Attachment

Planned Future Improvements

Indicate and describe any planned improvements. If new funds are required for planned improvements, you will also need to complete the next tab, "Mission Critical Budget Request".

Do assessment results indicate any critical improvements that must be made in the next fiscal year? **No**

Description of Planned Improvements

Mission-Critical Budget Request

Assessment Outcome Title

Outcome Title Ethical Responsibility

Mission-Critical Budget Request

Title of Budget Request

Details of Budget Request

Are capital funds required? No

Total Amount of Operating Funds Requested

Salaries: \$

Duration:

Benefits: \$

Duration:

Professional Development: \$

Duration:

Computer Hardware: \$

Duration:

Computer Software: \$

Duration:

Other Operating Funds: \$

Duration:

[^ Back to top](#)**Human Experience****Select Outcome to Assess from Master List of Outcomes****Instructions:** Below, click the "BROWSE" button to:**1. (REQUIRED)** Select an outcome to assess from Master List of Program Outcomes ("BROWSE" -> "Master List of Program Outcomes" -> "GO" button).**2. (OPTIONAL)** Align outcome with any other applicable standards such as AABI, ABET, General Education Outcomes: ("BROWSE" -> "Standards" -> "GO" button).

* Select Outcome from Master List of Outcomes

* Assessment Outcome Human Experience Title

Assessment Measures, Criteria for Success and Results**Measurement One**

Outcome Title Human Experience

* Means of Assessment Other (please specify below)

Description of 'Other' Means of Assessment HU 338 Traversing the Borders: Interdisciplinary Explorations End of Course Survey

Details of Assessment Measurement (Timeframe of Data Collection, Participants/Roles, etc.) See attachment: [DB_GENED HUM \[2012-13\] ASMEAS MEAS1 DET.pdf](#)

✱ Criterion for Success 80% of surveyed students will report that the course texts, discussions, and assignments have increased their recognition of the complexity of human experience from a variety of perspectives, for example, cultural, aesthetic, social, technological, scientific, psychological, philosophical, and historical.

Assessment Results / Data Collected A total of 92% of the respondents strongly agreed or agreed with the statement concerning course materials. A total of 100% of the respondents strongly agreed or agreed with the statement concerning class discussions, and a total of 76% strongly agreed or agreed with the statement concerning class assignments.

Measurement Two

Means of Assessment Rubric-scored artifact in non-culminating course(s)

Description of 'Other' Means of Assessment HU 338 Traversing the Borders: Interdisciplinary Explorations Portfolio Analysis.

Details of Assessment Measurement See attachment: [DB_GENED HUM \[2012-13\] ASMEAS MEAS2 DET.pdf](#)

Criterion for Success 80% of selected student portfolios will contain at least one example of research signaling the author's recognition of the complexity of human experience from a variety of perspectives, for example, cultural, aesthetic, social, technological, scientific, psychological, philosophical, and historical.

Assessment Results / Data Collected 67% of the portfolios from HU 338 - Fall 2011 were assessed as "Adequate." Results from HU 338 - Spring 2012 indicate that 25% of the portfolios were assessed as "Exceptional" and 25% were assessed as "Adequate," totaling 50% of the selected portfolios relaying appropriate analysis. Goals not achieved.

Measurement Three

Means of Assessment Rubric-scored artifact in non-culminating course(s)

Description of 'Other' Means of Assessment

Details of Assessment Measurement The SS110 Course Monitor chose to do a portfolio review a portfolio review to determine whether the students' work in the course indicated that the learning outcome being assessed had been met. The SS110 instructor was asked to collect one exam, an analysis of an assigned text, and a final paper for all students. The Course Monitor and one other SS faculty member created a rubric (see Appendix A below) to assess whether the portfolio materials indicated whether the students were able to "describe the complexity of human experience from a variety of perspectives, for example, cultural, aesthetic, social, technological, scientific, psychological, philosophical, and historical."

Criterion for Success 80% of selected SS110 student portfolios will reflect the students' ability to adequately "describe the complexity of human experience from a variety of perspectives, for example, cultural, aesthetic, social, technological, scientific, psychological, philosophical, and historical."

