WILLIAM PATERSON UNIVERSITY
College of Education
Department of Special Education and Counseling

COURSE OUTLINE

Preparing Inquiring Educators for Diverse Settings: Developing Knowledge, Applications, Dispositions

1. Title of Course and Course Number:
   SPC 3130 - Adaptive and Assistive Technologies in the Inclusive Classroom   Credits: 3

2. Description of Course: This lab-based course explores technologies that enhance the education experience for all learners in the 21st century classroom. Technologies and strategies, based on Universal Design for Learning, will be addressed in order to equitably support student learning according to the diversity and ability of each learner. Students will explore various no, low, mid and high tech assistive technology tools designed to assist learners in achieving academic goals and objectives. The integration of assistive technologies in lesson plans and assessments will be a main focus, as well as the integration of augmentative/alternative communication systems for learners with limited functional communication skills.

3. Course Prerequisites:
   SPC 255
   Acceptance into Dual K-5/TSD or Dual K-12/TSD program
   GPA in Education Courses: 3.0
   GPA Overall: 2.75

4. Course Objectives:
   1. identify various assistive technologies and augmentative/alternative communication systems for students with disabilities;
   2. gain knowledge of terms, legislation, copyright law, and teaching strategies in the field of educational and assistive technology;
   3. identify impacts of cultural, language, gender, psychosocial, and socioeconomic characteristics on utilization of educational and assistive technology;
   4. infuse educational and assistive technology, as well as Web 2.0 solutions in academic learning units so diverse learners can achieve the academic goals set forth in the New Jersey CCCS and/or the Individualized Education Plan;
   5. integrate technology into lesson plans that are based on Universal Design for Learning;
   6. identify various funding resources for the implementation of assistive technology in school and home based settings;
   7. describe various assessment tools and strategies needed for the development of a comprehensive assistive technology evaluation; and
   8. explain professional dispositions required of educators and their role in the integration of technology in the 21st century classroom.
5. **Student Learning Outcomes:**

**UCC Technology-Intensive SLOs:**
The teacher-candidate will be able to:
1. Demonstrate a sound understanding of technology concepts, systems and operations.
2. Use a variety of technologies to access, evaluate, collect, and manage data, information and datasets.
3. Understand the impact of technology on themselves, their culture, their environment and their society.
4. Practice legal and ethical behaviors in the context of technology.

**Technology-Intensive SLOs:** The teacher candidate will be able to…

1. demonstrate an understanding of relationships between students’ physical, cognitive, communication, psychosocial, cultural/racial and socioeconomic characteristics and their need for educational and adaptive/assistive technologies to facilitate or enhance educational performance as demonstrated by the development of an educational and assistive technology website that incorporates multiple areas of the technology continuum;

2. demonstrate an understanding of formal assessments which involves the implementation of various no, low, mid and high tech adaptations and accommodations for students experiencing academic difficulties in the classroom as evidenced by reviewing data and developing an assistive technology report;

3. demonstrate an understanding of the integration of technology in a lesson plan based on The Principles of Universal Design for Learning by utilizing interactive whiteboard technology; and

4. demonstrate an understanding of developing a low-tech augmentative/alternative communication systems as well as teaching techniques for effective use for students with limited functional communication skills.

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<th>Student Learning Outcomes</th>
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<th>CCCS</th>
<th>NJPT S</th>
<th>COE 20 Competencies</th>
<th>UCC Program SLOs</th>
<th>UCC Technology-Intensive SLOs</th>
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<td>1. Collaborative Group Website</td>
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<td>4, 8, 12, 19, 20</td>
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<td>2. Develop an Assistive Technology Report</td>
<td>2, 3, 4, 6</td>
<td>All</td>
<td>2, 3, 4, 7</td>
<td>8, 19, 20</td>
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<td>3. Interactive Whiteboard Lesson and Presentation</td>
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<td>All</td>
<td>3, 4, 6, 7</td>
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<td>4. Augmentative/Alternative Communication Board with Script Builder</td>
<td>3, 5, 6</td>
<td>All</td>
<td>2, 3, 7, 8</td>
<td>1, 17, 20</td>
<td>7, 8</td>
<td>1, 2, 3</td>
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6. **Topical Outline of the Course Content**

1. Hands-on experiences with assistive technology tools and software for students experiencing academic difficulties.
2. Address the physical, cognitive, communication, psychosocial, cultural/racial and socioeconomic characteristics of diverse learners and explore its impact on the integration of technology.
3. Teaching strategies and application of education and assistive technology for diverse learners.
4. Identify the importance of web literacy, copyright law, Chafee’s Amendment and Creative Commons.
5. Address various assistive technology assessment tools and strategies.
6. Discuss and explore the impact of Universal Design for Learning in the 21st century classroom.
7. Explore various no-tech, low-tech, mid-tech, and high-tech augmentative/alternative communication tools.
9. Design a low-tech communication system using picture/symbol communication boards.
10. Explore various Web 2.0 tools and interactive whiteboard technologies to meet the needs of diverse learners.
11. Discuss the importance of professional dispositions and ethical behaviors required when integrating technology in the classroom environment.

7. **Guidelines/Suggestions for Methods**

**Teaching Methods and Student Learning Activities:**

1. Lecture, discussion, note taking
2. Hands-on laboratory activities
3. Videos
4. Develop collaborative website
5. Case studies
6. On-line research
7. Blackboard [Bb] technology to augment lectures
8. Quizzes and examinations

8. **Guidelines/Suggestions for Methods of Student Evaluation:**

1. Develop a website to demonstrate an understanding of how characteristics of student’s cognitive, academic, social, emotional, cultural/racial, and socioeconomic aspects impact the selection of assistive technology tools. The website will include the latest hardware and software tools, as well as various funding sources. (SLO #1)

2. Research and analyze data from educational and clinical reports, IEPs, and intake forms to determine the most appropriate technology tools based on a student’s abilities and needs. (SLO #1, #2)

3. Create a cross-curricular lesson plan using interactive whiteboard technology that incorporates multiple means of representation that appeals to all learners. Teacher candidates will present their lesson for analysis and constructive feedback from instructor and peers. (SLO #3)
4. Create a picture communication system that incorporates a student’s cognitive, academic, social, emotional, and environmental factors when selecting appropriate symbols and vocabulary; develop a ‘script builder’ to demonstrate an understanding of teaching strategies for basic conversation skills such as turn-taking and initiating conversations. (SLO #1, #2, #4)

9. **Suggested Readings, Text, Objects of Study:**


10. **Bibliography of Supportive Texts and Other Materials:**


Resources.


Websites:


11. **Preparer’s Name and Date:** Denise Stone March 31, 2009

12. **Department Approval Date:** March 2009

13. **Reviser’s Name and Date:** Christine Besko-Maughan, January 15, 2011

14. **Department Revision Approval Date:** January, 2011