

# **Capstone Welding Design I**

# **WELDENG 4901**

## **Credit Hours:**

2.00

#### **Course Levels:**

Undergraduate (1000-5000 level)

#### **Course Components:**

Lecture

### **Course Description:**

Group design projects building on all aspects of Welding Engineering.

### Prerequisites and Co-requisites:

Prereq: Sr standing in WeldEng-BS major, or permission of instructor.

#### Course Goals / Objectives:

- Learn how research a topic proposed by a sponsor and prepare a research proposal
- Communicate with the research sponsor, course coordinator, and faculty advisor in the development of the proposal
- Perform initial investigations and testing to meet the objectives of the proposal

#### **Course Topics:**

- Course introduction and guidelines for proposal development
- Groups communicate with sponsors and advisors to understand problem definition and critical issues
- Groups develop draft proposal
- Draft proposal presentations
- Revise and finalize proposal
- Final proposal presentations
- Testing and analysis from proposal

#### **Designation:**

Required