Assessment Results / Data Collected At the end of the term, the SS110 Course Monitor randomly selected 15 students from the 142 students registered in all four SS110 sections using the class roster of active students provided by instructors for the purpose of conducting Gen Ed portfolio assessments. The sample constitutes 11% of students registered SS110, as seen in **Figure 2**, below. As **Figure 3** illustrates below, no portfolios or 0% were assessed as showing "Distinction," eight portfolios or 53% were judged "Satisfactory," and seven portfolios or 47% were assessed as "Unsatisfactory."

Of the selected portfolios, only 53% indicated the students' ability to "describe the complexity of human experience from a variety of perspectives, for example, cultural, aesthetic, social, technological, scientific, psychological, philosophical, and historical." This percentage falls short of the goal of 80% satisfactory.

Measurement Four

Means of Assessment

Description of 'Other'
Means of AssessmentDetails of Assessment
Measurement

Criterion for Success

Assessment Results /
Data Collected**Measurement Five and Up**

For Outcomes with more than four measurements, select means of assessment for measures five and up from the list below (check all that apply). Then list the details for measurements 5 and up in the areas below. Please number them appropriately in each text area, starting with number 5.

Capstone course / senior No
design projectExam in non-culminating No
course(s)Rubric-scored artifact in No
non-culminating
course(s)

End of course evaluations No

Focus group/structured No
interviews (students,
faculty)ERAU Student No
Satisfaction SurveyERAU Graduating Student No
Survey

ERAU Alumni Survey No

ERAU Employer No
Feedback SurveyNational Survey of Student No
Engagement (NSSE)Incoming Freshmen No
Survey (CIRP)

Other national survey No

External or internal peer No
reviewRetention / graduation No
ratesEmployment placement / No
continuing education
ratesOther (Please specify No
below)

Description of 'Other'
Means of Assessment

Details of Assessment
Measurement

Criterion / Criteria for
Success

Assessment Results /
Data Collected

Improvements

Assessment Outcome Title

Outcome Title Human Experience

Use of Assessment Results

Have assessment results been used to make improvements? Yes (Select all that apply below, then describe)

Pedagogical modifications were made Yes

Course sequence was altered No

Technology-related changes were made No

Personnel-related changes were made No

Other No

Description of
Improvements

Based upon the results of this measurement approach, reviewed in conjunction with faculty who teach HU 140/141, HU 143, and HU 338, the Course Monitor has several recommendations for faculty members during the upcoming academic year:

- &vβσπ; Faculty members in courses currently being assessed will be required to submit writing assignments along with their course syllabi at the beginning of the semester.
- &vβσπ; The Course Monitor will be expanding the HU 140s series Blackboard page to include a variety of writing assignments and grading rubrics for faculty to review when composing their assignments. Faculty members in courses with mostly inadequate portfolios will be directed to these materials to help redesign their assignments.
- &vβσπ; Faculty members will be required to participate in a collaborative session during the Fall semester aimed at reviewing the General Education Program's expectations of our writing assignments and determining whether current writing assignments give students the opportunity to meet those expectations.
- &vβσπ; Faculty members will be required to participate in a collaborative session during the Spring semester to review grading practices for sample student work. This session will ensure that faculty members understand how to evaluate student work for the General Education Learning Outcomes during their grading process.
- &vβσπ; The Course Monitor will remind faculty members of the types of writing samples that should be included in the portfolio process and speak individually to faculty members who are not submitting the correct types of writing samples.
- &vβσπ; The sample size for HU 338 will be increased to four students per section to give a higher probability of varied student portfolios. The limited offerings of this course led to smaller sample sizes that did, during the

Spring and Fall semester, give a slanted view of the overall performance of students on General Education Learning Outcomes.

- Finally, the Course Monitor recommends extending the assessment of HU 140/141 through the next academic year, rather than concluding it as planned this year. This extension should give faculty members time to improve the portions of the course that were contributing to the high rate of inadequate portfolios this past year.

If these measures are not successful, courses that include inadequate portfolios will continue to be assessed and the Course Monitor will work with the Department Chair to ensure that all instructors are offering assignments and evaluating those assignments in ways that give students the opportunity to demonstrate their understanding of the values being communicated through the Humanities. Instructors who do not comply with these measures will be met with individually by the Course Monitor and, if necessary, the Department Chair.

