“Preparing Professionals for Changing Educational Contexts”

Department of Special Education
College of Education, University of Nevada, Las Vegas

I. Prefix and Number: ESP 755A–1001

II. Title: Medically Related Aspects of Disability

III. Credit: 3

IV. Semester: Spring, 2011

V. Instructor: Dr. Sherri Strawser

VI. Class Location: CEB 214
February 10 – February 26, 2011
Thursdays: 7 - 9:30, Fridays 5 - 9:30, Saturdays 8:00 – 5:00

VII. Office Hours: W, 2 – 4 p.m.; F, 3 – 5, appointment preferred

VIII. Office, Telephone, Email: CEB 122, 702-895-1109,
preferred email through WebCampus course site or strawser@unlv.nevada.edu

IX. Prerequisites: ESP 701 or equivalent

X. Course description: Course emphasizes medical bases of typical and atypical development for individuals across the lifespan. Physical systems and disabilities; etiologies, symptoms, and psychosocial implications of disabilities and medical conditions; and interventions, treatment strategies, resources, transition/vocational implications are addressed.

CEC Knowledge and Skill Base Standards Addressed:
Common Core (CC), Individualized General Curriculum (GC), Individualized Independence Curriculum (IC), Learning Disabilities (LD), Intellectual disabilities / Developmental Disabilities (MR)

2 Development and Characteristics of Learners
3 Individual Learning Differences
5 Learning Environments and Social Interactions
7 Instructional Planning
8 Assessment
9 Professional and Ethical Practice
10 Collaboration

XI. Course Objectives:

Knowledge
Upon completion of this course, the student will have acquired knowledge related to:

Knowledge: INTASC Standards

| CC2K7 | Effects of various medications on individuals with exceptional learning needs. | 1.08, 2.01, 2.05 |
| CC3K1 | Effects an exceptional condition(s) can have on an individual's life. | 3.02, 3.06, 10.10 |
Methods to remain current regarding research-validated practice.  
Concerns of families of individuals with exceptional learning needs and strategies to help address these concerns.  
Impact of sensory impairments, physical and health disabilities on individuals, families, and society.  
Etiologies and medical aspects of conditions affecting individuals with disabilities.  
Common etiologies and the impact of sensory disabilities on learning and experience.  
Types and transmission routes of infectious disease.  
Complications and implications of medical support services.  
Impact of disabilities may have on auditory and information processing skills.  
Strategies for crisis prevention and intervention.  
Specialized health care interventions for individuals with physical and health disabilities in educational settings.  
Sources of unique services, networks, and organizations for individuals with disabilities.  
Organizations and publications relevant to individuals with disabilities.  
Roles of professional groups and referral agencies in identifying, assessing, and providing services to individuals with disabilities.  
Neurobiological and medical factors that may impact the learning of individuals with learning disabilities.  
Impact of co-existing conditions and exceptionalities on individuals with learning disabilities.  
Professional organizations and sources of information relevant to the field of learning disabilities.  
Services, networks, and organizations that provide support across the life span for individuals with learning disabilities.  
Medical aspects of intellectual disabilities and their implications for learning.  
Complications and implications of medical support services.  
Organizations and publications in the field of mental retardation/developmental disabilities.  
Services, networks, and organizations for individuals with mental retardation/developmental disabilities.

**Performance (Skills)**

Upon completion of this course, the student will be able to:

- Use verbal, nonverbal, and written language effectively.  
- Access information on exceptionalities.  
- Use group problem solving skills to develop, implement, and evaluate collaborative activities.  
- Select, design, and use medical materials, and resources required to educate individuals whose disabilities interfere with communications.  
- Interpret sensory and physical information to create or adapt appropriate learning plans.  
- Types and importance of information concerning individuals with disabilities available from families and public agencies.  
- Seek information regarding protocols, procedural guidelines, and policies designed to assist individuals with disabilities as they participate in school and community-based activities.  
- Use local community, and state and provincial resources to assist in programming with individuals with disabilities.  
- Collaborate with families of and service providers to individuals who are chronically or terminally ill.

**INTASC Standards**

- 10.05
- 1.10, 4.12, 9.03, 9.06
- 10.05, 10.07
Disposition(s)
Upon completion of the course, the student will display the following dispositions.

