

**Rhode Island College  
Feinstein School of Education and Human Development  
Special Education 517**

**Medical Aspects of Developmental Disabilities**

**Tuesday, 4:00- 6:50 PM; Mann Hall 192 and Rhode Island Hospital**

**Instructors:** Thomas T. Kochanek, Ph.D.  
HM056  
456-8599  
[tkochanek@ric.edu](mailto:tkochanek@ric.edu)

David Mandelbaum, M.D., Ph.D.  
Children's Neurodevelopment Center  
Rhode Island Hospital  
444-5685  
[dmandelbaum@lifespan.org](mailto:dmandelbaum@lifespan.org)

**Office Hours:** Thursday: 3:00–4:00 PM or By Appointment

**Required Text:** Batshaw, M., Pellegrino, L., and Roizen, N. (2007; Sixth Edition). Children with Disabilities. Baltimore: Brookes Publishing Company.

**Catalog Description**

Students are introduced to the medical diagnosis, classification, and management of young children with developmental disabilities. Major known etiologies are examined. Common neurologic, neuromuscular, metabolic, and psychosocial disturbances and their management are also explored.

**Extended Course Description**

The principal objective of this course is to acquaint students with the medical basis of childhood disabling conditions. Topics and areas addressed include prenatal diagnosis and fetal therapy, prematurity, substance abuse and exposure during pregnancy, neuromuscular disorders, autism and pervasive developmental disorder, infant and preschool child behavioral health, sleep disorders, attention deficit hyperactivity disorder, and neurologic disorders. For each condition considered, major emphasis is placed on etiology, developmental course over time, and array of alternative treatment interventions. This course is co-taught by faculty at Rhode Island College and interdisciplinary clinical staff at the Center for Special Children at Rhode Island Hospital.

**Relationship to the Teacher Education Program**

This course is a requirement in the M.Ed. Program in early childhood special education at Rhode Island College, and it is also a requirement for teacher certification within the area of infants/preschool children with disabilities. The course also serves as an elective for other M.Ed. candidates in special education.

**Relationship to Teacher Education Knowledge Base**

The principal goal of this course is to provide knowledge pertaining to childhood developmental disabilities that will assist students in effectively planning, implementing, and evaluating individualized educational programs. The course is taught by a team of interdisciplinary professionals (e.g., special education, neonatology, pediatric neurology, physical therapy, psychology, developmental pediatrics), and as such, students become acquainted with decision making (e.g., differential diagnosis, treatment planning) in the context of this interdisciplinary team.

**Course Outcomes** The student will

- 1) gain a fundamental understanding of the physical and physiologic basis of childhood disabling conditions;
- 2) understand the implications of these conditions for growth, development, and skill acquisition over time;
- 3) learn about the contemporary medical diagnostic and intervention techniques pertaining to these conditions;

- 4) gain understanding about the value and limitations of information provided by medical specialists in terms of developing effective intervention and treatment plans;
- 5) gain understanding about the value and importance of interdisciplinary diagnosis and treatment; and
- 6) demonstrate competency and confidence in effectively communicating with the health care community on behalf of the children in their classrooms and programs.

### **Standards Aligned to Course Requirements**

<b>Assignment</b>	<b>RIPTS</b>	<b>ECSE</b>	<b>CEC Standards</b>	<b>Conceptual Framework Advanced Competencies</b>
<b>Reflection Paper Course Outcomes 1,2,3,6</b>	1,2,5,7,10	<i>ICC9S8 ECSE10K1 ICC10S10 ICC10S1 ECSE 9S3 ECSE9S2 ECSE9S4 ICC1K7 ICC9S6 ICC9K1 ICC9S11 ICC9S8</i>	Foundations; Development and Characteristics of Learners; Learning Environment and Social Interactions; Professional and Ethical Practice; Collaboration	Knowledge: Contextual, Information Literacy, Professional Awareness Practice: Technology Use
<b>Research Paper Course Outcomes 1,2,3,6,</b>	1,2,5,7,10	<i>ICC9S8 ECSE10K1 ICC10S10 ICC10S1 ECSE 9S3 ECSE9S2 ECSE9S4 ICC1K7 ICC9S6 ICC9K1 ICC9S11 ICC9S8</i>	Foundations; Development and Characteristics of Learners; Learning Environment and Social Interactions; Professional and Ethical Practice; Collaboration	Knowledge: Contextual, Information Literacy, Professional Awareness Practice: Technology Use
<b>Final Exam Course Outcomes 1,2,4,5</b>	1,2,5,10	<i>ICC1K7 ICC2K7 ECSE2K4 ECSE2K5 ECSE7K1 ECSE7K3 ECSE10K1 ICC10K2, ICC10K3</i>	Foundations; Development and Characteristics of Learners; Learning Environment and Social Interactions; Professional and Ethical Practice; Collaboration	Knowledge: Contextual, Professional Awareness

