Understanding the language of rehabilitation and engineering is critical for the engineering student's introduction to the field of assistive technology or the rehabilitation professor who wants to better appreciate the science of a device that improves their patients' lives everyday.

Design sketch, model making.

After providing a brief introduction, the cause describes the models for assistant technology (AT) service delivery, the design tools and principles of universal design, and various technology-transfer mechanisms, models, and principles. The cause then explains the process for creating assistive device standards, followed by a review of seating biomechanics and soft tissue biomechanics. Subsequent classes examine design and service delivery principles of wheelchairs and scooters, functional electrical stimulation and its applications, wheelchair-accessible transportation legislation, and the applications of robotics in medical rehabilitation. The cause proceeds to discuss prosthetic and orthotic design and usage, visual and hearing impairment, Web-related AT, and augmentative and alternative communication (AAC) technology. It concludes with an introduction to adaptive sports and recreation.
六、教學進度 (Syllabi)

2010/9/14  Clinical Practice of Rehabilitation Engineering
2010/9/21  Universal Design
2010/9/28  Technology Transfer
2010/10/5  Standards for Assistive Technology
2010/10/12  Seating Biomechanics and Systems
2010/10/19  Tissue Integrity Management
2010/10/26  Wheelchairs
2010/11/2  Functional Electrical Stimulation
2010/11/9  Mid-Exam
2010/11/16  Wheelchair Transportation Safety
2010/11/23  Rehabilitation Robotics
2010/11/30  Major Limb Prosthetic Devices
2010/12/7  Orthotic Devices
2010/12/14  Aids for People with Low Vision and Blindness
2010/12/21  Maximizing Participation for People with Hearing Loss
2010/12/28  Telecommunications, Computers, and Web Accessibility
2011/1/4  Augmentative and Alternative Communication Technology
2011/1/11  Final-Exam

七、評量方式 (Evaluation)

presentation, homework, and exam.

八、講義地址 (http://)

九、教育目標

3. 培養學生對設計領域知識、理論與方法具備終生學習的態度與涵養