



Course Description

EEX4761 | Assistive Technology and Communication Systems for Students with Autism Spectrum Disorders | 3.00 credits

The student will learn about assistive technology (AT) strategies including its use for improving the communication and functional capabilities of students with autism spectrum disorders. The student will learn about instructional and assistive technology devices used to support students with autism spectrum disorders. Six hours of clinical experience are required. Corequisite: EEX4094.

Course Competencies

Competency 1: The student will recognize the role of assistive technology in P-12 settings for students with autism spectrum disorder by:

1. Discussing the legal and ethical requirements that ensure the selection, acquisition, and use of assistive technology devices
2. Utilizing basic and specialized terminology in identifying assistive technology devices and services
3. Describing appropriate assessment practices as related to the use of assistive technology
4. Recognizing the use of assistive technology to organize, acquire, and communicate information
5. Recognizing the continuum of no technology, low technology, and high technology items that are defined as assistive technology devices
6. Explaining possible barriers in using instructional and assistive technology
7. Assessing the benefits of using assistive technology devices across the continuum of educational settings and for improving independent functioning skills
8. Discussing the impact of assistive technology in improving cognition, visual and sensory input, and motor skills

Competency 2: The student will demonstrate knowledge of assistive technology devices used to improve the functional capabilities of students with autism spectrum disorders by:

1. Identifying assistive technology devices (e.g., speech-generating devices) used to enhance expressive and receptive language
2. Selecting and implementing assistive technology devices to facilitate communication through the use of augmentative and alternative communication
3. Utilizing auxiliary aids that may be used by students to benefit from learning
4. Recognizing no technology, low technology, and high technology tools and strategies for assisting students in making appropriate transitions and engaging in acceptable social interaction and behavior
5. Demonstrating appropriate adaptations of assistive technology devices that improve functional limitations associated with the disability
6. Planning for the effective use of assistive technology devices appropriate for transitioning into post-secondary settings and employment

Competency 3: The student will demonstrate an understanding of planning instruction with the use of assistive technology for students with autism spectrum disorders by:

1. Identifying and utilizing assessment measures to evaluate the individual needs of students to provide appropriate and applicable instructional and assistive technology devices and services
2. Exploring, evaluating, and using assistive technology resources including educational software, applications, tools, and associated documentation
3. Selecting, designing, and using technology materials and resources to educate students who are non-speakers and/or have limited communication
4. Designing multiple approaches for incorporating and implementing instructional and assistive technology devices into the educational program across settings and disciplines
5. Differentiating how to incorporate the use of no technology, low technology, and high technology devices and strategies for delivering instruction

6. Integrating instructional software and Internet resources into instructional planning
7. Summarizing the importance of using instructional and assistive technology devices for instructional purpose for teachers, other professionals, and parents/families involved in developing the Individual Education Plan

Competency 4: The student will identify the need for continuing professional development in assistive technology knowledge and skills to remain informed about emerging technologies for students with autism spectrum disorders by:

1. Describing the different educational resources that are available as research tools for learning about assistive technology devices and services to include the Internet, magazines, libraries, search engines, and applications
2. Locating local, state, and national resources and associations related to assistive and instructional technologies
3. Recognizing and summarizing scholarly journals that provide research -based practices related to the use of instructional and assistive technology devices
4. Evaluating and reflecting on professional practice to make informed decisions regarding the use of assistive technology in support of student learning, language, and communication development
5. Explaining the need for professional development in acquiring knowledge about technological advancement for improving teaching practices
6. Engaging in professional development activities (e.g, seminars, webinars, workshops) that develop awareness of and familiarities with a range of instructional and assistive technology devices

Competency 5: The student will identify the availability of resources and locate technology funding by:

1. Justifying the need for assistive technology funding for instructional purposes
2. Analyzing the financial cost for a range of assistive technology devices
3. Identifying federal, state, and local resources that provide funding for the acquisition and use of assistive technology devices and services
4. Describing federal, state, and local resources that provide funding for the acquisition and use of assistive technology devices and services

Learning Outcomes:

- Communicate effectively using listening, speaking, reading, and writing skills
- Solve problems using critical and creative thinking and scientific reasoning
- Use computer and emerging technologies effectively