



Feinstein School of Education & Human Development
Department of Counseling, Educational Leadership, and School Psychology
Rhode Island College
Syllabus of Record – edited November 2010

Course: CEP 536 – Biological Perspectives in Mental Health

Prerequisites: Matriculation in a graduate program in counseling or school psychology, CEP 531, or consent of department chair.

Required Texts:

Preston, J. D., O’Neal, J. H., & Talaga, M. C. (2010). *Handbook of clinical psychopharmacology for therapists. (6th ed.)*. Oakland, CA: New Harbinger Publications, Inc.

Sapolsky, R. (2004). *Why zebras don't get ulcers: An updated guide to stress, stress-related diseases, and coping (3rd ed.)*. New York: W.H. Freeman.

CEP 536 Faculty Fall '08-Fall '10		
	Boisvert, Charles	Ph.D.
	Crino, Richard	RN

Course Description

This course will introduce counseling and school psychology students to the neuroscience perspective of studying human behavior. Special attention will be given to neuroanatomy and neurophysiology, the biology of psychiatric conditions, and principles of psychopharmacology. In addition, the course will examine the psychological and physiological effects of stress and stress-related illness.

Relationship to Conceptual Framework and FSEHD

The course provides a foundation for best professional practice by instilling basic knowledge and understanding of human behavior from a neuroscience perspective. A theoretical and practical grounding in brain-behavior interactions is emphasized in the context of increasing sensitivity and responsiveness to human diversity. Students are encouraged to examine issues of multiculturalism and how these issues may further their understanding of the diverse clients with whom they will work. The instructor will incorporate the principles of the reflective practitioner, being sensitive to the varied learning styles and cultural backgrounds of students. Students will be encouraged to contribute to the learning process through incorporating their experiences and interests and developing a sound knowledge base and professionalism to best serve their clients. The on-going performance assessment of the learning process will enable the instructor to improve the overall learning experience and its relationship to the mission of the FSEHD.

<u>Course Learning Objectives</u>	<u>SPA</u>	<u>Conceptual Framework: Advanced Competencies</u>
1) Understand the fundamentals of neuroanatomy and neurophysiology. (<i>CACREP Standard 7: Curricula Domain C</i>).	CACREP Standard 3b; School Counseling Curricula Domain C; NASP 2.5, 2.7	Knowledge - 1
2) Identify the structural and functional organization of the brain and nervous system (<i>CACREP Standard 7: Curricula Domain C</i>).	CACREP Standard 3b; School Counseling Curriculum Domain C; NASP 2.5, 2.7	Knowledge - 1
3) Identify and classify common psychiatric drugs and drugs of abuse and understand the basic psychopharmacological mechanisms by which these drugs function (<i>Curricula Domain C</i>).	CACREP Curricula Domain G3; School Counseling Curricula Domain C; NASP 2.5, 2.7	Knowledge - 1
4) Understand the taxonomy of psychiatric conditions and the current biological theories of psychiatric conditions (<i>CACREP Standards 3, 7; Curricula Domain C</i>).	CACREP Standard 3b; 3c; 3g; CACREP Curricular Domain C5; School Counseling Curricula Domain C; NASP 2.5, 2.7	Knowledge - 1
5) Be familiar with medical and substance abuse conditions that can present with psychiatric symptoms and learns ways to distinguish between medical and psychiatric conditions (<i>CACREP Standards 5, 7; Curricula Domain C</i>).	CACREP Standards 3b; School Counseling Curriculum Domain C; NASP 2.5, 2.7	Knowledge – 1, 2 Practice - 1
6) Understand recent findings examining the relationship between stress, trauma; stress-related illnesses, and health and become familiar with various stress management techniques (<i>CACREP Standard 5; Curricula Domain C</i>).	CACREP Standard 3b; 3c; School Counseling Curricula Domain C; NASP 2.4, 2.5, 2.7	Knowledge - 1, 2 Practice - 1
7) Acquire an appreciation for mental health and substance abuse programs and models of prevention that incorporate a holistic perspective of brain-behavior relations (<i>CACREP Standards 3, 5; Curricula</i>	CACREP Standard 3g; CACREP Curricular Domain G4;; School Counseling Curricula Domain, C; NASP 2.1, 2.4, 2.7	Knowledge – 1, 3 Practice – 1, 2, 3

