

Southeastern Louisiana University
SPECIAL EDUCATION 684
BIOPHYSICAL DEVELOPMENT OF PRESCHOOL HANDICAPPED CHILDREN
CREDIT: 3 HOURS

PREREQUISITE: SPED 200/600 or permission of Department Head.

REQUIRED TEXT:

Batshaw, M. L. (1997). Children with DISABILITIES: A medical primer (4th ed.). Baltimore, MD: Paul H. Brookes.

COURSE DESCRIPTION:

An overview of normal development from conception to age five. Includes development of the musculoskeletal, neurological and endocrine systems and influences of genetics, diseases, trauma and chemicals on those systems. Methods of enhancing gross and fine motor and cognitive development during this period will be emphasized. Experience component required.

In order to successfully plan, develop, and implement curricula to meet the needs of diverse learners in today's world and to prepare students for the future, the College of Education and Human Development (COEHD) has identified four critical components of **The Effective Educator**: *standards-based instruction (SBI), knowledge of the learner (KL), best pedagogical practices (PP), and content knowledge (CK)*.

COURSE OBJECTIVES:

By the conclusion of this course, the student will have knowledge and understanding of:

- 1) Effects an exceptional condition(s) may have on an individual's life. (CC:2,K4) (SBI, KL, CK)
- 2) Characteristics and effects of the cultural and environmental milieu of the child and the family including cultural and linguistic diversity, socioeconomic level, abuse/neglect, and substance abuse. (CC:2, K5) (SBI, KL, CK)
- 3) Effects of various medications on the educational, cognitive, physical, social, and emotional behavior of individuals with exceptionalities. (CC:2,K6) (SBI, KL, CK)
- 4) Curricula for the development of motor, cognitive, academic, social, language, affective, career, and functional life skills for individuals with exceptional learning needs. (CC:4,K3) (SBI, PP, CK)
- 5) Instructional and remedial methods, techniques, and curriculum materials. (CC:4,K4) (SBI, PP, CK)
- 6) Techniques for modifying instructional methods and materials. (CC:4,K5) (SBI, PP, CK)
- 7) Research-based best practices for effective management of teaching and learning. (CC:5,K2) (SBI, PP, CK)

- 8) Ethical practices for confidential communication to others about individuals with exceptional learning needs. (CC:7,K5) (SBI, CK)
- 9) Importance of the teacher serving as a model for individuals with exceptional learning needs. (CC:8,K2) (SBI, PP)

LEARNER OUTCOMES:

By the conclusion of this course, the student will be able to:

- 1) Access information on various cognitive, communication, physical, cultural, social, and emotional conditions of individuals with exceptional learning needs. (CC:2,S1) (SBI, CK)
- 2) Choose and use appropriate technologies to accomplish instructional objectives and to integrate them appropriately into the instructional process. (CC:4,S4) (SBI, PP, CK)
- 3) Select, adapt, and use instructional strategies and materials according to characteristics of the learner. (CC:4,S8) (SBI, KL, PP, CK)
- 4) Sequence, implement, and evaluate individual learning objectives. (CC:4,S9) (SBI, KL, PP, CK)
- 5) Use strategies for facilitating maintenance and generalization of skills across learning environments. (CC:4,S11) (SBI, KL, PP, CK)
- 6) Create a safe, positive, and supportive learning environment in which diversities are valued. (CC:5,S1) (SBI, KL, CK)
- 7) Use strategies and techniques for facilitating the functional integration of individuals with exceptional learning needs in various settings. (CC:5,S2) (SBI, KL, PP, CK)
- 8) Design a learning environment that encourages active participation by learners in a variety of individual and group learning activities. (CC:5,S5) (SBI, KL, PP, CK)
- 9) Demonstrate proficiency in oral and written communication. (CC:8,S5) (SBI, CK)
- 10) Use copyrighted educational materials in an ethical manner. (CC:8,S8) (SBI, CK)
- 11) Practice within the CEC Code of Ethics and other standards and policies of the profession. (CC:8,S9) (SBI, CK)
- 12) Identify ethical and policy issues related to educational, social, and medical services for young children and their families. (EC:1,S2) (SBI, KL, PP, CK)
- 13) Apply theories of child development, both typical and atypical, and apply current research with emphasis on cognitive, motor, social-emotional, communication, adaptive, and aesthetic development in learning situations in family and community contexts. (EC:2,S1) (SBI, KL, PP, CK)
- 14) Identify pre-, peri-, and postnatal development and factors such as biological and environmental conditions that affect children's

