

Engineering Design Midyear Project 2013-14

There is no midyear examination for this course; instead, a midyear project is required. Like a midyear exam, it is worth 10% of your final course grade, and it will show up separately on your first semester transcript. You may select any one of three Standard Projects, described in detail in separate documents available on the class web site:

1. CAD Vehicle Design
2. Disposable Camera Dissection and Mechanical Analysis
3. Electro-mechanical Musical Instrument

Alternatively, you may propose your own project. If you do, your proposal should be very specific about what you intend to accomplish and how to assess whether you accomplished your goals or not. It should be similar in detail to the Standard Project descriptions including the points per Milestone; feel free to cut and paste.

The CAD Vehicle Design project is an individual project. You may partner with one other person for the other projects, in which case each partner will receive 70% of the points earned for the project as a whole.

The due dates for the project are:

| | | |
|-----------|----------------------------------|--|
| 3 PM | Fri, Jan 3 | Project Selection or Proposal Delivered |
| 3 PM | A: Wed, Jan 8 F: Thu, Jan 9 | Project Plan, Proposals Approved |
| 8 PM | Fri, Jan 10 | Progress Report #1 |
| 8 PM | Wed, Jan 15 | Progress Report #2 |
| 8 PM | A: Fri, Jan 18 F: Tue, Jan 21 | Progress Report #3 |
| High Noon | A: Tue, Jan 21 F: Thu, Jan 23 | Project Due, including Final Progress Report |

Project and partner selections are final as of Friday, Jan 4 at the end of class and cannot be changed after that.

Scoring for the project is as follows:

| | | |
|-----------------------|------------|------------|
| Project Plan | 10 | 10 points |
| Progress Reports (4): | 5 each | 20 |
| Project Deliverables: | up to 115+ | <u>115</u> |
| Total possible: | | 145 |

All submissions will be via Canvas and your shared Engineering folder. The score for each item will be reduced by 10% if no more than 24 hours late, 30% for 48 hours, and 70% for 72 hours, with no credit after that. There is a 5% bonus for final project delivery for each full school day (regardless of dropped blocks) in advance of the due date, up to a maximum of 20%. The timestamp shown on Canvas when you Submit is what counts. Don't wait until the last minute – a computer or other last-minute problem is NOT an excuse for late delivery. Percentages are of the actual grade that would have been received; for example, what would have been a 90 if

delivered on time is an 81 if delivered less than 24 hours late; the same project delivered 24 hours early is a 99.

The project should take between 8 and 15 hours to complete. You will have all class periods beginning Thursday, Jan 2 (and the scheduled Exam block, of course) to work on your project, except for an optional EE Review and a required EE unit quiz as shown on the class web site.

All the projects have a way of submitting interim Milestones for early evaluation up through Wednesday, 1/15. You should include these in your Project Plan with estimated completion dates, but there are no official due dates for any of these, and hence no late delivery penalties or early delivery bonuses. We will do our best to review and score a single submission within 48 hours of when you uploaded it. If it did not receive full credit, you can resubmit one time within 2 school days of receiving your score. Clearly, it is to your advantage to make interim deliveries as early and complete as possible!

Academic Integrity

You (and optionally your partner) must complete all work for this project yourself. You may use whatever non-human, published and publically available resources you wish on the web, in manuals, books, etc. as long as you cite any ideas, designs, circuits, programs, or text you use explicitly WHERE YOU USE IT. This could mean in comments in your program code, text blocks on a circuit or CAD drawing, or an explanatory document submitted along with your project. A list of “works cited” NOT sufficient by itself. You may interview human experts in person, by phone, or electronically as long as you record detailed notes of the interview (an online chat transcript, or record of email exchanges is sufficient) that includes the date and time of the interview, the place or medium, and the full legal name and contact information of the interviewee. Note that most “homework help” sites on the web do not meet this last criterion. Additional information on Academic Integrity specific to each project is provided in the Project document.

Progress Reports

Four Progress Reports on specific dates are required. For the first Progress Report ONLY, you may resubmit it within 24 hours of when you receive feedback for additional credit if desired.

This report is essentially an update of the information on your Project Plan, identifying how the Plan has changed and why since the last report. It also contains a snapshot of information from your Project Log, which you should still be keeping online as usual in your shared Google folder. Your Progress Reports may be audited against your Project Log entries. See the Assignments on Canvas for more details.