<i>Domain C).</i>		
8) Become familiar with internet resources and how these may be applied to practical problems in varied counseling settings (<i>Curricula Domain C).</i>	CACREP Standard 3b; School Counseling Curricula Domain, C; NASP 2.4, 2.11	Knowledge – 1 Practice - 2
9) Using the Reflective Practitioner Model, become familiar with how brain-behavior models impact the change process and acquire an appreciation for and understanding of how these models can be applied sensitively to meet the needs of multicultural populations (<i>CACREP Standard 5; Curricula Domain C).</i>	CACREP Standard 3b; 3g; School Counseling Curricula Domain C; NASP 2.4, 2.5, 2.7	Knowledge - 4 Practice - 4

CEP 536 - Alignment of Course Requirements with:

<u>Course Requirements</u>		Course learning objectives	Conceptual framework	SPA
Quiz. There will be a quiz covering neuroanatomy and neurophysiology	10 points	1,2	Knowledge - 1	CACREP Standard 3b; School Counseling Curricula Domain C; NASP 2.5, 2.7
Mid-Term Exam. The mid-term will cover course material and assigned readings to date. The mid-term will be a combination of objectives questions and short essays. It will assess your knowledge and conceptual understanding of the readings, issues and material covered in the course.	30 Points	1,2,3,4	Knowledge- 1, 2 Practice - 1	CACREP Standards 3b; 3c; 3g; CACREP Curricular Domains C5; D7; G3; School Counseling Curricula Domain C; NASP 2.5, 2.7
Final Exam. The final will consist of course material and readings covered during the course but mostly focused on material after the mid-term. The final exam will be a combination of	30 points	3, 4, 5, 6, 7, 8, 9	Knowledge- 1, 2 Practice – 1, 2	CACREP Standards 3b; 3c; 3g; CACREP

objectives questions and short essays. It will assess your knowledge and conceptual understanding of the readings, issues and material covered in the course.				Curricular Domains C5; D7; G3; School Counseling Curricula Domain, C; NASP 2.1, 2.4, 2.5, 2.7, 2.11
Research Paper. Students will chose a topic relevant to the course and complete a research paper. The paper should consist of a thorough literature review and a critical analysis of the topic. Possible topics: Literature review of current brain research and biological theories pertaining to a particular psychiatric condition (e.g., schizophrenia, major depression); Literature review on models of prevention related to a specific psychiatric disorder or models of prevention and their relationship to resiliency in mental health; Current biological models for understanding the action of a class of psychotropic drugs (e.g., SSRIs); Literature review of the psychological and physiological cause-effects relations of stress on a medical condition (e.g., Coronary Artery Disease-CAD, Gastroesophageal Reflux Disease-GERD, Irritable Bowel Syndrome-IBS); The paper should be 8-12 typed-pages and referenced according to APA guidelines. Topics should be approved.	30 Points	7, 8, 9	Knowledge – 1,2 Practice – 1, 2	CACREP Standards 3b; 3c; 3g; CACREP Curricular Domains C5; D7; G3; School Counseling Curricula Domain, C; NASP 2.1, 2.4, 2.5, 2.7, 2.11,

Evaluation:

Quiz	10 points
Mid-Term Exam	30 points
Final Exam	30 points
Research Paper	30 points
TOTAL POINTS	100 points

Grades:

- 93-100 = A
- 90-92 = A-
- 87-89 = B+
- 83-86 = B
- 80-82 = B-
- 77-79 = C+
- 73-76 = C

70-72 = C-
60-69 = D
Below 60 = F

Internet Resources

http://thebrain.mcgill.ca/flash/index_i.html
American Counseling Association: www.counseling.org
American Medical Association: ama-assn.org
American Mental Health Counselors Association: www.amhca.org
American Nurses Association: www.na.org
American Psychiatric Association: www.psych.org
American Psychological Association: www.apa.org
American Psychological Society: www.psychologicalscience.org
CEP Department Web Site: www.ric.edu/cep
Mind-Body Clinic: www.mbmi.org
National Association of Social Workers: www.naswdc.org
Therapy Resources: www.psychotherapistresources.com

