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

COURSE OF STUDY  

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

A. Course Title:  SPC 566 - Adaptive and Assistive Technologies in the Inclusive Classroom  
                Credits:  3  

B. Course Description:  This lab-based course explores technologies that enhance the educational experience for all learners in the 21st century classroom. Technologies and strategies, based on The Principles of 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. 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.  

C. Prerequisites:  

Acceptances into the TSD Endorsement Program, TSD Alternate Route Program, or Post Baccalaureate K-5/TSD  
SPC 555, SPC 560, SPC 564  

D. 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 Individual 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 in the development of a comprehensive assistive technology report for students with diverse needs; and
8. explain professional dispositions required of educators and their role in the integration of technology in the 21st century classroom.

E. **Student Learning Outcomes:** 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 education 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 integrating technology in a lesson plan based on Universal Design for Learning by utilizing interactive whiteboard technology;

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; and

5. demonstrate an understanding of legislation pertaining to assistive technology and Universal Design for Learning and identify various tools educators can implement in the classroom to address the needs of all learners.

<table>
<thead>
<tr>
<th>Student Learning Outcomes</th>
<th>CEC</th>
<th>NJ CCCS</th>
<th>NJPTS</th>
<th>COE 20 Competencies</th>
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</thead>
<tbody>
<tr>
<td>1. Collaborative Group Website</td>
<td>1, 2, 3, 4, 9</td>
<td>All</td>
<td>2, 3, 4, 7, 11</td>
<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>
<td>3, 4, 5</td>
<td>All</td>
<td>3, 4, 6, 7</td>
<td>1, 3, 6, 12, 17, 20</td>
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<td>4. Augmentative/Alternative Communication Board with</td>
<td>3, 5, 6</td>
<td>All</td>
<td>2, 3, 7, 8</td>
<td>1, 17, 20</td>
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F. **Course Content**

1. Hands-on experiences with assistive technology tools and software for students experiencing academic difficulties.
2. Identify terminology specific to education and assistive technology, with attention to special education terminology associated with laws, the IEP process, and inclusive educational placement.
3. Address the physical, cognitive, communication, psychosocial, cultural/racial and socioeconomic characteristics of diverse learners and explore its impact on the integration of technology.
4. Teaching strategies and application of educational and assistive technology for diverse learners.
5. Identify the importance of web literacy, copyright law, Chafee’s Amendment and Creative Commons.
6. Address various assistive technology assessment tools and strategies.
7. Discuss and explore the impact of The Principles of Universal Design for Learning in the 21st century classroom.
8. 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.

G. **Teaching / Learning Methods:**

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

H. **Performance-Based Assessment:**

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 to appeal 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)

5. Produce a reference manual for educators regarding the legislation pertaining to assistive technology and Universal Design for Learning (UDL), copyright law, and Creative Commons, as well as useful Web 2.0 sites that meet the criteria of UDL. (SLO #1,5)

I. Suggested Text:


J. Bibliography


Websites:


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

L. Department Approval Date: March 2009

M. Reviser’s Name and Date: Christine Besko-Maughan, December 17, 2010

N. Department Revision approval Date: January 2011