Recommendations SS 110

Based upon the results of the portfolio review, in conjunction with faculty who teach SS courses, the Course Monitor has several recommendations for the SS110 instructor for the upcoming academic year:

- SS110, World History, should undergo another review in Spring 2013;
- The Course Monitor will meet with the SS110 instructors, discuss the results of the Spring 2012 assessment report and share the rubric used to assess the quality of the portfolios;
- The Course Monitor will recommend that the SS110 instructors tailor their writing assignments and at least one examination to better allow students the opportunity to meet the Gen Ed outcome expectations;
- The SS110 instructors will work with the Course Monitor and other SS faculty members in an effort to ensure that the assignments are appropriate;
- The sample size for SS110 will be increased to 20% to better reflect the percentage of students that are meeting the Gen Ed outcome.

It is hoped that these recommendations will lead to the desired 80% satisfactory rate.

Attach File(s) (optional)

Attachments	Type
DB_GENED HUM [2012-13] ASMEAS MEAS1 DET.pdf	Attachment
DB_GENED HUM [2012-13] ASMEAS MEAS2 DET.pdf	Attachment
DB_GENED HUM [2012-13] IMP PLAN.pdf	Attachment
2012 SS110 Assessment Report.doc	Attachment
12_GenEd_Assessment_HU140s_revised.docx	Attachment

Planned Future Improvements

Indicate and describe any planned improvements. If new funds are required for planned improvements, you will also need to complete the next tab, "Mission Critical Budget Request".

Do assessment results indicate any critical improvements that must be made in the next fiscal year? Yes - planned improvements require NO NEW FUNDS

Description of Planned Improvements See attachment: [DB_GENED HUM \[2012-13\] IMP PLAN.pdf](#)

Mission-Critical Budget Request

Assessment Outcome Title

Outcome Title Human Experience

Mission-Critical Budget Request

Title of Budget Request

Details of Budget Request

Are capital funds required? No

Total Amount of Operating Funds Requested

Salaries: \$

Duration:

Benefits: \$

Duration:

Professional Development: \$

Duration:

Computer Hardware: \$

Duration:

Computer Software: \$

Duration:

Other Operating Funds: \$

Duration:

[^ Back to top](#)

⬆ Mathematics

Select Outcome to Assess from Master List of Outcomes

Instructions: Below, click the "BROWSE" button to:

1. (REQUIRED) Select an outcome to assess from Master List of Program Outcomes ("BROWSE" -> "Master List of Program Outcomes" -> "GO" button).

2. (OPTIONAL) Align outcome with any other applicable standards such as AABI, ABET, General Education Outcomes: ("BROWSE" -> "Standards" -> "GO" button).

* Select Outcome from Master List of Outcomes

* Assessment Outcome Mathematics
Title

Assessment Measures, Criteria for Success and Results

Measurement One

Outcome Title Mathematics

* Means of Assessment Exam in non-culminating course(s)

Description of 'Other'
Means of Assessment

Details of Assessment Measurement (Timeframe of Data Collection, Participants/Roles, etc.) See attachment: [DB_GENED MATH \[2012-13\] ASMEAS MEAS1 DET.pdf](#)

* Criterion for Success At least 75% of PS250 students would be able to answer selected test items correctly.

Assessment Results / Data Collected Program Outcome 1: The criterion of success for this assessment was that at least 75% of PS250 students would be able to answer selected test items correctly. Question 4 was answered correctly by 73 percent of the students, testing thus 2.6 percent lower than anticipated. Question 15 was answered correctly by 74 percent, testing 1.3 percent lower than anticipated. Question 28 was answered correctly by 80 percent of the students testing thus 6.7 percent higher than anticipated. The average of the percentages of number of correct answers to the 3 questions is 76% with standard deviation of 3.1. Considering this average of the correct answers to three questions testing the general education learning outcome 1, we feel that the criterion for success was met.

Measurement Two

Means of Assessment Exam in non-culminating course(s)

Description of 'Other' Means of Assessment

Details of Assessment Measurement EGR 115 Intro. to Computing for Engineers A common programming assignment shall be provided to all sections of the course. Upon completion, three randomly-selected submissions from each section will be evaluated by a team of three or more course faculty. The team will rate the provided solution as "Applied correctly", "Applied incorrectly", or "Not applied" in response to the question "How did this sample apply college-level mathematics to solve the assigned problem?".