### **Syllabus**

- 1/25** Overview of course objectives, content, requirements, and expectations.
- 2/1** Attention Deficit Hyperactivity Disorder  
David Mandelbaum, M.D., Ph.D.  
Reading: Batshaw et al., Chaps. 24-25
- 2/8** Genetics and Genetic/Environmental Interactions  
Natasha Shur, M.D.  
Reading: Batshaw et al., Chaps. 1, 7
- 2/15** Neurological Disorders and Epilepsy  
John Gaitanis, M.D.  
Reading: Batshaw et al., Chaps. 28, 29
- 2/22** Autism Spectrum Disorder  
Yvette Yatchmink, M.D.  
Roberta Zimmerly

- Reading: Batshaw et al., Chap. 23
- 3/1** Neuromuscular Disorders  
Karen Kerman, M.D.
- Reading: Batshaw et al., Chaps. 26-27
- 3/8** Prematurity: Born Too Soon/Too Small  
Katie Johnson, M.D.
- Reading: Batshaw et al., Chaps. 8-9
- 3/22** Reflection Paper Due  
Cerebral Palsy/Adaptive Equipment  
Feeding Challenges  
Mary Fournier, MS, PT, PCS  
Patty Gricus, OTR/L
- Reading: Batshaw et al., Chaps. 31, 37-38
- 3/29** Child Abuse and Protection  
Amy Goldberg, M.D.
- Reading: Batshaw et al., Chap. 39
- 4/5** Infant and Preschool Child Behavioral Health Issues  
Stephanie Shepard, Ph.D.  
Lisa Costello
- Reading: Batshaw et al., Chaps. 21, 35
- 4/12** Sleep Disorders and Disturbances  
Gisela Porras, M.D.
- Reading: Batshaw et al., Chap. 40
- 4/19** Early Intervention for Children and Families  
Ellen Jacobs, Director  
Early Intervention; Children's Neurodevelopment Center  
Reading: Batshaw et al., Chaps. 33, 34
- 4/26** Research Paper Due  
Synthesis and Implications for Early Childhood Programs  
Thomas T. Kochanek, Ph.D.
- 5/3** Review, Summary and Integration  
Thomas T. Kochanek, Ph.D.
- 5/10** Final Examination

**Course Assignments and Grading**

Reflection Paper	3/8/11	20%
Research Paper	4/19/11	35%

Final Examination	5/10/11	25%
Classroom Contribution		20%

**Potential Research Paper Topics**

- ADHD: Diagnosis, Etiology, Treatment Alternatives, and Long-Term Outcomes**
- Alternative Medications for ADHD: Efficacy and Safety**
- Substance Exposed Newborns: Short-Term and Long-Term Sequelae**
- Prematurity: Short-Term and Long-Term Outcomes**
- Autism Spectrum Disorders: Diagnosis, Prevalence, Etiology, Treatment Alternatives, and Long-Term Outcomes**
- Precursors to Severe Behavioral Disturbances in Children: Early Identification and Treatment Alternatives**
- Psychotropic Medications for Behaviorally Challenging Children: Efficacy and Safety**
- Frontiers of Science: Prenatal Diagnosis and Intervention Techniques**

\*\*\*\*\*

**Academic Honesty**

Please refer to Rhode Island College Handbook policies and procedures on Academic Honesty. Plagiarism on a paper or cheating on a test or quiz results in automatic failure of that assignment and disciplinary action.

**RHODE ISLAND COLLEGE STUDENT HANDBOOK, 2008-2009  
ACADEMIC STANDARDS**

**3.9.1 Academic Dishonesty**

Academic integrity is the foundation of the academic community. Students who violate College rules on academic dishonesty are subject to disciplinary penalties, including the possibility of failure or removal from a course, disciplinary probation, and/or dismissal from the College. Individual schools may have additional standards and policies related to academic honesty.

(a) **Examples of Academic Dishonesty include (but are not limited to):**

- **Cheating:** intentionally using or attempting to use unauthorized materials, information or study aids in any academic exercise.
- **Fabrication:** intentional and unauthorized falsification or invention of any information or citation in an academic exercise.
- **Plagiarism:** intentionally or knowingly representing the words or ideas of another as one's own in any academic exercise. The following are examples of plagiarism:

**i. Word-for-word plagiarism:** This includes (a) the submission of another student's work as one's own; (b) the submission of work from any source whatever (print or electronic) without proper acknowledgement by footnote or reference within the text of the paper; (c) the submission of any part of another's work without proper use of quotation marks.