Sample Journals

American Journal of Psychiatry
Archives of General Psychiatry
Biological Psychiatry
British Journal of Psychiatry
General Hospital Psychiatry
Health Psychology
International Journal of Behavioral Medicine
International Journal of Stress Management
Journal of Clinical Psychopharmacology
Journal of Nervous and Mental Diseases
Journal of Psychiatric Research
Journal of the American Medical Association (JAMA)
New England Journal of Medicine
Psychiatric Services
Psychiatry Research
Psychological Medicine
Psychopharmacology Bulletin
Psychosomatic Medicine
Schizophrenia Bulletin
Schizophrenia Research

Suggested Supplemental Readings

Barkley, R. A. (2006). Etiologies. In R. Barkley (Ed). *Attention-deficit hyperactivity disorder: A handbook for diagnosis and treatment* (pp. 219-247). New York: The Guilford Press.

Barondes, S. (1999). The evolution of biological psychiatry. In S. Barondes *Molecules and mental illness* (pp. 1-19). New York: Scientific American Library.

Barondes, S. (1999). The genetics of behavior. In S. Barondes *Molecules and mental illness* (pp. 21-43). New York: Scientific American Library.

Cozolino, L. (2002). *The neuroscience of psychotherapy: Building and rebuilding the human brain*. New York: W. W. Norton & Company (various chapters- 2, 3, 11, 12, 14).

Garrett, B. (2009). Drugs, addiction, and reward. In B. Garrett, *Brain & Behavior* (2nd ed) (123-153). Los Angeles: SAGE.

Lazarus, C. N. (2001). Foundations of psychopharmacology: Toward an integration of psychopharmacology and psychosocial therapy for mental health practitioners. In S.Cullari (Ed). *Counseling and psychotherapy: A practical guidebook for students, trainees, and new professionals* (pp. 246-288). Boston: Allyn & Bacon.

Ray, O. (2004). How the mind hurts and heals the body. *American Psychologist*, 59, 29-40.

Taylor, R. L. (2007). Clinical traps. In R. L. Taylor *Distinguishing psychological from organic disorders: Screening for psychological masquerade* (2nd ed.) (pp. 33-53). New York: Springer Publishing

Taylor, R. L. (2007). Four Masqueraders. In R. L. Taylor *Distinguishing psychological from organic disorders: Screening for psychological masquerade* (2nd ed.) (pp. 119-149). New York: Springer Publishing

Torrey, E. F. (2001). Research findings on the causes of schizophrenia? In E. F. Torrey, *Surviving schizophrenia: A manual for families, consumers and providers* (4th ed) (pp. 140-157). New York: HarperPerennial.

Weyandt, L. L. (2006). Dementia of the Alzheimer's type and Parkinson's Disease. In L. L. Weyandt. *The physiological bases of cognitive and behavioral disorders* (pp. 79-106). New Jersey: Lawrence Erlbaum Associates, Publishers.

Additional Resources.

Accardo, P., Shapiro, B., & Caputo, A. (Eds.). (1997). *Behavior belongs in the brain*. Baltimore, MD: York Press.

Andreason, N. C. (2001). *Brave new brain: Conquering mental illness in the era of the genome*. New York: Oxford University Press.

Allman, J. (2000). *Evolving brains*. New York: W. H. Freeman.

Asaad, G. (1995). *Understanding mental disorders due to medical conditions or substance abuse: What every therapist should know*. New York: Brunner/Mazel Publishers.

Benson, H. (1975). *The relaxation response*. New York: William Morrow.

Benson, H. (1996). *Timeless healing: The power and biology of belief*. NY: Fireside.

Bjorntorp, P., Holm, G., & Rosmond, R. Metabolic diseases: The hypothalamic arousal syndrome. In D. I. Mostofsky & D. H. Barlow (Eds.), *The management of stress and anxiety in medical disorders* (pp. 282-289). Boston: Allyn & Bacon.

Carlson, R. (2001). Anxiety disorders, autistic disorders, and stress disorders. In N. R. Carlson, *Physiology of behavior* (7th ed.) (pp. 557-581). Boston: Allyn & Bacon.

