EEX4764 Instructional and Assistive Technology in Special Education

EEX4764  Instructional and Assistive Technology in Special Education

Course Description: The student will acquire a basic foundation of the use of technology in special education. The student will learn about the educational and assistive technologies (AT) used to support K-12 learners with low and high incidence disabilities and select the best technology applications for the classroom. (3 hr. lecture)

Prerequisite: EEX3071

Course Competency

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<th>Learning Outcomes</th>
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**Competency 1:** The student will Learn about the historical, legal, and developmental implications of assistive and instructional technologies by:

1. a. Summarizing the Individuals with Disabilities Education Act definition of Assistive Technology and its implications on classroom instruction and the Individual Education Plan process.
b. Identifying functional limitations related to vision, hearing, mobility, cognitive, and health related impairments.
c. Describing barriers to technology, and common functional adaptations, and exhibiting sensitivity in terms of language and behavior.
d. Demonstrating knowledge of equity, ethics, legal, and human issues concerning the use of assistive technology.
e. Identifying and applying policies and procedures for the safe, appropriate, and ethical use of technologies.
f. Describing current instructional principles, research, and appropriate assessment practices as related to the use of assistive technology resources in the curriculum.
g. Comparing and contrasting the major historical and current trends and legal issues pertinent to the use of assistive technology in education of students with disabilities.
h. Discussing the impact of technology on all stages of development in individuals with special needs.

**Competency 2:** The student will Apply knowledge of assistive technology that can be used to extend the learning capabilities of students with special needs by:

1. a. Identifying a variety of no technology, low technology, and high technology hardware and software for students based on their individual needs and abilities.
b. Exploring, evaluating, and using assistive technology resources including applications, tools, educational software, and associated documentation.
c. Describing the process of selection and implementation of augmentative or assistive technology devices.
d. Demonstrating familiarity with the range of assistive technology devices and services.
e. Selecting, designing, and utilizing current and emerging assistive technologies that enable students to participate in high-quality communication interactions and achieve their educational goals.
f. Identifying augmentative and assistive communication strategies which utilize technology in the home, school, and community environment.
g. Planning instruction in the use of alternative and augmentative communication systems which utilize technology.
h. Incorporating and implementing instructional and assistive technology into the educational program.
i. Identifying placement of devices and positioning of the individual to optimize the use of assistive technology.
j. Selecting appropriate instructional procedures and technology for teaching adaptive life skills based on observation, ecological assessments, family interviews, and other student information.
k. Identifying skills and technology necessary for students with disabilities to engage in self-determination and self-advocacy.
**Competency 3:** The student will Use instructional technology to enable and empower students with special needs by:

1. a. Utilizing an interdisciplinary approach to the selection, implementation, and use of technologies to meet the educational and transitional needs of students with disabilities.
b. Integrating instructional software and Internet resources into the instructional planning process.
c. Matching characteristics of individuals with special needs with technology products and software.
d. Evaluating, selecting, developing, and adopting technology-based curriculum materials that respond to the cognitive, physical, and emotional characteristics and cultural, linguistic, and gender differences of the learner.
e. Recognizing the use of technology in the assessment, diagnosis, and evaluation of individuals with special needs.
f. Selecting appropriate instructional procedures for teaching adaptive life skills based on observations, ecological assessments, family interviews, and other student information.
g. Identifying methods for evaluating and documenting student progress in acquiring, generalizing, and maintaining skills related to interpersonal interactions and participation in activities across settings (e.g., at school at home, in the community).

4. Information Literacy

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**Competency 4:** The student will Become cognizant of technology funding sources, barriers, and potential solutions by:

1. a. Developing an awareness of cost, source, and range of assistive technology configurations and technology resources available for all students including those with disabilities and from culturally and linguistically diverse backgrounds.
b. Identifying funding sources for assistive and instructional technology devices and services.
c. Locating local, state, and national resources and associations related to assistive and instructional technologies.
d. Analyzing the cost and benefits of specific technologies.

5. Cultural / Global Perspective

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**Competency 5:** The student will Identify the need for continual growth in assistive technology knowledge and skills to stay abreast of current and emerging technologies by:

1. a. Describing the different resources that are available as research tools for future professions, including the Internet, magazines, Oasis, libraries, and search engines.
b. Explaining how to use technology resources to engage in ongoing professional development and lifelong learning.

4. Information Literacy

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**Competency 6:** The student will Demonstrate research-based instruction by:

1. FEAPs
   a. Organizing, allocating, and managing the resources of time, space, and attention.
   b. Integrating current information and communication technologies.
   c. Utilizing current and emerging assistive technologies that enable students to participate in high-quality communication interactions and achieve their educational goals.
   d. Applying varied instructional strategies and resources, including appropriate technology, to provide comprehensible instruction and to teach for student understanding.

1. Communication