**ii. Patchwork plagiarism:** This consists of a piecing together of unacknowledged phrases and sentences quoted verbatim (or nearly verbatim) from a variety of sources. The mere reshuffling of other people's words does not constitute original work.

**iii. Unacknowledged paraphrase:** It is perfectly legitimate to set forth another author's facts or ideas in one's own words, but if one is genuinely indebted to the other author for these facts or ideas, the debt must be acknowledged by footnote or reference within the text of the paper (e.g., the above paragraphs are based largely on Sears, Harbrace *Guide to the Library and Research Paper*, p. 39).

Many facts, ideas, and expressions are considered to be in the public domain or general knowledge and need not be acknowledged (e.g., the fact that the Declaration of Independence was signed in 1776; the idea that universal public education is essential to the survival of democratic institutions; such proverbial expressions as "A rolling stone gathers no moss," or "New York is a great place to visit, but I wouldn't want to live there,") but as a general rule,

when one is in doubt, it is best to acknowledge the source.

- **Collusion:** facilitating academic dishonesty intentionally or knowingly helping or attempting to help another to commit an act of academic dishonesty.
- **Deception:** Providing false information to an instructor concerning a formal academic exercise, e.g. giving a false excuse for missing a deadline or falsely claiming to have submitted work.
- **Sabotage:** Acting to prevent others from completing their work. This includes cutting pages out of library books or willfully disrupting the experiments of others.
- **Multiple Submissions:** Submitting for credit, when a student has not been given permission to do so, any work that is the same or substantially the same as work that has been submitted for credit in another course. Many professors allow re-working or building on prior work; however, multiple submissions are permitted only with the prior permission of the instructor(s), and only when the student acknowledges the multiple submission in the work itself.

**Feinstein School of Education and Human Development  
Special Education: Undergraduate Admission and Retention Committee  
Candidate Documentation Form**

\*\* Forms are due to the Department by the last day of finals\*\*

Candidate's Name \_\_\_\_\_ ID# \_\_\_\_\_

SPED Course # \_\_\_\_\_ Section # \_\_\_\_\_ Sem Fall Year \_\_\_\_\_

Assess the candidate in the following areas; circle the appropriate box: S for satisfactory or U for unsatisfactory. Use the space just below the area to include comments. Please use the back if additional space is needed.

- S     U     Plans/Implements meaningful and significant learning
- S     U     Uses effective management
- S     U     Uses feedback constructively
- S     U     Is timely
- S     U     Attends class regularly
- S     U     Collaborates effectively
- S     U     Demonstrates knowledge of content
- S     U     Other concerns

In the overall evaluation, (which takes into account any of the attributes/behaviors on this form, the candidate's grade, and/or the candidate's dispositions) this candidate is:

\_\_\_\_\_ Recommended to Continue with \_\_\_\_\_ Not Recommended to Continue in \_\_\_\_\_ Grade \_\_\_\_\_  
 \_\_\_\_\_ Concerns \_\_\_\_\_ Program \_\_\_\_\_

\_\_\_\_\_ Faculty signature \_\_\_\_\_ Date \_\_\_\_\_

\_\_\_\_\_ I agree with the area(s) identified above     \_\_\_\_\_ I **do not** agree with the area(s) identified above (Candidate may submit a response)

I \_\_\_\_\_ have read this on \_\_\_\_\_.  
 Candidate's signature \_\_\_\_\_ Date \_\_\_\_\_

**Special Education 517. Rubric for Research Paper**

Student's Name: \_\_\_\_\_ Grade: \_\_\_\_\_ Faculty Signature: \_\_\_\_\_

Unacceptable \_\_\_\_\_ Below Standard \_\_\_\_\_ Meets Standard \_\_\_\_\_ Target \_\_\_\_\_  
 (69 or below) (79-70) (89-90) (100-90)