**INTASC Standards**

| CC9K3       | Continuum of lifelong professional development. | 9.03, 9.06 |
| CC9S5       | Demonstrate commitment to developing the highest education and quality-of-life potential of individuals with exceptional learning needs. | 9.06, 10.06 |
| CC9S6       | Demonstrate sensitivity for the culture, language, religion, gender, disability, socio-economic status, and sexual orientation of individuals. | 9.02, 9.07 |
| IC9S2       | Ethical responsibility to advocate for appropriate services for individuals with disabilities. |

XII. Texts, readings, and instructional resources

**Required Text / Readings**


Additional materials will be posted on WebCampus site.

**Supplemental sources:**


**Internet Resources:**
The Association for Retarded Citizens (ARC) http://www.thearc.org
National Rehabilitation Information Center http://www.naric.com/
The Association for Severe Handicaps (TASH) http://www.tash.org
Council for Exceptional Children http://www.cec.sped.org
Disability information and resources http://www.makoa.org/
Environmental health perspectives http://www.ehponline.org/
Disability rights and advocacy http://www.draginc.com/
American Assoc. of People with Disabilities http://www.aapd.com/site/c.pvl1kNWJqE/b.5406299/k.FBBC/Spotlight.htm

XIII. Assignments, evaluation procedures, and grading policy

**Course Assignments**

Students must be able to access the course WebCampus site for assignments, announcements, additional materials, and other resources.

1. **Actively participate in class discussion and activities.** Because of the intense schedule of the course, attendance and participation is essential. Class discussion is encouraged and expected. However, in rare cases, points will be deducted for individuals who excessively contribute personal narratives that do not add clarification to the discussion. No absences are allowed.

   During the class meetings, students are expected to respond to activities or points for discussion provided by the instructor (in groups or individually). Some assignments will encompass material not covered in class lecture because of limited time and extensive content. If content assignments are done as group activities during the course meeting times, each person in the group will earn equivalent grades on those activities, assuming "equivalent" participation in the activity.

   Course participation points will be based on timely submission of all assignments and participation. (40 pts.)

2. **Readings and content evaluation.**

   Students will be responsible for completing assigned readings and the associated assignments.

**Chapter Questions:** This assignment comes from research that found the level of students’ understanding of content material is reflected by the questions they ask about it. Each student
will submit two questions developed from his/her reading of the text chapters assigned for each of the weeks. The questions must be:

• generated from the reading for the week,

• from 2 different topics or assigned chapters for the week (not two on the same topic or from the same chapter),

• integrative and thought provoking in nature (i.e., NOT questions that would be a multiple-choice, item-completion, or true-false question that you might create for a class exam, but like a comprehension strategy known as authentic questions). Examples of appropriate questions will be shared for information.

• focused in some way on educational applications or interventions related to the knowledge of medical issues gained from reading, or how you might integrate the information from your reading of the chapters into your teaching or work with persons with disabilities.

It is acceptable if the questions are not in a traditional "question" format, but are reflections or hypothetical questions that come to mind as you read the material in the chapters. You may incorporate your personal experiences or observations, as well.

The questions are to be submitted in a printed document at the beginning of class on Saturdays.

Each Chapter Question is worth 10 points (= 20 per week) and will be graded with a posted rubric. (60 pts.)

3. "Participation in online discussions and postings:"

Completion of assigned readings also enables students to participate meaningfully in the online discussion assignment.

Each week, students are expected to log on to WebCampus and participate in the on-line discussion of a Discussion Question posted by the instructor. The Discussion Question will be from the readings or PowerPoint materials on WebCampus.

• Students will work in groups to discuss the question within their own group in the "Discussions" section on WebCampus set up by the instructor. The discussion groups are private among members of that group (i.e., it cannot be viewed by anyone other than the instructor). Open, professional, conversation is encouraged.

• Groups should discuss the issue in their own WebCampus Discussion site, and come to an agreement about what content their final response to the Discussion Question should contain (i.e., from ALL members’ contributions).

• After agreeing on a final response, one member of the group must post the final response on the “Main” section of the Discussion site. This Main section is accessible to everyone so all students will have a chance to view the group’s response and respond/react to it.

• After the final responses are posted, all students are expected to view the other groups’ responses, and post a reply to each one (except the posting of their own group).
For credit, you must
• fully participate in your own discussion group, and
• post an individual reply to the final response postings of all other groups.

Participation in your own discussion group to develop a final response is worth a maximum of 24 points for each discussion question posted (based on contribution). Students must post a reply to the final postings of all the other groups. For these, thoughtful replies or responses (i.e., more than “Hey, good ideas”) are expected. These replies are worth 5 points per discussion question.

A rubric / grading form for the online discussion assignment is on the WebCampus site to clarify discussion expectations.

