

Department of Mechanical & Aerospace Engineering University of Florida

Aerospace Engineering Academic Learning Compacts

Purpose of Academic Learning Compacts

In addition to the requirements imposed by ABET accreditation, all students in the State of Florida University System must be given an opportunity to achieve the program's self identified Academic Learning Compact. Academic Learning Compacts identify the skills students should acquire if they follow their major's prescribed course of study. These skills, known collectively as Student Learning Outcomes, describe the core learning expectations that UF is required to assess for each baccalaureate degree program.

For detailed Information on the Academic Learning Compact see <http://www.registrar.ufl.edu/catalog/>.

The direct link for the BS Aerospace Engineering Academic Learning Compacts is:

<http://www.registrar.ufl.edu/catalog/programs/majors/alc/aerospace.html>

Examples of Assessment Results for Academic Learning Compacts

Student Learning Outcome #1

Apply knowledge of mathematics, science and engineering principles to aerospace engineering problems

Description of Direct Assessment (Evaluated in EAS4700):

Chapter 2 of the final design report, entitled "Flight through the Atmosphere" covers atmospheric models, ascent trajectories through the atmosphere, insertion into low earth orbit, transfer orbits, reentry trajectories, and guidance and control. This chapter is used to evaluate the students' application of mathematical and engineering principles to meeting the design specifications by the detailed technical analyses they carried out.

Student Performance Results:

Complete Mastery:	20%
Acceptable Performance:	80%
Below Expectations:	0%

(Note: Complete Mastery corresponds to a grade of A- or higher; Acceptable Performance corresponds to a grade of C- to B+, Below Expectations corresponds to a grade of D+ or lower)

Student Learning Outcome #2

Design and conduct aerospace engineering experiments, analyzing and interpreting data

Description of Direct Assessment (Evaluated in EML4304C):

Students designed an experiment using the Water Rocket experimental apparatus to determine the feasibility of using water rockets as JATO pods to reduce the take-off distance of a small aircraft. The outcome was assessed using the grade on the lab report.

Student Performance Results:

Complete Mastery:	61%
Acceptable Performance:	39%
Below Expectations:	0%