Criterion for Success At least 75% of a random sampling of submissions will correctly apply college level mathematics.

Assessment Results / Data Collected Outcome 61% of a random sampling of submissions correctly applied college-level mathematics.

Outcome #1 measurements confirm anecdotal evidence that the students enrolled in EGR115 are occasionally not prepared sufficiently to apply college-level mathematics (defined by the course faculty to include college algebra, trigonometry, and mathematics notation). The 2011 Fall semester data demonstrated marginally-acceptable performance from the sampled students, while the 2012 Spring semester data indicated a marked lack of preparedness.

It should also be noted that the samples obtained naturally did not include students who did not submit the assignment – a good portion of whom may not have been capable of doing the assigned mathematics. From this it is quite possible to infer that the actual percentage of students capable of applying college-level mathematics is significantly lower than our measurement.

Measurement Three

Means of Assessment Exam in non-culminating course(s)

Description of 'Other' Means of Assessment

Details of Assessment Measurement The PS250 Physics for Engineers III course monitor and other instructors prepared an end-of-course exam, covering fundamental topics of introductory level electricity & magnetism and selected topics from modern physics. Each instructor submitted several multiple choice questions, and the questions for the final version of the final exam were put together in the meeting consisting of all the course instructors. A subset of specific topics from the list of official PS 250 course objectives are chosen.

Criterion for Success The criterion of success for this assessment was that at least 65% of PS250 students would be able to answer selected test items correctly.

Assessment Results / As 74% and 71.5% of the students answered questions 13 and 20 correctly, respectively, the

Data Collected

criterion for success was exceeded. The average of the percentages was 73%, exceeding the anticipated criterion by 12%. 75% for SLO1 assessment as this outcome needs to be mastered and success level of 65% for SLO6 assessment as this outcome needs to be practiced. The students in general loved to learn about special relativity and its strange consequences so we think it contributed to the fact the SLO6 tested much higher than anticipated. In our initial assessment plan submitted in summer 2011 we had chosen the success level of

Measurement Four

Means of Assessment

Description of 'Other'
Means of AssessmentDetails of Assessment
Measurement

Criterion for Success

Assessment Results /
Data Collected

Measurement Five and Up

For Outcomes with more than four measurements, select means of assessment for measures five and up from the list below (check all that apply). Then list the details for measurements 5 and up in the areas below. Please number them appropriately in each text area, starting with number 5.

Capstone course / senior No
design projectExam in non-culminating No
course(s)Rubric-scored artifact in No
non-culminating
course(s)

End of course evaluations No

Focus group/structured No
interviews (students,
faculty)ERAU Student No
Satisfaction SurveyERAU Graduating Student No
Survey

ERAU Alumni Survey No

ERAU Employer No
Feedback SurveyNational Survey of Student No
Engagement (NSSE)Incoming Freshmen No
Survey (CIRP)

Other national survey No

External or internal peer No
reviewRetention / graduation No
ratesEmployment placement / No
continuing education

rates

Other (Please specify below) **No**

Description of 'Other' Means of Assessment

Details of Assessment Measurement

Criterion / Criteria for Success

Assessment Results / Data Collected

Improvements**Assessment Outcome Title**Outcome Title **Mathematics****Use of Assessment Results**Have assessment results been used to make improvements? **Yes (Select all that apply below, then describe)**Pedagogical modifications were made **No**Course sequence was altered **Yes**Technology-related changes were made **No**Personnel-related changes were made **No**Other **No**Description of Improvements **EGR 115 Intro. to Computing for Engineers will add a calculus co-requisite. EGR 115 will continue to be assessed.**

Attach File(s) (optional)

Attachments**Type**[DB_GENED MATH \[2012-13\] ASMEAS MEAS1 DET.pdf](#)

Attachment

[EGR115 AY2011-2012 General Education Assessment Final Report.pdf](#)

Attachment

[11_Gen_Ed_assesment_PS250_Nykyri_v2.pdf](#)

Attachment

Planned Future Improvements*Indicate and describe any planned improvements. If new funds are required for planned improvements, you will also need to complete the next tab, "Mission Critical Budget Request".*Do assessment results indicate any critical improvements that must be made in the next fiscal year? **Yes - planned improvements require NO NEW FUNDS**

Description of Planned Improvements

It should also be noted that the samples obtained naturally did not include students who did not submit the assignment – a good portion of whom may not have been capable of doing the assigned mathematics. From this it is quite possible to infer that the actual percentage of students capable of applying college-level mathematics is significantly lower than our measurement.

