

LOYOLA UNIVERSITY CHICAGO
SCHOOL OF EDUCATION

CIEP 484-001: Biological Basis of Behavior
Summer 2020

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COURSE DESCRIPTION

Students will be introduced to the basics of the biological foundations of behavior and the emerging practice of School Neuropsychology. In this six-week course, students will be exposed to theories and frameworks for assessment based on a neuropsychological lens and given the opportunity to explore various areas of neuropsychological functioning often assessed by school psychologists. This course is also designed to build upon prior assessment courses in the areas of cognitive and social emotional assessment. Evidence-based interventions for students with difficulties in the areas of self-regulation, executive functioning, and sensory integration will also be explored.

METHOD OF INSTRUCTION

Students should expect to dedicate 12-16 hours per week on average to completing work for this course. This course will be taught using an online platform via Sakai that may include assigned readings to inform online discussions and quizzes. The course is divided into three consecutive modules and each module is designed for students to complete at their own pace with respect to the due date for each module. Module two is dependent on the completion of module one and module three requires completion of modules one and two. Therefore, modules must be completed consecutively and cannot be released before another is completed.

Students are also expected to meet at two points in the semester via Zoom in order to explore course content and connect with each other over new learning. These meetings are mandatory, and attendance will be monitored. The dates for class-wide meetings are:

Monday, June 29th from 12pm-1pm CST

Wednesday, July 29th from 5-7pm CST

REQUIRED TEXTBOOKS¹

Miller, D. & Maricle, D. (2019). *Essentials of school neuropsychological assessment, third edition*. Hoboken, NJ: John Wiley & Sons, Inc.

¹ Note that the required textbooks are available electronically in the library: www.libraries.luc.edu.

Meltzer, L. (2018). *Executive function in education: From theory to practice, second edition*. New York, NY: Guilford Press.

The following assigned sources will be made available via Sakai:

Cleary M. J., Scott A. J. (2011). Developments in clinical neuropsychology: Implications for school psychological services. *The Journal of School Health*, 81(1), 1-7.

Cleary, T. J., Platten, P., & Nelson, A. (2008). Effectiveness of the self-regulation empowerment program with urban high school students. *Journal of Advanced Academics* 20(1), 70–107.

Davis, A. S., Moss, L. E., Nogin, M. M., & Webb, N. E. (2015). Neuropsychology of child maltreatment and implications for school psychologists. *Psychology in the Schools*, 52(1), 77–91. doi: 10/1002/pits.21806

Decker, S. L. (2008). School neuropsychology consultation in neurodevelopmental disorders. *Psychology in the Schools*, 45(9), 799–811. doi: 10.1002/pits.20327

Goldstein, S., & Naglieri, J. A. (2008). The school neuropsychology of ADHD: Theory, assessment, and intervention. *Psychology in the Schools*, 45(9), 859–874. doi: 10.1002/pits.20331.

Immordino-Yang, M. H., Darling-Hammond, L., & Krone, C. (2018). *The brain basis for integrated social, emotional, and academic development: How emotions and social relationships drive learning*. The Aspen Institute. <https://www.aspeninstitute.org/publications/the-brain-basis-for-integrated-social-emotional-and-academic-development/>

Leong, H. M., Carter, M., & Stephenson, J. R., (2015). Meta-analysis of Research on Sensory Integration Therapy for Individuals with Developmental and Learning Disabilities. *Journal of Developmental and Physical Disabilities*, 27, 183-206. doi: 10.1007/s10882-014-9408-y

May-Benson, T. A., & Koomar, J. A. (2010). Systematic review of the research evidence examining the effectiveness of interventions using a sensory integrative approach for children. *American Journal of Occupational Therapy*, 64(3), 403–414. doi: 10.5014/ajot.2010.09071

Miller, D.C. (2012). *Neuropsychological processing concerns checklist for school-aged children & youth – third edition (NPCC-3)*. Retrieved May 27, 2020, from <https://michaeliswalton.files.wordpress.com/2015/01/neuropsych-processing-concerns-checklist-three.pdf>

Schaaf, R. C., & Davies, P. (2008). Evolution of the sensory integration frame of reference. *The American Journal of Occupational Therapy* 64 (3), 363–367.