	<b>Unacceptable</b>	<b>Below Standard</b>	<b>Meets Standard</b>	<b>Target</b>
<p align="center"><b>Sources of Evidence/Literature Review</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Contemporary citations are included (i.e. within last 10 years) are drawn from refereed journals and textbooks.</li> <li><input type="checkbox"/> Review and analysis of other LEA designs</li> <li><input type="checkbox"/> Parent Interviews and discussion</li> <li><input type="checkbox"/> Analysis of personal and professional experiences.</li> </ul> <p>                     ICC9S8                      ECSE10K1                      ICC10S10                      ICC10S1                 </p>	<p>The literature review is <i>missing key information and/or includes only cursory information.</i></p>	<p>The literature review and analysis is <i>not current</i> and/or <i>inadequate</i>, on a topic that pertains to research paper with <i>inadequate descriptions</i> of other LEA designs, description of parent interview <i>and</i> analysis of personal and professional experiences. <i>Key details /information is not found in some areas and/or some areas are unclear.</i></p>	<p>The literature review and analysis is <i>current, adequate, well-balanced</i> on a topic that pertains to research paper with <i>descriptions</i> of other LEA designs, description of parent interview <i>and</i> analysis of personal and professional experiences.</p>	<p>The literature review and analysis is <i>current, thorough, well-balanced</i> on a topic that pertains to research paper with <i>very clear descriptions</i> of other LEA designs, <i>rich</i> description of parent interview <i>and well-balanced</i> analysis of personal and professional experiences</p>
<p align="center"><b><u>Use/Interpretation of Current Literature</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Current literature is presented and accurately interpreted.</li> <li><input type="checkbox"/> Key concepts are formulated based upon literature. Key concepts are translated into a specific model or approach.</li> <li><input type="checkbox"/> Proposed model provides diverse options/opportunities for all families.</li> <li><input type="checkbox"/> Student understands family centeredness and its empirical foundation.</li> </ul> <p>                     ECSE 9S3                      ECSE9S4                 </p>	<p>This <i>section is missing or includes only cursory information</i> in the required areas.</p>	<p>The implications and inferences drawn from the literature review are <i>not adequately described; discussion lacks some key information; discussion conveys a lack of understanding and</i> some implications are unclear, and/or details are omitted.</p>	<p>The implications and inferences drawn from the literature review are <i>adequately described; includes some description of ideas</i> related to regional, national, practices and policies.</p>	<p>The implications and inferences drawn from the literature review are <i>meaningful, fully described ; includes rich description of ideas</i> related to regional, national, practices and policies.</p>

<p style="text-align: center;"><b>Student's Self-Awareness and Insight</b></p> <ul style="list-style-type: none"> <li>❑ Understands the influence of race, culture, language, and economic status on family identity.</li> <li>❑ Understands his/her own biases and tolerance for differences among families.</li> <li>❑ Understands his/her own comfort level in working with diverse families.</li> <li>❑ Demonstrates potential to communicate effectively with families.</li> <li>❑ Demonstrates potential to establish a meaningful, appropriate relationship with families.</li> </ul> <p style="text-align: center;"> <i>ICC9S6</i>                      <i>ICC9K1</i>  <i>ICC9S11</i>                     <i>ICC9S8</i> </p>	<p><i>This section is missing or includes only cursory information in the required areas.</i></p>	<p>The discussion reveals <i>limited</i> insights between the literature and <i>personal experiences</i> and/or <i>limited</i> insights between the literature and <i>professional experiences</i> with an inadequate articulation of biases related to differences among children and families. <i>The discussion is unclear, and/or sufficient details are omitted.</i></p>	<p>The discussion reveals <i>adequate</i> insights between the literature and <i>personal experiences</i>; and adequate insights between the literature and <i>professional experiences</i> with an <i>adequate articulation of biases</i> related to differences among children and families.</p>	<p>The discussion reveals <i>keen</i> insights between the literature and <i>personal experiences</i>; the literature and <i>professional experiences</i> with a <i>clear articulation of biases</i> related to differences among children and families.</p>
<p style="text-align: center;"><b>Presentation: Professional Writing and Technical Skills</b></p> <ul style="list-style-type: none"> <li>❑ Appropriately uses rules of standard grammar, punctuation, spelling, capitalization, People First Language.</li> <li>❑ Ideas and observations are presented clearly.</li> <li>❑ Layout and format of paper are clear with meaningful topical headings that are consistent with assignment detail and explanation.</li> <li>❑ Citation of references and quotations throughout paper follows APA format.</li> <li>❑ References section of paper complies with APA format.</li> <li>❑ Paper is double spaced using 12 point font with appropriate headers/footers, cover page.</li> <li>❑ Paper is appropriately bound together, with title page.</li> </ul> <p style="text-align: center;"><i>ICC9S8</i></p>	<p><i>Considerable improvement</i> in technical skills and/or professional language is <i>needed</i>.</p>	<p><i>Limitations</i> in professional writing are evident and include a <i>lack of understanding</i> of the standards of the profession of special education; need for <i>some improvement</i> in technical skills/professional language.</p>	<p><i>Adequate</i> professional writing includes an understanding of the standards of the profession of special education <i>throughout most sections</i>.</p>	<p><i>Exceptional</i> professional writing includes an understanding of the standards of the profession of special education <i>throughout all sections</i>.</p>

Additional Comments: