The deliverables for the Senior Design project will include

**A Portfolio (of the following items)**

**Product Design Specification**

Submit a copy of your complete PDS

**Wholesale Cost Estimation**

Determine and document a wholesale cost for your design. This is the cost to produce the device and must include costs for each individual fabricated component, the wholesale costs for purchased components (preferably with documentation) and assembly costs for the device.

**Exploded Assembly with BOM**

This is a technical drawing showing all components and including a Bill of Materials (BOM) on the drawing sheet. Every component of the system must be labeled on the drawing with a ballooned leader and included in the BOM.

**Production Image(s) of Device/System**

Photorealistic computer images showing controls, access panels, etc.

**FMEA Analysis for system**

This should take the form of FMEA spreadsheets which examine the system's function and critical componentry

**User/Service Manual**

Safe operation and servicing (if appropriate) of the device.

**Prototype**

A final “proof of concept” prototype showing operation is realistic and feasible.
An Oral Presentation

Each senior design project team is expected to make an oral presentation to the instructor, the rest of the design class, and any visitors. This oral presentation should be professional and utilize good technical presentation techniques. Audio-visual equipment will be available for student use by prior notification of the faculty advisor. The presentation will be limited to 20 minutes which includes a question and answer session. The design team is responsible to stay within this constraint. The presentation should be structured to include all aspects of the project so that an individual with no prior knowledge of the project (but with an engineering background) can understand its entire scope as well as the results. The presentation will be graded based upon four equal categories.

1) Technical content.
2) Structure of talk, i.e. introduction, main body, conclusion, timing.
3) Quality of presentation (metric below)
4) Knowledge of subject area; ability to answer questions.

Participation in the Mechanical Engineering Department Research and Design Symposium

Each design team is required to participate in the end of semester symposium sponsored by the Mechanical Engineering department. Winning an award in the symposium will positively affect the team’s grade, but failing to win an award will not negatively impact the team’s grade.