UBC Medicine. (2014, January 13). *Introduction to the central nervous system - UBC neuroanatomy season 1 - ep 1* [Video].
Youtube. https://www.youtube.com/watch?v=xB7rXw_3gVY&t=312s

ESSENTIAL COURSE OBJECTIVES

- Gaining a basic understanding of the subject (e.g., factual knowledge, methods, principles, generalizations, theories)
- Learning to apply course material (to improve thinking, problem solving, and decisions)
- Developing specific skills, competencies, and points of view needed by professionals in the field most closely related to this course
- Learning to apply knowledge and skills to benefit others or serve the public

NASP STANDARDS

The school psychology program at Loyola University Chicago is a NASP approved EdS program. This course is aligned with NASP Standards for Graduate Preparation of School Psychologists in Domain II to support the development of school psychologists who employ an integrated model of service delivery. Specifically, in this course, students will be expected to learn content aligned to the following standards:

- 2.1 Data-Based Decision Making and Accountability
- 2.3 Interventions and Instructional Support to Develop Academic Skills
- 2.4 Interventions and Mental Health Services to Develop Social and Life Skills
- 2.5 School-Wide Practices to Promote Learning
- 2.8 Diversity in Development and Learning

APA COMPETENCY BENCHMARKS

The school psychology program at Loyola University Chicago is an APA accredited PhD program. This course is aligned with the APA Benchmarks for Competency Development of Psychologists in the areas of:

- 4A Reflective Practice
- 4B Self-Assessment
- 6B Scientific Foundation of Psychology
- 6C Scientific Foundation of Professional Practice
- 8A Knowledge and Application of Evidence-Based Practice
- 9B Knowledge of Assessment Methods
- 9C Application of Assessment Methods
- 10A Intervention Planning
- 10C Intervention Implementation
- 11B Addressing Referral Question

CLASS COMMUNICATION

Email and Sakai will be the primary methods of communication with students enrolled in this course. Because Sakai uses your Loyola computer account, students are responsible for making sure that their account is in good working order. Also, students are responsible for checking their account for emails related to this class. If you have a personal email you would rather use, you may forward emails from your student account to the personal account. Emails will only be sent to Loyola email accounts.

DISPOSITIONS

Students enrolled in the school psychology program at Loyola University Chicago are expected to demonstrate dispositions of professionalism, inquiry, and social justice throughout their time in the program. Dispositions will be assessed through LiveText and are not factored into a student's grade. The descriptions for the expected behaviors for these dispositions can be found in the rubric posted in LiveText for this course. A description of how faculty uses disposition data in the SOE is included in the SOE syllabus addendum.

TECHNOLOGY

Technology is an essential tool for developing one's own professional skills and for completing any degree program. In addition to mastering the online learning technology, such as Sakai, Panopto, Zoom, and VoiceThread, this course assumes a basic and practical knowledge of technology. Students are expected to be proficient at word processing (including creating tables and figures), preparing PowerPoint presentations, communicating via Loyola Outlook e-mail, and downloading Microsoft Word and Acrobat Reader files.

SCHOOL OF EDUCATION CONCEPTUAL FRAMEWORK

The School of Education at Loyola University Chicago supports the Jesuit ideal of knowledge in the service of humanity. Social action through education is addressed within this course. We endeavor to advance professional education in the service of social justice, engaged with Chicago, the nation, and the world. To achieve this vision the School of Education participates in the discovery, development, demonstration, and dissemination of professional knowledge and practice within a context of ethics, service to others, and social justice. This course will equip students with the knowledge, skills of inquiry, and ethics necessary to be professional and socially just practitioners. The framework components fulfilled by this course are:

CFS3: Candidates demonstrate knowledge of ethics and social justice.

CFS4: Candidates engage with local and/or global communities in ethical and socially just practices.

Here is the link to the LUC SOE Conceptual Framework: www.luc.edu/education/mission/.

DIVERSITY

In concert with the conceptual framework for the School of Education, faculty and students will be expected to show respect and sensitivity to individual, cultural, social, and economic diversity. Students who display insensitive behaviors to diversity will be provided feedback and, depending on the behavior, may receive a disposition warning.

LANGUAGE AND IDENTITY

Our use of language as school psychologists can serve as a tool for creating an inclusive community. Students and the instructor will use people-first language in all communication that describes people as people first before their group identity or prescribed classification. For example, we will practice saying child with an Autism Spectrum Disorder, instead of “Autistic kid.” In terms of race, we may say student of color. Further, we will practice using the pronouns “they” and “them” to represent individuals who are gender non-binary. Note that some in the disabled community prefer that you use their identity first in describing them. For instance, someone who is Deaf may prefer that you refer to them as a Deaf woman, man, or person. See chapter 5 of the Publication Manual of the American Psychological Association, 7th edition for further clarification or the National Inclusion Project for great resources.

