

ME/ID4833 ATD – Special Topics: Rehabilitation and Assistive Technology Design

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Objective: To provide an inter-professional learning experience for UNG physical therapy (PT) students and Georgia Tech (GT) design and engineering students as they collaborate to solve real-world clinical problems with assistive technology

Assessment:

- 1) Prepare and deliver class lecture to PT students (15%)
- 2) Human subject research ethics training (10%)
- 3) Week 1-3 fabrication project and associated deliverables (15%)
- 4) Design specification document (10%)
- 4) Interim Report and Presentation (10%)
- 5) Final Design Report and Presentation (30%)
- 6) Class Participation/Peer Reviews (10%)

Outline of Course Content

Introduction to disability and rehabilitation, including physical therapy
Ethics of human subject R&D
Overview of assistive and rehabilitation technology
Product stakeholders, stakeholder needs, design constraints, design criteria
Developing marketing strategies and technical design specifications
Concept generation, evaluation and selection
Intellectual Property
Prototyping
Prototype evaluation and revision

CLASS SCHEDULE for Summer 2017

M W F 9:30-12:15

Friday June 16-Monday June 19: class held at University of North Georgia for design activities
(students able to stay will be provided dorm rooms at no cost to the student)