- development and learning. (EC:2,S2) (SBI, KL, CK)
- 15) Identify specific disabilities, including the etiology, characteristics, and classification of common disabilities in young children, and describe specific implications for development and learning in the first years of life. (EC:2,S3) (SBI, KL, CK)
 - 16) Demonstrate understanding of (a) developmental consequences of stress and trauma, (b) protective factors and resilience, (c) the development of mental health, and (d) the importance of supportive relationships. (EC:2,S5) (SBI, KL, CK)
 - 17) Plan and implement developmentally and individually appropriate curricula and instructional practices based on knowledge of individual children, the family, the community, and curricula goals and content. (EC:4,S1) (SBI, KL, PP, CK)
 - 18) Incorporate information and strategies from multiple disciplines in the design of intervention strategies. (EC:4,S3) (SBI, KL, PP, CK)
 - 19) Select intervention curricula and methods for children with specific disabilities including motor, sensory, health, communication, social-emotional, and cognitive disabilities. (EC:4,S6) (SBI, KL, PP, CK)
 - 20) Implement developmentally and functionally appropriate individual and group activities using a variety of formats, including play, environmental routines, parent-mediated activities, small-group projects, cooperative learning, inquiry experiences, and systematic instruction. (EC:4,S7) (SBI, KL, PP, CK)
 - 21) Demonstrate appropriate use of technology, including adaptive and assistive technology. (EC:4,S9) (SBI, KL, PP, CK)
 - 22) Implement nutrition and feeding strategies for children with special needs. (EC:4,S11) (SBI, CK)
 - 23) Identify aspects of medical care for premature, low birth weight, and other medically fragile babies, including methods of care for young children dependent on technology and implications of medical conditions on child development and family resources, concerns, and priorities. (EC:4,S13) (SBI, CK)
 - 24) Make specific adaptations for the special needs of children who have unique talents, learning and developmental needs, or specific disabilities. (EC:5,S1) (SBI, KL, PP, CK)
 - 25) Select, develop, and evaluate developmentally and functionally appropriate materials, equipment, and environments. (EC:5,S3) (SBI, KL, PP, CK)
 - 26) Establish and maintain physically and psychologically safe and healthy learning environments that promote development and learning. (EC:5,S4) (SBI, KL, PP, CK)
 - 27) Provide a stimulus-rich indoor and outdoor environment that employs materials, media, and technology, including adaptive and assistive technology. (EC:5,S5) (SBI, KL, PP, CK)
 - 28) Adhere to the profession's code of ethical conduct. (EC:8,S1)

(SBI)

- 29) Serve as advocates on behalf of young children and their families, improved quality of programs and services for young children, and enhanced professional status and working conditions for early childhood special educators. (EC:8,S2) (SBI, CK)

COURSE OUTLINE:

- I. Motor Development Chapter 15,16
- A. Underlying concepts of motor development
 - B. Reflexive patterns
 - C. Gross motor
 - 1. Rudimentary movements
 - 2. Fundamental movements
 - D. Fine motor development
- II. Sensory Systems
- A. Visual
 - B. Auditory
 - C. Tactile
 - D. Vestibular
 - E. Proprioceptive
 - F. Sensory-motor integration
- III. Atypical motor development
- IV. The Brain and Nervous System Chapter 14
- A. Development of the nervous system
 - 1. Neuron
 - B. Gross anatomy
 - 1. Central nervous system
 - 2. Peripheral nervous system
 - 3. Autonomic nervous system
 - spinal nerves
 - 4. Neurotransmitters
- V. Basic organization/structure of the human body and influences of heredity Chapter 1
- A. The cell
 - 1. Division and abnormalities
 - B. Anatomical orientation
 - C. Prenatal diagnosis Chapter 2
- VI. Prenatal and infant growth Chapters 3 & 4
- A. Prenatal development
 - 1. Fetal development
 - 2. Factors affecting typical

	development	
B.	The birth process	Chapter 5
	1. Problems during labor and delivery	
C.	Changes in the first weeks of life	Chapter 6
	1. Physical changes at birth	
	2. Causes of illness in newborns	
D.	Premature and SGA infant	Chapter 7
	1. Causes	
	2. Complications	
	3. Influence of nutrition	
E.	Inborn errors	Chapter 8 & 10
VII.	Disorders	
		Chapter 14
A.	Orthopedic and neurologic	Chapters 21, 22
	1. cerebral palsy	
	2. convulsive disorders	
B.	Other health conditions	
C.	Neuromuscular	Chapter 13
VIII.	Programming and intervention	
IX.	Positioning	Chapter 10
XI.	Ethical Concerns	Chapter
		23

COURSE REQUIREMENTS:

1. Assigned readings in text and additional supplementary readings.
2. Class attendance and active class participation (10 pts).
3. Exams
 - Mid-term exam (100 pts.)
 - Final exam (100 pts.)
4. Project/hands-on activities (75 pts.)

Choose a syndrome in which you are interested that impacts the child's motor development.

- A. Complete a 1-2 page fact sheet including:
 - Description of syndrome - type, cause...
 - Effects on the child and family
 - Medical concerns
 - Precautions when teaching and working with the child

- Nutritional needs and feeding modifications
- Communication options
- Activities to facilitate motor development
(28/75 pts)

B. Hands-on Activities (47/75 points)

Complete a total of 6 hours (observation and hands-on) involving gross motor activities with infant/toddler and preschool children, preferably with this syndrome or a syndrome with similar motor characteristics.

- You **MUST** have a minimum of 3 hours hands-on experience. You will design and implement these activities at 1/2 hour time blocks.

- Observations of motor activities prior to hands-on motor experiences are highly recommended.

- **Suggested** hours include:

- 2 hours at infant/toddler level (or the level at which you are **not** teaching)
(minimum 1 hour with typical children and 1 hour with children with disabilities)
- 1 hour at preschool level (or the level at which you are teaching)
- 3 hours with 2 of the following: OT, PT, Adapted Physical Educator (include 1 hour outside the school setting)

*** Organize the project according to SETTING. (18/75 pts)

Setting: _____

Address: _____ Phone #: _____

Contact person for verification of hours: _____

Then, for each hour time block, **list** activities completed. Use the following format:

Teacher/therapist: _____

Date _____ Time beginning and ending: _____

Cumulative time: _____

Observation ____ or Hands on ____

Activities:

*** Reaction. (22/75 pts)

Complete a reaction to the entire hands-on experience (maximum 4 pgs).

- 1) Brief justification for why you observed and completed hands-on activities for your chosen child groups.
- 2) Compare and contrast the abilities of the typical children and children with disabilities at different age levels.

