Embry-Riddle Aeronautical University » Academic Division » Worldwide Campus » WW_College of Aeronautics » WW_Department of Aeronautics Graduate Studies

WW_MS Aviation and Aerospace Sustainability

2019-2020 Assessment Cycle

Assessment Plan

Measures

WW MS Aviation and Aerospace Sustainability Outcome Set

Outcome

Outcome: PO 1 - Aviation and Aerospace Environmental and Business Based Solutions Critique the commonalities of environmental and business based solutions for global aviation and aerospace organizations.

▼ Measure: AASI 600 & AASI 630 End of Course Survey Program level Indirect - Survey

Details/Description: End of Course survey questions will be used to

> obtain student feedback to obtain appropriate information that supports that conditions were present that enabled the student to be capable of

successfully accomplishing this outcome.

Criterion for Success: Custom questions added in an attempt to

determine student impressions on their achivement

of the outcome and will utilize Likert scoring. Feedback will inform need for further assessment to potentially review courses or program direction.

75% of students will agree

Timeframe of Data

Collection:

2019-2020 Assessment Cycle

Key/Responsible

Program Chair

Personnel:

Supporting Attachments:

©EOC Eval - PO01 Custom Survey Question (Adobe Acrobat Document)

▼ Measure: AASI 600 Group Project Assignment Program level Direct - Student Artifact

Details/Description: AASI 600 requires students to complete a research-

based group project, consisting of 2-3 students per group, based on overall class size. The project is

focused on evaluating Corporate Social

Responsibility and Sustainability reporting for an industry relevant company over a five year period. The student submissions in activities 8.4 (Group Research Report) and the accompanying 8.5

(Sustainability Scorecard) will be used to assess PO

1. Student submissions are scored using an interactive research project rubric. Ideally, AASI 600 is taken as the first course or early in the degree program and comparative analysis of scores will be completed in AASI 691 in later assessment

cycles.

Criterion for Success: The criteria for success will be that the concepts

examined in the student projects are identifiable with the specifi program outcome. 80% of students will achieve an average score of 80% or better on

the group research project.

Timeframe of Data

Collection:

Key/Responsible

Personnel:

2019-2020 Assessment Cycle

Program Chair and Instructors

Supporting Attachments:

AASI 600 Group Project Sustainability Scorecard Analysis (Word Document (Open XML))

▼ Measure: AASI 630 9.2 Sustainable Stickies Written Assignment Program level Direct - Student Artifact

Details/Description: In AASI 630, Activity 9.2, students are required to

examine the concept of supersonic aircraft from

historical and future perspectives. The goal is to evaluate if supersonic aircraft are viable business based and environmental solutions for future air travel. Student submissions will be used to assess this PO via a Sustainable Stickies rubric (attached).

Criterion for Success: 80% of the students will score 80% or higher on the

assignment

Timeframe of Data

Collection:

2019-2020 Assessment Cycle

Key/Responsible

Personnel:

Instructors and Program Chairs

Supporting Attachments:

Outcome: PO 4 - Aviation and Aerospace Sustainable Solutions

Develop leading edge aviation and aerospace sustainable solutions.

▼ **Measure:** AASI 620 & 625 End of Course Surveys

Program level Indirect - Survey

Details/Description: End of Course survey questions will be used to

obtain student feedback to obtain appropriate information that supports that conditions were present that enabled the student to be capable of

successfully accomplishing this outcome.

Criterion for Success: Custom questions added in attempt to determine

student impressions on their achievement of the outcome and will use Likert scoring. Feedback will inform need for further assessment to potentially revise courses or program direction. 75% of

students will agree.

Timeframe of Data 2019-2020 Assessment Cycle



Collection:

Key/Responsible

Program Chair

Personnel:

Supporting Attachments:

EOC Eval - PO04 Custom Question (Adobe Acrobat Document)

▼ Measure: AASI 620 Group Project Sustainable Techniques Portfolio Program level Direct - Portfolio

Details/Description: In AASI 620, 9.2, the student groups will submit a

collection of group assignments completed during the course and reflection on LO and PO relevance. The group collaboration on the six different group assignments create the basis of a Sustainable Techniques Portfolio and the students will

articulate the fit for the techniques as sustainable solutions. Group submissions will be used to assess this PO and a portfolio rubric will be used for

grading.

Criterion for Success: 80% of the students will score 80% or higher on the

assignment

Timeframe of Data

Collection:

Key/Responsible

Personnel:

2019-2020 Assessment Cycle

Instructors and Program Chair

Supporting Attachments:

M AASI 620 9.2 Portfolio Rubric (Word Document (Open XML))

▼ **Measure:** AASI 625 Written Assignment Program level Direct - Student Artifact

Details/Description: AASI 625, Activity 5.5, requires students to examine

the actions of nations and regional coalitions of

nations that have already implemented emissions trading programs applicable to airline operations nationally and/or regionally. Students will determine whether the programs are related to ICAO emissions trading programs, geographical applicability and weigh the solution feasibility. Student submissions will be used to assess this PO and a written assignment rubric will be used for

grading.

Criterion for Success: 80% of the students will score 80% or higher on the

assignment

Timeframe of Data

Collection:

Key/Responsible

Personnel:

2019-2020 Assessment Cycle

Instructors and Program Chair

Supporting Attachments:

M AASI 625 5.5 Written Assignment Rubric (Word Document (Open XML))

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