For the first question, the final group response must be posted no later than Tuesday, February, 15. For the last 2 questions, groups will have access to the questions at the beginning of the week. Final group responses should be posted by Friday at class time. Individual student replies to the final group responses should be posted by the following Sunday. (87 pts.)

4. Terminology:
Each student will be required to make a card set for the terminology used in the study of the medical and neurological components of disability. A list of terms is attached to the syllabus. The criterion for mastery is correct identification of 40 with no more than 3 errors in 5 minutes. A time to “pass the cards” is to be scheduled individually with the instructor. Students may take as many trials to reach criterion as necessary. (40 pts.)

5. Final project: A Health Fair:
Each student will work with a group to research a specific disability-related health topic and create a Health Fair presentation. On the final day of class, we will have a “Health Fair” during which each group will share their project presentations with the class. They are all presented at the same time, and members of each group will rotate among presentations. Therefore, each member of the project group should be knowledgeable about the topic content and be able to talk about it. The task of “presenting” must not be given to one member of the group (see rubric).
Working in small groups, students will select one of the following health education topics for their presentation:

- nutrition,
- dental care,
- exercise / physical fitness,
- street drugs education,
- smoking,
- alcohol effects

The group also will choose a focus for their presentation based on a type of disability (e.g., intellectual disabilities, autism, cerebral palsy, etc.) and grade level (e.g., elementary or secondary). For example, the Health Fair presentation might be about learning about dental care for elementary-age students with intellectual disabilities.

The Health Fair project presentation must include:

- your group's learning objectives;
- visual materials;
- an overview of basic information on the topic (in language appropriate for the chosen student group);
- discussion of effects on the body systems (in language appropriate for the chosen student group);
- clarification of myths or misconceptions (in language appropriate for the chosen student group);
- suggested community resources, books, articles, and other instructional resources for the chosen student group;
- instructional tips / strategies for teachers or related-services personnel;
- suggestions for parents;
- a complete list of resources and references that were accessed in preparation of your presentation; and
- an evaluation form for your presentation. It will be completed during the presentation time by each student attending your Health Fair (i.e., all of you) and turned in to the instructor at the end of the session.

The Health Fair project will be evaluated according to the attached rubric. All group participants will receive the same grade unless there are reported difficulties in group participation and/or work commitment. Each group will submit a compiled report to the instructor containing all of the above elements. An electronic version is preferred so materials can be shared with the other groups to provide resources for your future use.

(100 pts.)

**Evaluation procedures:**

<table>
<thead>
<tr>
<th>Activities</th>
<th>Evaluation</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actively participate in class discussion and activities; class attendance</td>
<td>Student’s record of participation.</td>
<td>40</td>
</tr>
<tr>
<td>Readings - chapter questions</td>
<td>Accuracy of content; instructor’s subjective judgment of the thoroughness and thoughtfulness of questions posed</td>
<td>60</td>
</tr>
</tbody>
</table>
Online discussions and postings | Student's record of participation; thoroughness of discussion contributions and responses. | 87
---|---|---
Terminology acquisition | Achieving the passing criteria | 40
Final project: Health Fair project and report | Inclusion and quality of the required components as evaluated by the project rubric. | 100

**Grading Policy and Administrative Requirements:**

<table>
<thead>
<tr>
<th></th>
<th>Total Points</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>309 – 327</td>
<td>94-100%</td>
</tr>
<tr>
<td>A−</td>
<td>293 – 308</td>
<td>90-93%</td>
</tr>
<tr>
<td>B +</td>
<td>283 – 292</td>
<td>87-89%</td>
</tr>
<tr>
<td>B</td>
<td>273 – 282</td>
<td>84-86%</td>
</tr>
<tr>
<td>B−</td>
<td>260 – 272</td>
<td>80-83%</td>
</tr>
<tr>
<td>C +</td>
<td>250 – 259</td>
<td>77-79%</td>
</tr>
<tr>
<td>C</td>
<td>241 – 249</td>
<td>74-76%</td>
</tr>
<tr>
<td>C−</td>
<td>227 – 240</td>
<td>70-73%</td>
</tr>
<tr>
<td>D</td>
<td>211 – 226</td>
<td>65-69%</td>
</tr>
<tr>
<td>F</td>
<td>0 – 210</td>
<td>0-64%</td>
</tr>
</tbody>
</table>

**Grading Policy:** Assignments will be evaluated on both content and language usage. Assignments completed outside of class must be typed or word-processed (10 – 12 point font and double-spaced) with correct person-first language, writing mechanics, and APA style (where appropriate). Points will be deducted for errors in any of these areas. Points for each evaluation requirement will be assigned and grades will be based on the percentage earned of the total points shown in the chart.