- 3) Discuss intervention techniques used by yourself, the therapists and teachers.
 - 4) Discuss how the motor activities done during therapy/ape can be included in the classroom daily schedule and routine activities.
 - 23) Critique the purpose and appropriateness of the activities.
- *** Include the "verification of hours sheet" (2/75 pts.)
- *** Include a reading/reference list (5/75 pts.)
5. Augmentative/Assistive Communication Device Evaluation (25 pts).
With a partner, select a device that is appropriate for young children who have a motor deficit. Research the device so that you can use it in your classroom. Prepare a fact sheet for the class and discuss your findings with the class in a 15 minute presentation. **Discuss how you would use the device in a learning center and during scheduled routine activities.**

STUDENT EVALUATION:

SLU grading scale will be used:

- 100 - 93% = A
- 92 - 85% = B
- 84 - 77% = C
- 76 - 66% = D
- 65% & below = F

TOTAL	310 pts.
A=	310-288
B=	288-263
C=	262-238
D=	237-204
F=	below 204

PROFESSIONAL STANDARDS OF BEHAVIOR:

1. Students are expected to maintain professional standards of behavior at all times when fulfilling course requirements.
2. Student behavior/classroom decorum: Free discussion, inquiry, and expression is encouraged in this class. Classroom behavior that interferes with either (a) the instructor's ability to conduct the class or (b) the ability of students to benefit from the instruction is not acceptable. Examples may include routinely entering class late or departing early; use of beepers, cellular telephones, or other electronic devices; repeatedly talking in class without being recognized; talking while others are speaking; or arguing in a way that is perceived as "crossing the civility line." In the event of a situation

where a student legitimately needs to carry a beeper/cellular telephone to class, prior notice and approval of the instructor is required.

3. Students must demonstrate proficiency in written composition as written communication skills are basic to teaching. The essay component of examinations will be graded on correctness of grammatic usage, word choice, and spelling, as well as content.
4. Students must follow the rules of the publication manual of the American Psychological Association (APA) (4th. edition) in citing references. See attached reading list.
5. Students should consult the current catalogue for information regarding the last day to drop or resign from the University without grade penalty. Students are responsible for completing required forms when they find it necessary to discontinue University work prior to the end of the semester.
6. Students will not be given make-up exams without a valid written excuse for the absence.

NOTE:

1. If you have been accepted into the Master of Education program and have not completed a degree plan, please see your advisor as soon as possible.
2. If you have completed a degree plan for a Master of Education and do not have a Comprehensive Examination Manual, please see Department of Special Education and Communication Sciences & Disorders' secretary for a copy. Be sure to sign the form attached to the Manual indicating that you have received your copy, and return the signed form to the folder on the counter (or to your advisor).
3. If you are a qualified student with a disability seeking accommodation under the Americans with Disabilities Act, you are required to self-identify with the Office of Student Life, Room 203, Student Union.
4. Graduate students with **non-degree status** who wish to pursue a graduate degree should contact the Graduate School (#549-2103) to request a change of status. Upon receipt of GRE scores and all other required paperwork, the Graduate School notifies students as to their status: Regular Admission status, Conditional Admission status, or Non-Degree status. **Students with Regular or Conditional status will then receive a letter from the Department Graduate Coordinator assigning an advisor and requesting that they complete a degree plan promptly.**

No more than 12 hours earned by a student in Conditional, Temporary, or Non-Degree Status may be counted toward a graduate degree, provided the credit is recommended for approval to the Graduate Dean by the appropriate graduate coordinator or faculty advisor.

PASS/FAIL OPTION:

Graduate students have the option of registering on a Pass/Fail basis for courses not included in their degree plan. Courses taken on a P/F basis cannot be used for degree credit at SLU. For a graduate credit course, a grade of "P" will be assigned only if the work is of at least "C" quality. Please note that a student on probation may not enroll in graduate courses on a pass/fail basis. See the catalogue for further information.

INSTRUCTOR:

Dr. Carol C. Torrey
115 Campbell Hall
department: #549-2214
office: #549-3430
email: ctorrey@selu.edu
Office hours: As posted

TENTATIVE COURSE SCHEDULE:

August	27	Overview of course
September	3	Sensory systems
	10	Typical motor development (Gross and fine motor) Chapter 15 & 16
	17	Partner work day on augmentative project
	24	Typical motor development continued
October	1	Motor programming
	8	Atypical motor patterns - Intervention Chapters 22, 24, 25, 26, 27
	15	Midterm
	22	Central and peripheral nervous system Chapter 14
	29	Positioning and Handling
	November	5
	12	Nutrition
	19	Feeding Issues
December	3	Syndrome project due
	10	Final Exam

READING LIST

Adams, R. C., & Snyder, P. (1998). Treatments for Cerebral Palsy: Making choices of intervention from an expanding menu of options. Infants and Young Children, 10(4), 1-22.

Arthur, C. R., & Gerken, K. C. (1998). Prenatal exposure and public policy: Implications for pregnant and parenting women and their families. Infants and Young Children, 10(4), 23-35.

Auxter, D., Pyfer, J., & Huettig, C. (1997). Principles and methods of adapted physical education and recreation (8th ed.). Chicago: Brown & Benchmark.

Baker, M. J., Banfield, C. S., Kilburn, D., & Shufflebarger, K. J. (1991). Controlling movement: A therapeutic approach to early intervention. Rockville, MD: Aspen.

Breath, D., DeMauro, G. J., & Snyder, P. (1997). Adaptive sitting for young children with mild to moderate motor challenges: Basic guidelines. Young Exception Children, 1(1), 10-16.

Brett, A. (1997). Assistive and adaptive technology-supporting competence and independence in young children with disabilities. Dimensions of Early Childhood, 25(3), 14-20.

Buekelman, D. & Mirenda, P. (1992). Augmentative and alternative communication: Management of communication disorders in children and adults. Baltimore, MD: Brookes.

Burkhart, L. (1993). Total augmentative communication in the early childhood classroom.

Cowden, J. E., & Torrey, C. C. (1995). A ROADMAP for assessing infants, toddlers and preschoolers: The role of the adapted motor developmentalist. Adapted Physical Activity Quarterly, 12(1), 1-11.

Cowden, J. E., Sayers, L. K., & Torrey, C. C. (1998). Pediatric adapted motor development and exercise: An innovative, multisystem approach for professionals and families. Springfield, IL: Charles C. Thomas.

Diamant, R. B. (1992). Positioning for play. Tucson, AZ: Therapy Skill Builders.

Fewell, R. R., & Glick, M. P. (1993). Observing play: An appropriate process for learning and assessment. Infants and Young Children, 5(4), 35-43.

Finnie, N. R. (1975). Handling the young cerebral palsied child at home. New York: Dutton.

Hourcade, J. J., Parette Jr., H. P., & Huer, M. B. (1997) Family and cultural alert! Considerations in assistive technology assessment. Teaching Exceptional Children, 30(1), 61-65.

Jansma, P., & French, R. (1993). Special physical education. Englewood Cliffs, NJ: Prentice Hall.

Langone, J., Malone, D. M., & Kinsley, T (1999). Technology solutions for young children with developmental concerns. Infants and Young Children, 11(4), 65-76.

Levine, K. J. (1991). Fine motor dysfunction: Therapeutic strategies. Tucson, AZ: Therapy Skill Builders.

Lewis, R. B. (1993). Special education technology. Pacific Grove, CA: Brooks/Cole.

Malone, D. M., Stoneman, Z., & Langone, J. (1994). Contextual variation of correspondences among measures of play and developmental level of preschool children with cognitive delays. Journal of Early Intervention, 18(2), 199-215.

Morris, L. & Schulz, L, (1989). Creative play activities for children with disabilities. Champaign, IL: Human Kinetics.

Parette, H. P., Hendricks, M. D., & Rock, S. L. (1991). Efficacy of therapeutic intervention intensity with infants and young children with cerebral palsy. Infants and young children,4(2), 1-19.

Scott, S. M., McWilliam, R. A., & Mayhew, L. (1999). Integrating therapies into the classroom. Young Exceptional Children, 2(3), 15-24.

Sears, C. (1994). Recognizing and coping with tactile defensiveness in young children. Infants and Young Children, 6(4), 46-53.