STUDENTS WITH SPECIAL NEEDS

If you are a student who requires accommodations due to a special need and would like to receive those accommodations while taking this course, please notify the instructor as soon as possible, preferably before the start of the course, so that these accommodations are provided. All accommodations will be considered in order to ensure that students with special needs have equal access to the course. Please note that the instructor will be in regular communication where necessary with the Student Accessibility Center to ensure your needs are being met at Loyola standards.

COURSE EVALUATION

Loyola uses the Smart Evaluation system for course evaluations. Students are encouraged to take the evaluation at the end of the semester to provide feedback based on their experience with the course and instructor. Students will be contacted via email regarding the window for evaluation near the end of the semester. Please take the time to complete this evaluation and provide feedback. For more information on the course evaluation system, refer to the addendum on the last page of this syllabus.

ASSIGNMENTS

Note that all written work (see Self-Assessment and Reflection papers below) should be completed as a Word document and submitted via Sakai. No work will be accepted via email or in hard copy. Papers should be written using Times New Roman and 12-point font with 1-inch margins. Papers that do not comply with this formatting will not be graded.

Initial Self-Assessment and Reflection. Students will be expected to self-assess on their current understanding of key concepts in the field of school neuropsychological assessment and

intervention. A self-assessment worksheet will be provided. After self-assessing, students should write a 1-2 page reflection on what stands out from the self-assessment and set at least 2 goals for learning in the course. The self-assessment and reflection paper should be uploaded to Sakai in the corresponding assignment drop box before the assigned due date.

Module Quizzes. In order to assess each student’s acquisition of knowledge of the course content, students will be expected to complete a quiz at the end of each module. All quizzes will be based on the readings assigned for each respective module. Students must pass the quiz for each module with an 80% or better before moving on to the next module. Quizzes can be retaken up to three times and the higher grade received will be used to calculate the student’s overall grade.

Online Engagement. Each module is comprised of various activities that students can complete at their own pace within a certain time period. The estimated time required to complete each module will be provided at the beginning of each module. Within each module, students will be expected to apply the assigned readings through in depth discussions on the Forum in Sakai. Students are responsible for keeping track of the due dates for completing each module. Failure to complete an activity by the respective due date will result in a deduction of 10 points for each incomplete activity from the online engagement grade.

Final Self-Assessment and Reflection. Students will be expected to self-assess on their understanding of key concepts in the field of school neuropsychological assessment and intervention after taking this course using the same self-assessment worksheet they completed at the beginning of the course. After self-assessing, students should write a 3-5 page reflection paper on what stands out from the self-assessment when comparing pre and post course, whether or not they were able to reach their learning goals discussed in the initial reflection, and explain any practices they will use as a school psychologist after taking this course. The self-assessment and reflection paper should be uploaded to Sakai in the corresponding assignment drop box before the assigned due date.

EVALUATION & GRADING PROCEDURES

Grades will be assigned based on one’s collective performance on graded assignments and engagement online with the course. Both reflection papers will be graded using a rubric that clearly indicates the criteria for grading in order to provide consistency and transparency. The rubric for each assignment is included at the end of this syllabus and also posted in Sakai for the respective assignment. *Students are responsible for asking questions and seeking further clarification if the expectations for the assignment are unclear.* The components of one’s grade are as follows:

Assignment	Points Possible
Initial Self-Assessment and Reflection	100
Module Quizzes	300
Online Engagement	100
Final Self-Assessment and Reflection	100

Grades will be given using the following scale:

Grade	%
A	94-100
A-	90-93
B+	87-89
B	84-86
B-	80-83
C+	77-79
C	74-76
C-	70-73
D+	67-69
D	60-66
F	< 60

PRIVACY STATEMENT

Assuring privacy among faculty and students engaged in online and face-to-face instructional activities helps promote open and robust conversations and mitigates concerns that comments made within the context of the class will be shared beyond the classroom. As such, recordings of instructional activities occurring in online or face-to-face classes may be used solely for internal class purposes by the faculty member and students registered for the course, and only during the period in which the course is offered. Students will be informed of such recordings by a statement in the syllabus for the course in which they will be recorded. Instructors who wish to make subsequent use of recordings that include student activity may do so only with informed written consent of the students involved or if all student activity is removed from the recording. Recordings including student activity that have been initiated by the instructor may be retained by the instructor only for individual use.

COURSE OUTLINE

(This outline is subject to change to accommodate extenuating circumstances. Students will be notified in advance if any changes to this outline are made.)