Carlson, R. (2001). Schizophrenia and the affective disorders. In N. R. Carlson, *Physiology of behavior* (7th ed.) (pp. 527-556). Boston: Allyn & Bacon.

Carlson, R. (2001). Structure and functions of cells of the nervous system. In N. R. Carlson, *Physiology of behavior* (7th ed.) (pp. 26-61). Boston: Allyn & Bacon.

Carlson, R. (2001). Structure of the nervous system. In N. R. Carlson, *Physiology of behavior* (7th ed.) (pp. 63-95). Boston: Allyn & Bacon.

Cicala, R. (1999). *The brain disorders sourcebook*. Boston: Lowell House.

Diamond, R. J. (1998). *Instant psychopharmacology: A guide for the nonmedical mental health professional*. New York: W. W. Norton & Company.

Fried, R. (2000). Breathing as a clinical tool. In D. I. Mostofsky & D. H. Barlow (Eds.), *The management of stress and anxiety in medical disorders* (pp. 100-118). Boston: Allyn & Bacon.

Kaplan, G. B., & Hammer, R. P. (2002). *Brain circuitry and signaling in psychiatry: Basic science and clinical implications*. Washington, DC: American Psychiatric Publishing, Inc.

Liska, K. (1997). *Drugs and human behavior*. Upper Saddle River, NJ: Prentice-Hall.

Preston, J. & Johnson, J. (2006). *Clinical psychopharmacology made ridiculously simple* (5th ed.). Miami, FL: Medmaster, Inc.

Schiffer, F. (1998). *Of two minds: The revolutionary science of dual-brain psychology*. New York: Free Press.

Stemberg, E. (2000). *The balance within: The science connecting health and emotions*. New York: Free Press.

Sullivan, G. M., Kent, J. M., & Coplan, J. D. The neurobiology of stress and anxiety. In D. I. Mostofsky & D. H. Barlow (Eds.), *The management of stress and anxiety in medical disorders* (pp. 15-35). Boston: Allyn & Bacon.

Suloway, S. P., Malloy, P. F., & Duffy, J. D. (2001). *The frontal lobes and psychiatric illness*. Washington, DC: American Psychiatric Publishing, Inc.

Weyandt, L. (2006). *The physiological bases of cognitive and behavioral disorders*. Mahwah, New Jersey: Lawrence Erlbaum Associates, Publishers.

Research Paper Rubric
CEP 536: Biological Perspectives in Mental Health

Performance	SPA/Advanced competency standards	Below Standard	Meets Standard	Exceeds Standard
Paper follows APA Format	Knowledge- 1 Practice- 2	Reference page does not follow APA format; sources are incorrectly cited throughout the body of the paper	Reference page follows APA format; sources are correctly cited throughout the body of the paper; paper demonstrates few citations errors	Reference page follows APA format; sources are correctly cited throughout the body of the paper; paper demonstrates no citations errors
Literature Review	Knowledge- 1,2, 3 Practice- CACREP Standards 3b; 3g SC Curricula Domain C	Minimal references; minimal peer-reviewed journals are used; incomplete literature review	Adequate references; an acceptable range of peer-reviewed journals are used; adequate literature review	Several references; a broad range of peer-reviewed journals are used; very thorough literature review
Organization	Knowledge- 1, 4 Practice- 1,2 CACREP Standards 3b SC Curricula Domain C	Organization of ideas is poor; paper does not display a clear logical structure; transitions between ideas are disjointed	Organization of ideas is adequate; paper displays mostly a clear logical structure; transitions between ideas are generally fluid	Organization of ideas is clear and very well-developed; paper displays a clear logical structure; transitions between ideas are very fluid
Conceptual Thinking	Knowledge- 1, 2, 3 Practice- 1, 4 CACREP Standards 3b; 3c; 3g; SC Curricula Domain C NASP 2.4, 2.5, 2.7	Development of ideas is poor and unfocused; brain-behavior relations are minimally addressed	Development of ideas is focused; brain-behavior relations are adequately discussed	Development of ideas is very well-focused; brain-behavior relations are clearly discussed and well articulated
Critique of the Literature	Knowledge- 1, 2 Practice- 1, 2 CACREP Standards 3a; 3c; 3g; SC Curricula Domain C NASP 2.1, 2.4, 2.7	Minimal reflection and critique of the literature; patterns and inconsistencies in the literature are minimally addressed	Literature is adequately critiqued; patterns and inconsistencies in the literature are adequately addressed	Literature is very well critiqued; patterns and inconsistencies in the literature are thoroughly addressed;
Conclusion/ Summary	Knowledge- 1, 4 Practice- 3, 4 CACREP Standards 3b; 3c; 3g SC Curricula Domain C NASP 2.1, 2.4, 2.7	Implications for future research are minimally addressed; issues of how findings apply to diverse groups is not discussed	Implications for future research are adequately addressed; the application of findings to diverse groups is addressed	Implications for future research are well articulated; the application of findings to diverse groups is clearly and thoroughly discussed.

