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| REQUIRED COURSES |

**DHD440 - Introduction to Assistive Technology: Principles and Practice (3 credit hours, Online)**

An examination of best clinical practices and state-of-the-art Assistive Technology devices, including Augmentative Communication, Cognitive Technologies, Computer Access, Environmental Modification, Job Accommodation, Seating and Wheeled Mobility, Funding, and Outcomes Measurement.

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| ONLINE ELECTIVES |

**DHD555 - Assistive Technology Consideration, Assessment and Documentation in the PreK-12 Educational Setting (3 credit hours)** An in-depth introduction to the delivery of AT devices and services in the preK-12 educational setting. Students use a case study project to apply the steps of consideration, assessment and documentation. Topics include data design, assessment protocols, and the legal mandates of IDEA. A basic understanding of AT devices is a prerequisite as the emphasis in this course is the service delivery process.

**DHD556 - Seating and Positioning for Wheelchair Mobility (1 credit hour)**

A focus on seating and positioning assessment for functional use of a manual or powered wheelchair for children and adults with physical disabilities. Emphasis is placed on identifying the appropriate technology to match consumer needs. Course content includes an in depth look at assessment procedures, seating and positioning technology selection and applicable research.

**DHD557 - Manual Wheelchair Technology (1 credit hour)**

An in depth look at the styles and components of manual wheelchairs designed for children and adults with physical disabilities. Content includes information on frame materials and features to guide the manual wheelchair selection process, performance adjustments, transportation standards and applicable research. Emphasis is placed on identifying the appropriate technology to match consumer needs.

**DHD558 - Powered Wheelchair Technology (1 credit hour)**

An in depth look at the styles and features of powered wheelchairs designed for children and adults with physical disabilities. Emphasis is placed on identifying the appropriate technology to match consumer needs. Content includes information on assessment, access methods, powered seat functions, electronics, programming and applicable research.

**DHD590 – Field Experience in Disability & Human Development (1 credit hour, Online)**

Students demonstrate their knowledge and skill set regarding the provision of quality assistive technology services. Students may report on direct services they provide at their place of employment, or may report on their observations of direct services by service providers in their geographic area.

**DHD594 - Assistive Technology for Individuals Who Are Blind or Visually Impaired (1 credit hour)**

An introductory overview of assistive technology for people who are blind or visually impaired. Topics include screen magnification software, screen reading software, OCR software, braille technologies, low vision devices, smart phone and tablet accessibility features, and other specialized technologies designed for people with visual impairments.

**DHD594 - Assistive Technology for Infants and Toddlers (2 credit hours)**

A course designed for therapists, educators and service coordinators involved in the assessment and training of assistive technology for children birth to 3 years. Covered topics include assessment and intervention, EI policies and procedures, and an overview of aids and strategies for augmentative communication, adapted play and computer access.

**DHD594 – Assistive Technology Tools for Education (2 credit hours)**

Examination of a range of assistive technology tools and strategies that support participation and learning in an educational setting across major content areas, including low tech through high tech interventions and the AT decision-making process/framework.

**DHD594 - AAC for Individuals with Autism Spectrum Disorders (2 credit hours)**

Content addresses how AAC can meet the unique communication needs of individuals with autism spectrum disorders with emphasis on evidence-based modalities and intervention strategies. Topics include supports for social interaction and participation, assessment, and a range of intervention approaches including PECS, visual supports, aided language stimulation, and LAMP.

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| ONLINE ELECTIVES continued |

**DHD594 – Environmental Modification (1 credit hour)**

A comprehensive overview of accessibility issues common in private residences and public spaces. National, state, and local codes are used as a framework for addressing the barriers, and accessible design and assistive technology solutions are investigated

**DHD594 - Ergonomics & Safety for Workers with Disabilities** **(1 credit hour)**

Individuals with disabilities can often achieve employment through the application of sound ergonomic principles, and where necessary, low-to-high-tech job accommodation devices. The course covers the application of these strategies in office and manufacturing environments, as well as the unique issues that individuals with disabilities face regarding emergency evacuation from worksites.

**DHD594 - Intro to Microcontrollers in Assistive Technology (1 credit hour)**

In the spirit of DIY projects, this class introduces students to the use of entry-level electronics utilizing microcontrollers such as the Arduino board. Students are guided in constructing projects with an Assistive Technology focus. Project options include making an adaptive switch to operate a computer game, creating an alternate input control for accessing the computer and/or building a basic EADL/ECU control. No previous experience with microcontrollers required only a proficiency with computer use.

**DHD594 - Mobile Technology and Computers: Built-in Accessibility Features (1 credit hour)**

This course explores the built-in accessibility features that are available in Macintosh, iOS, Android and Windows PC operating systems.

**DHD594 - Supporting AAC in Educational Settings (3 credit hours)**

This course focuses on instruction and intervention for students who use augmentative and alternative communication systems (AAC) in the K-12 setting. Content emphasizes strategies that are classroom based and can be used in inclusive settings to aid the students’ language and educational growth. Topics include assessment, literacy, social relationships, collaboration, and academic adaptations.

**DHD594 – Technology to Support Universal Design for Learning (1 credit hour)**

An introduction to the framework of Universal Design for Learning (UDL). Technology will be explored through the lens of the three components of UDL: multiple means of representation, multiple means of expression and multiple means of engagement.  Participants will explore technologies to support all learners for ages K-12.

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| LAB-BASED ELECTIVES taught at UIC |

**DHD441 - Adaptive Equipment Design and Fabrication (3 credit hours, at UIC))**

A course covering design theories, idea generation, fabrication machines, hand tool techniques, and appropriate materials that relate to custom design and custom fabrication of low-tech adaptive equipment. Students work in the ATU shop during practice sessions, and in completing an individual project based on actual consumer request.

**DHD551 - Computers, Communication and Controls in Rehabilitation Technology (3 credit hours)**

A course exploring different methods for evaluating access methods and controls used to operate computers, communication devices and powered wheelchairs. Instruction also addresses device features and integration factors. Hands-on Labs.

**DHD554 - Augmentative Communication Assessment (3 credit hours)**

A course covering a range of augmentative communication assessment strategies and evaluation materials utilizing case examples for discussion of specific approaches for different ages, disabilities, and settings.

Students work directly with a wide range of speech-generating devices to conduct feature analyses of systems and to gain hands-on experience using a variety of access methods, rate enhancement techniques and vocabulary expansion tools. Hands-on Labs.

**Interested in the UIC Assistive Technology Certificate Program?**

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To register for individual courses, visit the Office of Continuing Education website at www.oce.uic.edu