EDSE/EDIT 524: Assistive Technology for Individuals with Learning Disabilities

Schedule

Class Time: 4:30 – 7:10  
Class sessions: March 3 – April 14  
Final class: May 5

Instructor

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Course Description

524/EDSE 524 Assistive Technology for Individuals with Learning Disabilities (2:2:0). Focuses on strategies and techniques for implementing software and other technologies in the lives of individuals with learning disabilities from ages 3 to adult.  
Students have the opportunity to develop and implement plans for assistive technology.  
A practicum is required as part of this course. Knowledge and awareness components of this course may be delivered via distance education.

Course Objectives

At the completion of the course students will:
1. define major issues and concerns for individuals with learning disabilities.  
2. explore techniques for self-empowerment and self-advocacy.  
3. identify tools and strategies that can be used in the academic curriculum.  
4. identify tools and strategies that can be used in the workplace.  
5. teach and monitor the use of assistive technology software and hardware appropriate for students with learning problems.  
6. analyze student needs, plan lessons, and write summary reports (including goals and objectives).
Relationship of Course to Program Goals and Professional Organizations

This course is part of the George Mason University, Graduate School of Education, and Special Education Program for teacher licensure in the commonwealth of Virginia in the special education areas of Emotional Disturbance and Learning Disabilities. This program complies with the standards for teacher licensure established by the Council for Exceptional Children, the major special education professional organization. As such the learning objectives for this course cover many of the competencies for curriculum and methods for teaching individuals with emotional disturbances and learning disabilities kindergarten through grade 12.

Required Text

Internet site: Learning Disabilities and Assistive Technologies
http://www.gatfl.org/ldguide

National Assistive Technology Research Institute
http://natri.uky.edu/natinfo/mission.html

LD Online
http://www.ldonline.com
CLASS 1 Introduction
Wed., March 3
- Course and syllabus overview
- Concepts and issues for individuals with learning disabilities
- Empowerment through learning strategies and technology

CLASS 2 Reading Skills
Wed., March 10
- Defining and analyzing the reading process for individuals with learning disabilities
- Software exploration
  - Reading Programs- Balanced Literacy
  - Phonics Programs- Earobics, Lexia, Simon Sounds it Out, WordMaker
  - Electronic Books- Start-to-Finish
  - Text- to-Speech Software- Readplease or textHelp

CLASS 3 Reading Skills Continued
Wed., March 17
- Adapting Books: Creating Electronic Books
- OCR: Kurzweil and Wynn
- Adaptations in the academic curriculum
- Adaptations in the workplace

CLASS 4 Writing Skills
Wed., March 24
- Defining and analyzing the writing process for individuals with learning disabilities
- Exploration of writing software
  - Talking Word Processors- Write:OutLoud, IntelliTalk II
  - Word Predication Software- Co:Writer, Text Help
  - Devices- AlphaSmart 3000, Dana, Franklin Language Master
  - Writing/ Organizing Software- Inspiration/ Kidspiration, DraftBuilder
- Graphics Based Word Processors
- Adaptations in the academic curriculum
- Adaptations in the workplace

CLASS 5 Speech Recognition Technology
Wed., March 31
♦ Writing by Dictation – a guide for students
♦ Hands-on with Speech Recognition

CLASS 6  Math Skills
Wed., April 7
♦ Defining and analyzing basic math operations and problem-solving for individuals with learning disabilities
♦ Exploration of supportive software and talking calculator
  Math for the Real World
  Hot Dog Stand
  IntelliMathics

CLASS 7  Common Tools for Adapting and Enhancing the Curriculum
Wed., April 14 and Multimedia Project Guidelines
♦ Exploration of hand held devices such as spell checkers, Palm Pilots, etc.
♦ Defining and analyzing organizational skills for individuals with learning disabilities
♦ Exploration of electronic information organizers
♦ Exploration of computer supported study strategies
♦ Adaptations in the academic curriculum
♦ Adaptations in the workplace
  - MS Word
  - MS PowerPoint
♦ How to complete a successful multimedia project in a classroom setting
♦ Share Resource Notebooks

Class 8  Share Practicum Experiences
Wed., May 5
ASSIGNMENT 1:  Reading Reflections (25 points)

Complete the reading reflections for each of the class sessions. Each assignment will be worth 5 points for a total of 25 points.

Reflection 1: Due March 10
Reflection 2: Due March 17
Reflection 3: Due March 24
Reflection 4: Due March 31
Reflection 5: Due April 4

ASSIGNMENT 2:  Resource Notebook (35 points)

Compile resources of your choice that would be useful for teaching students with learning disabilities. Create an electronic or paper resource notebook that includes:

- Strategies with AT infused (Min. of 20) .....................................................15
- Websites & description (Min. of 20) ............................................................5
- Devices & description (Min. of 20) ..............................................................5
- Software & description (Min. of 20) .............................................................5
- Other & description (Min. of 20) .................................................................5

Notebook Due:  April 14, 2004

ASSIGNMENT 3:  Learning Disabilities Implementation Project (40 points)

You are charged with locating appropriate assistive technologies, learning how to use them, and implementing and evaluating them for a user with learning disabilities. You will follow “Things to Consider” handout steps A-D and address all points listed. You may work with a person that you know, work with an AT Specialist in a local school system or work with a student with learning disabilities in your school system.

A presentation of your project (using PowerPoint) should include:

- **Step A.** Background information on the user & areas of concern ........5
- **Step B.** Strategies, materials, equipment and technology tools already used to address the concerns. .................................................................5
- **Step C.** Assistive Technology Recommendations/ Accommodations/Device selection & rationale .........................................................5
- **Step D.** Assistive Technology Evaluation Criteria ...............................5
Assistive Technology Implementation Plan (last 2 pages of “Things to Consider” handout) .............................................................. …5

Presentation style .................................................................10

You should also be prepared to distribute to each member of the class a one-page project summary & device literature...........................................5

*Product Due: Wednesday, May 5  (class presentation time)*

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**Grading Scale**

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<tr>
<th>Grading Scale</th>
<th>Grade</th>
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<tbody>
<tr>
<td>100-90</td>
<td>A</td>
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<tr>
<td>89-80</td>
<td>B</td>
</tr>
<tr>
<td>79-70</td>
<td>C</td>
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<tr>
<td>69-below</td>
<td>F</td>
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