

SIE 498B -- Senior Capstone

Instructor: Robert (Bob) Lepore

Office: Engineering 103

Phone: 626-4276

Email: rglepore@email.arizona.edu

Office Hours: MWF 10AM – 12PM or by appointment.

Designation: Required Course in Engineering Management

Catalog Description:

Students will use material taught in the SIE curriculum to address a customer's needs and help a real-world client design or improve a system. Students will use a system design process, discover system requirements, identify project and technical risks, and develop a project plan and schedule. Students will communicate orally and in writing. A series of design reviews will monitor project goals, schedule, risk and progress. Continuation of SIE 498A.

Prerequisite: Senior Standing

Course Objectives:

The Senior Project Paper and Presentation is the culmination of the SIE 498B class. The Paper includes a WORD document and any other associated files (e.g. Excel, Arena, Microsoft Project, etc.) that you use for the Senior Project. The Presentation is a PowerPoint file that you will use to illustrate the knowledge and skills gained from the Engineering Management curriculum to address and solve a problem(s) of interest to industry. Industry in this context can range from the largest employers (e.g. Raytheon, Honeywell) to small companies or even individuals (e.g. UA Faculty members).

There is no specified number of pages for the Senior Project Paper. The paper needs to introduce the topic and background, detail the solution approach, and include appendices as necessary to support the solution methodology. A concise to the point paper is preferred. Schedule an appointment with your Senior Project advisor no later than week 10 of the semester to review your Project and receive any feedback to incorporate you're your final paper. Upload the final paper into the D2L drop box on or before the due date posted for the drop box. There are sample Senior Project Papers for your review in ENG 111. The PowerPoint slides need to be tailored to fit into the 20 minute time limit for your presentation. You will have 20

minutes to present followed by 10 minutes of questions and answers. Because of the limited presentation time, focus on the topics most relevant to the solution of the problem. In addition to PowerPoint, you may wish to have Excel, Project, Arena and other Programs on the Taskbar for your presentation. Links to the internet are OK if they don't require inordinate amounts of time to display.

There is no need to produce paper documents for the Senior Project. However, you may wish to bring one copy for discussion purposes during the presentation. Your industry mentor is invited to attend your presentation.

Class schedule:

The student works independently on the project at whatever rate is needed to complete the project.