I SY E 662, Design and Human Disability and Aging

1. **Credits**: 3
2. **Contact Hours**: 3.2
3. **Textbook and Materials**: No textbook, handouts in class

**a. Other Supplemental Materials**: N/A

- **Specific Course Information**:
  
  **a. Brief description of the content of the course (Course Catalog Description)**: Design of products for persons with physical, sensory or cognitive impairments is covered as well as the design of standard mass market products. Interdisciplinary teams explore specific disabilities, then design a standard mass market product in competition with each other.

  **b. Pre-requisites or Co-requisites**: Jr st or cons inst

  **c. This is a Selected Elective course**.

- **Specific Goals for the Course**:

  **a. Course Outcomes**:

  1. Building a solid understanding of - the different types of disabilities that people experience, - the tools they currently use, and the problems they face due to current design.

  2. Developing an understanding of the laws and regulations related to accessible design.

  3. Learning the strategies that can be used to build mass market products that: - are attractive, practical, and profitable - address as many accessibility issues as is commercially practical - and comply with regulations.

  4. Developing skills in putting these strategies into practice.
• **ABET Student Learning Outcomes:**

(a) Ability to apply mathematics, science and engineering principles.
(b) Ability to design and conduct experiments, analyze and interpret data.
(c) Ability to design a system, component, or process to meet desired needs.
(d) Ability to function on multidisciplinary teams.
(e) Ability to identify, formulate and solve engineering problems.
(f) Understanding of professional and ethical responsibility.
(g) Ability to communicate effectively.
(h) The broad education necessary to understand the impact of engineering solutions in a global and societal context.
(i) Recognition of the need for and an ability to engage in life-long learning.
(j) Knowledge of contemporary issues.
(k) Ability to use the techniques, skills and modern engineering tools necessary for engineering practice.

• **Brief List of Topics to be Covered:**


• **Additional Information:** N/A