**Administrative Requirements:**
According to University policy, a grade of "Incomplete" will be given only if the student has a) completed at least 75% of the course, b) earned a grade of a “B” or better at the time the Incomplete" grade is requested, and c) requested an "Incomplete" grade for "reason(s) beyond the student's control and acceptable to the instructor...."

The student must take all responsibility for completion of the course assignments. The student and instructor must negotiate the due date for completion of the course assignments. If course requirements are not completed by the agreed-up date, the earned grade at the time of the “Incomplete” will be submitted. There is no grading penalty for completing the course within this period.

In this course, group assignments may not be completed after the course is over, unless the reason for the "Incomplete" grade is deemed extraordinary.

**XIV. Instructional methods**
A variety of instructional methods will be utilized in this course. Included among them are lecture, discussion, large and small group activities, and independent content-application activities.
### XV. Course outline

<table>
<thead>
<tr>
<th>Dates</th>
<th>Topics</th>
<th>Readings</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 10 – 12</td>
<td>Introduction, course overview, definitions, terminology, prenatal, perinatal issues, nutrition, vision, hearing, Brain 101</td>
<td>Chapters: 1 – 9, 10 – 13, 31 Terminology</td>
</tr>
<tr>
<td>February 17 – 19</td>
<td>Patterns in development and disability; disabilities related to problems of development, inborn errors and illnesses; AD/HD; TBI; dual diagnosis (disabilities and behavioral/psychiatric disorders)</td>
<td>Chapters: 15 – 21, 24, 26 – 30, 32</td>
</tr>
<tr>
<td>February 24 – 26</td>
<td>Disabilities related to external threats to development; Autism Spectrum Disorders, ethical dilemmas, services/interventions</td>
<td>Chapters: 5 (review), 23, 39, 33 – 37 (skim)</td>
</tr>
</tbody>
</table>

**group Health Fair presentations: 2/26**
TERMINOLOGY FOR CARD SET

a- or an- prefix meaning “without; loss of ”

abduction moving part of the body away from the midline (as in moving an arm from the side up toward the shoulder, while parallel to the torso)

adduction moving part of the body toward the midline (as in moving an arm from the shoulder level down toward the torso, while parallel to the torso)

agnosia general term for an input disorder; failure to recognize familiar objects or stimuli perceived by the senses

anomia impairment in the ability to name objects and to understand the nominal significance of words

anterior In front of or the front part of a structure

aphasia general term for language disorders caused by CNS dysfunction, but not those caused by cognitive or sensory disorders, or paralysis of muscles essential for speech

apraxia general term for an output disorder; inability to carry out (on request) a complex or skilled movement, not due to paralysis or deficits in understanding

ataxia unbalanced or poorly coordinated gait or posture (usually resulting from abnormalities in the cerebellum)

athetosis term referring to slow, writhing, involuntary movements, especially in the hands

atonic absence of normal muscle tone

autoimmune relating to, or caused by a reaction in which one’s own immune system antibodies attack other parts of the body

automatisms automatic fine motor movements (e.g., buttoning or unbuttoning clothing) that are part of a type of seizure

autonomic nervous system the part of the nervous system that regulates certain automatic functions of the body (e.g., heart rate, sweating, respiration)

