

# ASEN 4057 Aerospace Software

Material is preliminary and subject to change

Instructor: Alexandra LeMoine ([Alexandra.LeMoine@colorado.edu](mailto:Alexandra.LeMoine@colorado.edu))

Lecture: Monday/Wednesday 2:55-3:45pm Aero N100 (COPILOT)

Lab: Monday/Wednesday 3:55-4:45pm Aero N100 (COPILOT)

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Canvas Webpage: <https://canvas.colorado.edu/courses/916516>

Private Repos:

## Course Objectives

Aerospace engineers may go through their entire undergraduate education curriculum and have only a single formal course in computing, which often does not even cover formal programming, much less any details of the underlying processes by which the computing is accomplished. This is true despite an increasing reliance on software by academia and industry for simulation and operational purposes. The purpose of this course is an attempt to fill that void.

## Course Learning Goals

The goal of this course is to provide aerospace engineers with an overview of key software and hardware computing concepts utilized in academia and industry.



tablet/smartphone genre - as these are not currently used for solving traditional aerospace computational problems. Although the concepts of this class could be applicable and useful for such related applications.

### Course Format

The course will follow a blend of traditional lectures with lab/computing assignments. There will be two lectures and two lab periods per week. There will be 4 individual programming assignments along with 4

## Final Project

A final project will replace a final exam and will be assigned toward the end of the semester before the Final Week. The final project will consist of improving performance of an existing serial code and parallelization. Students may work in pairs of their own choosing for the final project.

## CU BOULDER POLICIES

### CLASSROOM BEHAVIOR