To improve the achievement of this outcome, it is the recommendation of the course faculty that the course receive a formal corequisite of calculus – that is to say that students wishing to enroll in EGR115 must have passed an introductory course in calculus or be enrolled in an introductory calculus course.

Mission-Critical Budget Request

Assessment Outcome Title

Outcome Title Mathematics

Mission-Critical Budget Request

Title of Budget Request

Details of Budget Request

Are capital funds No
required?

Total Amount of Operating
Funds Requested

Salaries: \$

Duration:

Benefits: \$

Duration:

Professional
Development: \$

Duration:

Computer Hardware: \$

Duration:

Computer Software: \$

Duration:

Other Operating Funds: \$

Duration:

[^ Back to top](#)

📈 Oral Communication

Select Outcome to Assess from Master List of Outcomes

Instructions: Below, click the "BROWSE" button to:

1. (REQUIRED) Select an outcome to assess from Master List of Program Outcomes ("BROWSE" -> "Master List of Program Outcomes" -> "GO" button).

2. (OPTIONAL) Align outcome with any other applicable standards such as AABI, ABET, General Education Outcomes: ("BROWSE" -> "Standards" -> "GO" button).

✳ Select Outcome from
Master List of Outcomes

✳ Assessment Outcome Oral Communication
Title

Assessment Measures, Criteria for Success and Results

Measurement One

Outcome Title Oral Communication

* Means of Assessment Rubric-scored artifact in non-culminating course(s)

Description of 'Other'
Means of Assessment

Details of Assessment Measurement (Timeframe of Data Collection, Participants/Roles, etc.) See attachment: [DB_GENED ORAL \[2012-13\] ASMEAS MEAS1 DET.pdf](#) CIV 460 Senior Design Project The instructor and guests (usually faculty, students, and interested community members) attending the CDR presentations will be asked to complete a short questionnaire at the completion of the review. The questionnaire will ask the observer to rate the following as either: Excellent / Very Good / Good / Fair / Poor based on the design team's oral and written presentation: 1. Overall, how would you rate the professionalism and confidence of the design team? 2. How was the quality of the overheads and visual presentation items? 3. How well did the students know the information presented? 4. How was the presentation team's interaction with the audience? 5. How adequate was the written report submitted prior to the presentation?

* Criterion for Success 80% response rate as either "Excellent" or "Very Good" for each of the questions above.

Assessment Results / Data Collected Analysis: With a 36.5 score, the assessment of the Learning Outcomes was deemed adequate having reached the 30.0 target. There were individuals on the team who did not demonstrate mastery of some aspects of oral presentation, however it was felt that this was indicative a personality trait more than a lack of educational preparation. The civil engineering program will continue to require that all students develop and practice communication skills, thus ensuring that even those students not naturally gifted in oral presentation abilities will be afforded a chance to practice those important skills.

Measurement Two

Means of Assessment Other (please specify below)

Description of 'Other'
Means of Assessment End of course survey.

Details of Assessment Measurement CIV Senior Design Project An indirect measurement of the attainment of the Learning Outcomes will be generated through a survey of the students at the completion of the course. All students will be asked to answer "Strongly Agree," "Agree," "Disagree," or "Strongly Disagree" following questions: 1. This course, along with your other educational experiences at ERAU, allowed me to master the skill of preparing effective written documents for both technical and non-technical audiences. 2. This course, along with your other educational experiences at ERAU, allowed me to master the skill of communicating ideas in non-written form, such as oral presentations and visual media? In addition, students will be asked to comment on ways the course could be improved to better the attainment of the Learning Outcomes identified.