bilateral both sides of the body

cephal- prefix meaning “pertaining to the head”
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>central nervous system (CNS)</td>
<td>the portion of the nervous system consisting of the brain and spinal cord; primarily involved in voluntary movement and thought processes</td>
</tr>
<tr>
<td>chorea</td>
<td>involuntary, jerky, purposeless movements of the extremities</td>
</tr>
<tr>
<td>concussion</td>
<td>a condition resulting from the effects of a hard blow to the head; resulting in disturbance of cerebral function, transient loss of consciousness, and possible permanent damage</td>
</tr>
<tr>
<td>congenital</td>
<td>originating prior to birth</td>
</tr>
<tr>
<td>contra-</td>
<td>prefix meaning “against”</td>
</tr>
<tr>
<td>contusion</td>
<td>structural damage limited to the surface layer of the brain (like a bruise) that is caused by a blow to the head</td>
</tr>
<tr>
<td>cranial</td>
<td>pertaining to the skull</td>
</tr>
<tr>
<td>distal</td>
<td>pertaining to the part farthest from the center (midline) or trunk</td>
</tr>
<tr>
<td>dys-</td>
<td>prefix meaning “difficult; abnormal, impaired”</td>
</tr>
<tr>
<td>dysarthria</td>
<td>disturbance in expressive speech because of impairment of the muscles used in speaking</td>
</tr>
<tr>
<td>echolalia</td>
<td>person is able to repeat heard language but does not understand the words heard or produce spontaneous, appropriate language</td>
</tr>
<tr>
<td>encephal-</td>
<td>prefix meaning “of, pertaining to, or affecting the brain”</td>
</tr>
<tr>
<td>epidemiology</td>
<td>the study of factors determining the frequency and distribution of diseases in specific populations (e.g., an outbreak of food poisoning)</td>
</tr>
<tr>
<td>extension</td>
<td>to straighten a part of the body at a joint</td>
</tr>
<tr>
<td>flexion</td>
<td>refers to the bending of a part of the body at a joint</td>
</tr>
<tr>
<td>hemi-</td>
<td>prefixes meaning “half”</td>
</tr>
<tr>
<td>hyper-</td>
<td>prefix meaning “in excess”</td>
</tr>
<tr>
<td>hypo-</td>
<td>prefix meaning “under; beneath; less than normal”</td>
</tr>
<tr>
<td>immunology</td>
<td>a science dealing with the phenomena and causes of immunity (i.e., the ability to resist a particular disease)</td>
</tr>
<tr>
<td><strong>incidence</strong></td>
<td>the rate of occurrence of new cases of a disorder in a population</td>
</tr>
<tr>
<td><strong>inferior</strong></td>
<td>below (relative position of body)</td>
</tr>
<tr>
<td><strong>insult</strong></td>
<td>an attack or injury to the body or one of its parts causing damage – may be physical, metabolic, immunological, or infectious</td>
</tr>
<tr>
<td><strong>-kinesis</strong></td>
<td>suffix meaning “motion”</td>
</tr>
<tr>
<td><strong>lateral</strong></td>
<td>to the side; away from the mid-line (relative position of body)</td>
</tr>
<tr>
<td><strong>lesion</strong></td>
<td>an abnormal change in structure or loss of function of an organ or body part due to injury or disease</td>
</tr>
<tr>
<td><strong>mal-</strong></td>
<td>prefix meaning “bad, abnormal, or inadequate”</td>
</tr>
<tr>
<td><strong>medial</strong></td>
<td>toward the center or mid-line (relative position of body)</td>
</tr>
<tr>
<td><strong>meninges</strong></td>
<td>the three membranes covering the brain and spinal cord</td>
</tr>
<tr>
<td><strong>morbidity</strong></td>
<td>medical complication of an illness, procedure, or operation</td>
</tr>
<tr>
<td><strong>orthopedic</strong></td>
<td>relating to bones or joints</td>
</tr>
<tr>
<td><strong>paresis</strong></td>
<td>partial weakness, short of paralysis (which is total)</td>
</tr>
<tr>
<td><strong>peripheral nervous system</strong></td>
<td>the parts of the nervous system that are outside the brain and spinal cord</td>
</tr>
<tr>
<td><strong>plasticity</strong></td>
<td>the ability of an organ or part of an organ to take over the function of another damaged organ</td>
</tr>
<tr>
<td><strong>-plegia</strong></td>
<td>suffix meaning “paralysis”</td>
</tr>
<tr>
<td><strong>posterior</strong></td>
<td>in back of or the back part of a structure</td>
</tr>
<tr>
<td><strong>prevalence</strong></td>
<td>the percentage of a population that is affected with a particular disorder at a given time</td>
</tr>
<tr>
<td><strong>prone</strong></td>
<td>lying face downward</td>
</tr>
<tr>
<td><strong>proprioception</strong></td>
<td>ability to sense the position of the limbs and their movements, with the eyes closed</td>
</tr>
<tr>
<td><strong>proximal</strong></td>
<td>nearest to the point of attachment or center of the body</td>
</tr>
<tr>
<td><strong>pulmonary</strong></td>
<td>pertaining to the lungs</td>
</tr>
</tbody>
</table>
quadri- prefix meaning “four”
rebound a phenomenon in which as a medication dose wears off, a person’s behavior or symptoms become worse than when completely off the medication
spastic increased muscle tone so that the muscles are stiff and movements are difficult
static characterized by a lack of change (i.e., as related to a condition)
superior above (relative position of body)
supine lying face upward
syndrome a set of 2 or more signs and symptoms that have a single origin, occur together, and characterize a particular condition
systemic involving the entire body
vestibular system three ring-shaped bodies located in the inner ear that are involved in maintenance of balance and sensation of the body's movement through space