Sheda, C. & Small, C. (1990). Developmental motor activities for therapy. Tucson, AZ: Therapy Skill Builders.

Sher, B. (1992). Extraordinary play with ordinary things. Tucson, AZ: Therapy Skill Builders.

Sherrill, C. (1993). Adapted physical activity, recreation and sport (4th ed.). Madison WI: Brown & Benchmark.

Washington, K., Schwartz, I. S., & Swinth, Y. (1994). Physical and occupational therapists in naturalistic early childhood settings: Challenges and strategies for training. Topics in Early Childhood Special Education, 14(3), 333-349.

Wolf, L. S. & Glass, R. P. (1992). Feeding and swallowing disorders in infancy. Tuscon, AZ: Therapy Skill Builders.

THIS IS TO VERIFY THAT

_____ completed ___ hours of observation and ___ hours of "hands-on" activities at the infant/toddler level

—

Signature

- completed ___ hours of observation and ___ hours of "hands-on" activities at the preschool level

—

Signature

- completed ___ hours of observation and ___ hours of "hands-on" activities with an occupational or physical therapist

—

Signature

-completed ___ hours of observation and ___ hours of "hands-on" activities with an adapted physical educator

Signature

Project/Hands On Activities Grading Sheet

SLU Student Name: _____

Syndrome/Medical Condition: _____
_____**Fact Sheet**

1-2 pages

Description of syndrome

Effects on child and family

Medical concerns

Precautions when teaching

Nutritional needs and feeding modifications

Activities that will facilitate motor development

/28

Hands-on Activities

6 hours total:

_____ Hours observation

_____ Hours hands on (minimum 3)

Organization of hands on - according to setting

-heading completed

-activities listed/explained

/18

Reaction

Maximum 4 pages

Justification of hours - observation

-Infant/toddler

vs. Hands-on

vs. Preschool

Compare and contrast abilities - typical vs. Disabilities

Intervention techniques used by you, therapists, and teachers

Inclusion of therapy/Adpe activities in classroom schedule/routine

Critique appropriateness of activities

/22

Verification sheet

/2

Reading/Reference list

/5

Presentation**TOTAL****/75**

With a partner, develop motor activities for an infant, toddler or preschool child with a specific motor disability or medical condition. (These will be assigned in class in accord with

your preference.) Possibilities include: spina bifida/congenital anomalies, autism, Down Syndrome, cerebral palsy, sensory impairment, hypotonicity, prematurity (infant), drugs (infant), specific syndromes.

- A. Include in the **introduction:** (6/55 pts)
- Student's age, disability and other identifying information.
 - Summary** of critical data from medical and developmental history, observations, or assessments which address and impact the child's motor development.
 - Precautions for working with students who have this disorder/condition.
- B. According to the needs of the individual child, develop/plan 3 activities in four (4) areas most critical for this child's development.
- Describe the activity, equipment needed, and teaching strategies.
 - Address how you would include parent or caregiver interaction and peer interaction.
 - Develop/plan 2 activities in each of the 4 selected areas, for a child with the similar condition who is at another age level. (40/55 pts)
- Choose from the following areas:
 - a) muscle tone or reflex involvement
 - b) 1 area of sensory development
 - c) balance and equilibrium
 - d) body awareness
 - e) locomotor movement
 - f) manipulative gross motor
 - g) fine motor
- C. Include two (2) current journal articles related to motor development, motor activities, or movement precautions for this population (4/55 pts).
- D. Oral presentation of activities with active class involvement. Provide a hand-out to each class member with recommendations and precautions for a child with this specific condition. (5/55 pts.)

Grading of this project will be determined by:

- specificity of the activities to the child
- thoroughness of explanation, materials needed and parent involvement

Bonus points will be awarded for creativity of activities
 Loss of points will occur for poor writing style (grammar, spelling, etc.), typographical errors, non APA style of

referencing.