Criterion for Success 80% of students either "Strongly Agree" or "Agree" to each of the two questions posed. Student comments will be used to improve the course content regardless of the positive response rate.

Assessment Results / Data Collected With an average positive response rate of 90%, the program has exceeded its goal of 80%. Notably, a small but still significant number students are not comfortable with communicating in written form. This could be due to the high number of foreign national students in the course as well as the normal aversion of most engineering students to express ideas in the proper written form.

Measurement Three

Means of Assessment

Description of 'Other'
Means of Assessment

Details of Assessment
Measurement

Criterion for Success

Assessment Results /
Data Collected

Measurement Four

Means of Assessment

Description of 'Other'
Means of Assessment

Details of Assessment
Measurement

Criterion for Success

Assessment Results /
Data Collected

Measurement Five and Up

For Outcomes with more than four measurements, select means of assessment for measures five and up from the list below (check all that apply). Then list the details for measurements 5 and up in the areas below. Please number them appropriately in each text area, starting with number 5.

Capstone course / senior No
design project

Exam in non-culminating No
course(s)

Rubric-scored artifact in No
non-culminating
course(s)

End of course evaluations No

Focus group/structured No
interviews (students,
faculty)

ERAU Student No
Satisfaction Survey

ERAU Graduating Student No
Survey

ERAU Alumni Survey No

ERAU Employer No
Feedback Survey

National Survey of Student No
Engagement (NSSE)

Incoming Freshmen No
Survey (CIRP)

Other national survey No

External or internal peer No
review

Retention / graduation No
rates

Employment placement / No
continuing education
rates

Other (Please specify No
below)

Description of 'Other'
Means of Assessment

Details of Assessment
Measurement

Criterion / Criteria for
Success

Assessment Results /
Data Collected

Improvements

Assessment Outcome Title

Outcome Title Oral Communication

Use of Assessment Results

Have assessment results been used to make improvements? **Yes (Select all that apply below, then describe)**

Pedagogical modifications were made **Yes**

Course sequence was altered **No**

Technology-related changes were made **No**

Personnel-related changes were made **No**

Other **No**

Description of Improvements In a proactive manner, the program will evaluate the possibilities of increasing the opportunities to conduct written reports in other courses. This will give students more chances to practice these skills and improve their level of confidence.

Attach File(s) (optional)	Attachments	Type
	DB_GENED ORAL [2012-13] ASMEAS MEAS1 DET.pdf	Attachment
	CIV460 GenEd Assessment.docx	Attachment

Planned Future Improvements

Indicate and describe any planned improvements. If new funds are required for planned improvements, you will also need to complete the next tab, "Mission Critical Budget Request".

Do assessment results indicate any critical improvements that must be made in the next fiscal year? **No**

Description of Planned Improvements

Mission-Critical Budget Request

Assessment Outcome Title

Outcome Title Oral Communication

Mission-Critical Budget Request

Title of Budget Request

Details of Budget Request

Are capital funds required? No

Total Amount of Operating Funds Requested

Salaries: \$

Duration:

Benefits: \$

Duration:

Professional Development: \$

Duration:

Computer Hardware: \$

Duration:

Computer Software: \$

Duration:

Other Operating Funds: \$

Duration:

[^ Back to top](#)

Scientific Inquiry

Select Outcome to Assess from Master List of Outcomes

Instructions: Below, click the "BROWSE" button to:

- (REQUIRED)** Select an outcome to assess from Master List of Program Outcomes ("BROWSE" -> "Master List of Program Outcomes" -> "GO" button).
- (OPTIONAL)** Align outcome with any other applicable standards such as AABI, ABET, General Education Outcomes: ("BROWSE" -> "Standards" -> "GO" button).

* Select Outcome from Master List of Outcomes

* Assessment Outcome Scientific Inquiry Title

Assessment Measures, Criteria for Success and Results

Measurement One

Outcome Title Scientific Inquiry

* Means of Assessment Exam in non-culminating course(s)

Description of 'Other' Means of Assessment

Details of Assessment Measurement (Timeframe of Data Collection, Participants/Roles, etc.) See attachment: [DB_GENED_SCI \[2012-13\] ASMEAS_MEAS1_DET.pdf](#) The PS250 Physics for Engineers III course monitor and other instructors prepared an end-of-course exam, covering fundamental topics of introductory level electricity & magnetism and selected topics from modern physics. Each instructor submitted several multiple choice questions, and the questions for the final version of the final exam were put together in the meeting consisting of all the course instructors. A subset of specific topics from the list of official PS 250 course objectives are

chosen.