Date	Topics	Readings	Assignments*
Week of June 29th	Module One: Introduction to School Neuropsychology (12-16 hours)	Miller & Maricle (2019) Chps. 1, 2, 4, 5, 8 Aspen Institute Brief UBC Medicine [video] Cleary & Scott (2011) Davis et al. (2015) Decker (2008)	Class meeting on June 29 th at 12pm Initial Self-Assessment and Reflection due before midnight on July 5 th Module One Quiz due July 5 th
Week of July 6th	Module Two: Areas of Neuropsychological Functioning (42-56 hours)	Miller & Maricle (2019) Chps. 10-16 Meltzer (2018) Chp. 3 Goldstein & Naglieri (2008)	Module Two Quiz due July 29 th
Week of July 13th			
Week of July 20th			
Week of July 27th	Module Three: School-based Neuropsychological Interventions (24-32 hours)	Meltzer (2018) Chps. 10-13 Cleary, Platten, & Nelson (2008) Schaaf & Davies (2010) May-Benson & Koomar (2010) Leong et al. (2015)	Class meeting on July 29 th at 5pm Module Three Quiz due August 7 th Final Self-Assessment and Reflection due before midnight on August 7 th
Week of August 3rd			

*All major assignments are highlighted in yellow. This does not include lessons that count towards the Online Engagement grade.

**Loyola University Chicago
School of Education
Syllabus Addendum**

Syllabus Addendum Link: www.luc.edu/education/syllabus-addendum/

Smart Evaluation

Towards the end of the course, students will receive an email from the Office of Institutional Effectiveness reminding them to provide feedback on the course. They will receive consistent reminders throughout the period when the evaluation is open, and the reminders will stop once they have completed the evaluation.

- The evaluation is completely anonymous. When the results are released, instructors and departments will not be able to tell which student provided the individual feedback.
- Because it is anonymous and the results are not released to faculty or departments until after grades have been submitted, the feedback will not impact a student's grade.

Dispositions

All students are assessed on one or more dispositional areas of growth across our programs: Professionalism, Inquiry, and Social Justice. The instructor in your course will identify the dispositions assessed in this course and you can find the rubrics related to these dispositions in LiveText. For those students in non-degree programs, the rubric for dispositions may be available through Sakai, TaskStream or another platform. Disposition data is reviewed by program faculty on a regular basis. This allows faculty to work with students to develop throughout their program and address any issues as they arise.

LiveText

All students, except those who are non-degree, must have access to LiveText to complete the benchmark assessments aligned to the Conceptual Framework Standards and all other accreditation, school-wide and/or program-wide related assessments. You can access more information on LiveText here: [LiveText](#).

Center for Student Access and Assistance (CSAA)

Should you encounter an unexpected crisis during the semester (e.g., securing food or housing, addressing mental health concerns, managing a financial crisis, and/or dealing with a family emergency, etc.), I strongly encourage you to contact the Office of the Dean of Students by submitting a CARE Referral for yourself or a peer in need of support: www.LUC.edu/csaa. If you are uncomfortable doing so on your own, please know that I can submit a referral on your behalf.

This link directs students to statements on essential policies regarding academic honesty, accessibility, ethics line reporting and electronic communication policies and guidelines. We ask that you read each policy carefully.

This link will also bring you to the full text of our conceptual framework that guides the work of the School of Education – Social Action through Education.

Initial Reflection Rubric

Criteria	Does Student's Work Meet Criteria?	Strengths	Areas for Growth
<p>The self-assessment worksheet was completed and submitted.</p> <p><i>40 points</i></p>	<p>Yes</p> <p>Not Yet</p>		
<p>An essay is provided that is 1-2 pages long.</p> <p><i>10 points</i></p>	<p>Yes</p> <p>Not Yet</p>		
<p>The author shares her reflections on the results of the self-assessment.</p> <p><i>20 points</i></p>	<p>Yes</p> <p>Not Yet</p>		
<p>The author shares 2 or more learning goals for the course.</p> <p><i>30 points</i></p>	<p>Yes</p> <p>Not Yet</p>		

Final Reflection Rubric

Criteria	Does Student's Work Meet Criteria?	Strengths	Areas for Growth
<p>The self-assessment worksheet was completed and submitted.</p> <p><i>30 points</i></p>	<p>Yes</p> <p>Not Yet</p>		
<p>An essay is provided that is 3-5 pages long.</p> <p><i>10 points</i></p>	<p>Yes</p> <p>Not Yet</p>		
<p>The author shares reflections on the results of the self-assessment pre and post course.</p> <p><i>20 points</i></p>	<p>Yes</p> <p>Not Yet</p>		
<p>The author shares whether she met the learning goals for the course.</p> <p><i>20 points</i></p>	<p>Yes</p> <p>Not Yet</p>		
<p>The author shares a new practice she will use after taking this course.</p> <p><i>20 points</i></p>	<p>Yes</p> <p>Not Yet</p>		