Grade: _____

Below Standard = C

Meets Standard = B

Exceeds Standard = A

CHALK AND WIRE

The Feinstein School of Education and Human Development has adopted *Chalk & Wire* as its data collection and assessment system. All students admitted to the Feinstein School and/or enrolled in any education course are required to purchase a *Chalk & Wire* electronic code at the RIC Bookstore. The *Chalk & Wire* electronic code purchase is a required one-time textbook purchase. This code allows students to access *Chalk & Wire* for a four year period while enrolled at Rhode Island College. The electronic code is a personal code and cannot be exchanged among students. Students receiving financial aid may use their financial aid to purchase the *Chalk & Wire* electronic code. *Chalk & Wire* allows students to submit assignments electronically and receive electronic feedback from Education course instructors. Students also have the opportunity to create personal portfolios on *Chalk & Wire*. To assist students with this transition, instructions about how to use the *Chalk & Wire* system will be available in one or more of their education courses.

STUDENTS WITH DISABILITIES

Rhode Island College is committed to making reasonable efforts to assist students with documented disabilities. If you are seeking reasonable accommodations under the Americans with Disabilities Act, and/or Section 504 of the Rehabilitation Act of 1973, you are required to register with the Student Life Office in Craig-Lee Hall Room 127 (456-8061). To receive accommodations, please obtain the proper forms from the Student Life Office and meet with me at the beginning of the semester.

ACADEMIC HONESTY STATEMENT

Students in this course are expected to abide by the principles of academic honesty. Students who willfully violate these principles (e.g., by cheating on examinations and assignments, plagiarizing, altering or changing records, etc.) cheat themselves, destroy any presumption of personal integrity, and degrade the value of education. It is especially important that all students understand the nature of plagiarism, for their written work will be judged rigorously for honesty.. There are various forms of plagiarism of which the following are most common:

- 1. 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 (book, magazine or newspaper article, unpublished paper or thesis) without proper acknowledgement by footnote or reference within the text of the paper; (c) the submission of any part of another's work within your paper use of quotation marks.
- 2. 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.
- 3. 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 with the text of the paper.
- 4. Many facts, ideas, and expressions are common property 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-It's a great place to visit, but I wouldn't want to live there"), to acknowledge indebtedness.**

(Note: The above paragraphs are based largely on D. Sears, Harbrace Guide to the Library and the Research, p. 39). It is especially important that all students understand the nature of plagiarism; for further explanation, see Sears, Harbrace, *Guide to the Library and Research paper*. Student Handbook, pg 35

- 5. Self-plagiarism:** Unauthorized multiple submissions of work for credit is a form of academic dishonesty. It occurs when a student, who has not been given permission to do so, submits for academic credit 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. *Adopted by the Rhode Island College Council, spring 2006.*

A student who commits academic dishonesty will incur one of the following penalties depending on the severity of the infraction:

1. A low or failing grade on the assignment in which the offense occurred.
2. An additional assignment.
3. Reduction of the final grade up to and including course failure
4. Any combination of the above.

Students who willfully violate the principles of academic honesty (e.g., through cheating on examinations or assignments, plagiarism [see below], altering or changing records, etc) are subject to consequences ranging from an effect on their grade to academic probation or expulsion depending on the seriousness of the act. Any student accused of academic dishonesty may appeal to the Board of College Discipline.