✳️ **Criterion for Success** The criterion of success for this assessment is that at least 65% of PS250 students would be able to answer selected test items correctly.

Assessment Results /
Data Collected The criterion of success for this assessment was that at least 65% of PS250 students would be able to answer selected test items correctly. As 74% and 71.5% of the students answered questions 13 and 20 correctly, respectively, the criterion for success was exceeded.

Measurement Two

Means of Assessment

Description of 'Other'
Means of Assessment

Details of Assessment
Measurement

Criterion for Success

Assessment Results /
Data Collected

Measurement Three

Means of Assessment

Description of 'Other'
Means of Assessment

Details of Assessment
Measurement

Criterion for Success

Assessment Results /
Data Collected

Measurement Four

Means of Assessment

Description of 'Other'
Means of Assessment

Details of Assessment
Measurement

Criterion for Success

Assessment Results /
Data Collected

Measurement Five and Up

For Outcomes with more than four measurements, select means of assessment for measures five and up from the list below (check all that apply). Then list the details for measurements 5 and up in the areas below. Please number them appropriately in each text area, starting with number 5.

Capstone course / senior No
design project

Exam in non-culminating No
course(s)

Rubric-scored artifact in No
non-culminating
course(s)

End of course evaluations No

Focus group/structured interviews (students, faculty)	No
ERAU Student Satisfaction Survey	No
ERAU Graduating Student Survey	No
ERAU Alumni Survey	No
ERAU Employer Feedback Survey	No
National Survey of Student Engagement (NSSE)	No
Incoming Freshmen Survey (CIRP)	No
Other national survey	No
External or internal peer review	No
Retention / graduation rates	No
Employment placement / continuing education rates	No
Other (Please specify below)	No
Description of 'Other' Means of Assessment	
Details of Assessment Measurement	
Criterion / Criteria for Success	
Assessment Results / Data Collected	

Improvements

Assessment Outcome Title

Outcome Title Scientific Inquiry

Use of Assessment Results

Have assessment results been used to make improvements? No

Pedagogical modifications were made No

Course sequence was altered No

Technology-related changes were made No

Personnel-related No

changes were made

Other **No**

Description of Improvements **Students exceeded the expected outcome.**

Attach File(s) (optional)	Attachments	Type
	DB_GENED SCI [2012-13] ASMEAS MEAS1 DET.pdf	Attachment
	11_Gen_Ed_assesment_PS250_Nykyri_v2.pdf	Attachment

Planned Future Improvements

Indicate and describe any planned improvements. If new funds are required for planned improvements, you will also need to complete the next tab, "Mission Critical Budget Request".

Do assessment results indicate any critical improvements that must be made in the next fiscal year? **No**

Description of Planned Improvements

Mission-Critical Budget Request

Assessment Outcome Title

Outcome Title **Scientific Inquiry**

Mission-Critical Budget Request

Title of Budget Request

Details of Budget Request

Are capital funds required? **No**

Total Amount of Operating Funds Requested

Salaries: \$

Duration:

Benefits: \$

Duration:

Professional Development: \$

Duration:

Computer Hardware: \$

Duration:

Computer Software: \$

Duration:

Other Operating Funds: \$

Duration:

Written Documents

Select Outcome to Assess from Master List of Outcomes

Instructions: Below, click the "BROWSE" button to:

- (REQUIRED)** Select an outcome to assess from Master List of Program Outcomes ("BROWSE" -> "Master List of Program Outcomes" -> "GO" button).
- (OPTIONAL)** Align outcome with any other applicable standards such as AABI, ABET, General Education Outcomes: ("BROWSE" -> "Standards" -> "GO" button).

* Select Outcome from Master List of Outcomes

* Assessment Outcome Written Documents Title

Assessment Measures, Criteria for Success and Results

Measurement One

Outcome Title Written Documents

* Means of Assessment Capstone course / senior design project

Description of 'Other' Means of Assessment

Details of Assessment Measurement (Timeframe of Data Collection, Participants/Roles, etc.)

