

# Minnesota State University Moorhead

## SPED 419: Biomedical Aspects

### A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: 0

OJT Hours/Week: \*.\*

Prerequisites:

This course requires the following prerequisite  
SPED 225 - Individuals with Exceptionalities

Corequisites: None

MnTC Goals: None

This course is designed to help you understand medical aspects and terminology, human anatomy and physiology, pharmacology, kinesiology, neurology, secondary health care issues, accompany specific physical and health disabilities, specific condition needs, managing personal physical care, first aid techniques, and evacuation procedures. Prerequisite substitutions require instructor consent.

**B. COURSE EFFECTIVE DATES:** 01/14/2013 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Physical/Health Disabilities
2. Learning, behavioral, and developmental impact of disability
3. Brain basics and motor development
4. Orthopedic, musculoskeletal, and sensory disorders
5. Cerebral palsy
6. Spinal cord and brain injury
7. Assistive technology
8. Orthopedic and musculoskeletal conditions
9. Early Childhood and Complex Conditions
10. Sensory disorders and classroom adaptations
11. Muscular dystrophies and spinal muscular atrophies
12. Cystic fibrosis, seizures and epilepsy
13. Asthma and diabetes
14. Infectious diseases
15. Coping with illness and health care planning
16. Universal precautions and future planning

#### **D. LEARNING OUTCOMES (General)**

1. Understand the foundations of special education services for students with physical, health, and multiple disabilities on which to base practice
2. Understand the etiology, characteristics, and classification of specific disabilities, disorders, and developmental delays and the developmental and educational implications on infants, toddlers, and young children
3. Understanding of educational definitions, issues related to identification and eligibility criteria pertaining to students with developmental disabilities; including those from culturally and linguistically diverse backgrounds
4. Understand general developmental, academic, social, and functional characteristics of students with developmental disabilities as they relate to levels of support needed
5. Understand foundational principles of human anatomy, physiology, pharmacology, kinesiology, neurology, and related medical terminology;
6. Understand aspects of medical care for premature, low birth weight, and other medically fragile infants including methods employed in the care of young children dependent on technology
7. management of student support needs, including the medical complications, implications, and secondary health care issues of tube feeding, catheterization, seizure management, and CPR

#### **E. Minnesota Transfer Curriculum Goal Area(s) and Competencies**

None

#### **F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

#### **G. SPECIAL INFORMATION**

None noted