CIV Senior Design Project In the case of CIV 460, the instructor and guests (usually faculty, students, and interested community members) attending the CDR presentations will be asked to complete a short questionnaire at the completion of the review. The questionnaire will ask the observer to rate the following as either: Excellent / Very Good / Good / Fair / Poor based on the design team's oral and written presentation: 1. Overall, how would you rate the professionalism and confidence of the design team? 2. How was the quality of the overheads and visual presentation items? 3. How well did the students know the information presented? 4. How was the presentation team's interaction with the audience? 5. How adequate was the written report submitted prior to the presentation?

* Criterion for Success The criterion for success in the accomplishment of the Learning Outcomes identified will be an 80% response rate as either "Excellent" or "Very Good" for each of the questions above.

Assessment Results / Data Collected

Analysis: With a 36.5 score, the assessment of the Learning Outcomes was deemed adequate having reached the 30.0 target. There were individuals on the team who did not demonstrate mastery of some aspects of oral presentation, however it was felt that this was indicative a personality trait more than a lack of educational preparation. The civil engineering program will continue to require that all students develop and practice communication skills, thus ensuring that even those students not naturally gifted in oral presentation abilities will be afforded a chance to practice those important skills.

Measurement Two

Means of Assessment Capstone course / senior design project

Description of 'Other' Means of Assessment

Details of Assessment Measurement

Criterion for Success

Assessment Results / Data Collected

Measurement Three

Means of Assessment

Description of 'Other'
Means of Assessment

Details of Assessment
Measurement

Criterion for Success

Assessment Results /
Data Collected

Measurement Four

Means of Assessment

Description of 'Other'
Means of Assessment

Details of Assessment
Measurement

Criterion for Success

Assessment Results /
Data Collected

Measurement Five and Up

For Outcomes with more than four measurements, select means of assessment for measures five and up from the list below (check all that apply). Then list the details for measurements 5 and up in the areas below. Please number them appropriately in each text area, starting with number 5.

Capstone course / senior design project **No**

Exam in non-culminating course(s) **No**

Rubric-scored artifact in non-culminating course(s) **No**

End of course evaluations **No**

Focus group/structured interviews (students, faculty) **No**

ERAU Student Satisfaction Survey **No**

ERAU Graduating Student Survey **No**

ERAU Alumni Survey **No**

ERAU Employer Feedback Survey **No**

National Survey of Student Engagement (NSSE) **No**

Incoming Freshmen Survey (CIRP) **No**

Other national survey **No**

External or internal peer review **No**

Retention / graduation **No**

rates

Employment placement /
continuing education
rates **No**

Other (Please specify
below) **No**

Description of 'Other'
Means of Assessment

Details of Assessment
Measurement

Criterion / Criteria for
Success

Assessment Results /
Data Collected

Improvements

Assessment Outcome Title

Outcome Title **Written Documents**

Use of Assessment Results

Have assessment results
been used to make
improvements?

Pedagogical
modifications were made **No**

Course sequence was
altered **No**

Technology-related
changes were made **No**

Personnel-related
changes were made **No**

Other **No**

Description of
Improvements

Attach File(s) (optional)

Attachments	Type
DB_GENED WRIT [2012-13] ASMEAS MEAS2 DET.pdf	Attachment
CIV460 GenEd Assessment.docx	Attachment

Planned Future Improvements

Indicate and describe any planned improvements. If new funds are required for planned improvements, you will also need to complete the next tab, "Mission Critical Budget Request".

Do assessment results
indicate any critical
improvements that must
be made in the next fiscal
year? **No**

Description of Planned
Improvements

Mission-Critical Budget Request

Assessment Outcome Title

Outcome Title **Written Documents**

Mission-Critical Budget Request

Title of Budget Request

Details of Budget Request

Are capital funds **No**
required?

Total Amount of Operating
Funds Requested

Salaries: \$

Duration:

Benefits: \$

Duration:

Professional
Development: \$

Duration:

Computer Hardware: \$

Duration:

Computer Software: \$

Duration:

Other Operating Funds: \$

Duration:

[^ Back to top](#)