DEP6059 Section PJ24 Seminar: Special Topics in Developmental Psychology

Concepts and Methods in Lifespan Development Research

University of Florida Fall 2024

InstructorMeeting timeDr. Natalie EbnerWednesdays

Professor, Psychology 12:50PM – 1:40PM (1 credit) 082 Psychology Bldg. 1:45PM – 3:50PM (3 credits)

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By appointment PSY129

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Course Description

The goal of this course is to introduce graduate students to concepts and applications in quantitative psychological research methods. Throughout the semester, we will cover a variety of advanced design and analytic techniques in developmental psychological science research. In addition to broadly surveying a variety of methods (from surveys to randomized experiments to latent growth modeling to multilevel modeling), examples and readings will span the life course and topics of developmental inquiry.

This course is designed to build on research skills graduate students have obtained in other fundamental research methods and statistics courses. The material we will cover will allow graduate students to design, implement, analyze, and critically evaluate developmental psychological science research and, guided by discussions, experiential, and practical assignments as well as invited guest lectures, is intended to prepare graduate students to advance their own program of research.

Three major themes will guide the course:

- 1) Theoretical: Central concepts in developmental science and the nature of developmental change
- 2) Methodological: Design, measurement, and causal inference
- 3) Statistical: Statistical approaches to address developmental research questions

Towards career development, we will also cover short segments on 'Preparing for the Academic Job Market', 'The Scientific Peer-Review Process', and 'AI Application in Psychological Science'.

The course is variable credits (1, 3) and the grading scheme is points/letter grades (see below for details). Weekly attendance is required for all developmental psychology graduate students. Registering for credit (1, 3) is required for all developmental psychology graduate students prior to their Qualifying Exam and requires completion of basic assigned readings and assignments in addition to weekly attendance. Students registered for 3 credits will complete additional assignments (outlined below) catered to the needs of the students and topics covered. Developmental Psychology Faculty will attend the seminar for some of the weeks throughout the semester.

Course Materials

Shadish, W. R., Cook, T. D., & Campbell, D.T. (2002). *Experimental and quasi-experimental designs for generalized causal inference* (2nd Edition). Boston: Houghton-Mifflin.

Laursen, B., Little, T. D., & Card, N. A. (2013). *The handbook of developmental research methods* (1st Edition). New York, NY: Guilford.

Additional required readings and chapters are included (outlined below) to supplement and exemplify concepts from the chapters.

All readings can be found on the course website.

Topic Timeline and Readings/Assignments (larger content areas are color coded; topics and readings/assignments in red/purple refer to the 1-credit version of the class; all topics and readings/assignments apply to the 3-credit version of the class, this includes readings/assignments in green/green)

Week	Date	Topic	Readings/Assignments
1	Aug 28	Intro & Organization Navigating the Academic Job Market Guest: Dr. Nicholas Coles Foundational Issues of Design and Measurement in Developmental Research "Dream Project" Introduction	Read and be ready to discuss https://ecrlife.org/things-to-know- academic-job-market/ Read and post 2 questions Chapter 1: Laursen et al. (2013)
2	Sep 4	Masters Defense Practice Niti Contractor Experiments I	Student presentation No readings Read and post 2 questions Chapter 1: Shadish et al. (2002)

Week	Date	Topic	Readings/Assignments	
		Hands-On: Counterbalancing		
3	Sep 11 Navigating the Non-Ad Market		Mead and be ready to discuss https://www.psychologicalscience.org/publications/observer/exploring-tech-jobs.html	
			https://www.psychologicalscience.org/publications/observer/follow-your-path.html	
			https://www.psychologicalscience.org/publications/observer/psychology-training-jobmarket-realities.html	
		Experiments II	Read and post 1 question per article/chapter Chapter 8: Shadish et al. (2002)	
			Ledgerwood, A. (2018). New developments in research methods. In R. F. Baumeister & E. J. Finkel (Eds.). <i>Advanced Social Psychology</i> (2 nd Ed.). Oxford University Press.	
		Hands-On: Guest presenter: Dr. Tian Lin Power/Sensitivity Analysis		
4	Sep 18	Job Talk Practice Dr. Adam Barnas	Postdoc presentation No readings	
		Correlational, Survey, and Internet Research	Read and post 1 question per article/chapter <i>Chapter 10</i> : Laursen et al. (2013)	
			Privitera. G. J. (2017). Survey and Correlational Research Designs. In G. J. Privitera (Ed.), Research Methods for the Behavioral Sciences (pp. 225-260, ed. 2). New York: NY, Sage.	
			https://www.psychologicalscience.org/publi cations/observer/pluses-pitfalls-online-research.html	
		Hands-On: Guest presenter: Dr. Didem Pehlivanoglu Online Data Collection Zoom: https://ufl.zoom.us/j/98083075426?p wd=gzeWwLcv122bvXMQznEKXtp		
5	Sep 25	gTpTcZH.1 Scientific Peer-Review Process: How to Write a Good Peer Review	Read and be ready to discuss https://royalsociety.org/blog/2020/02/wha t-makes-a-good-or-bad-peer-review/	

Week	Date	Topic	Readings/Assignments	
		Quasi Experiments I Hands-On: Avoiding Confounds	Read and post 2 questions Chapter 4: Shadish et al. (2002) Chapter 5: Shadish et al. (2002)	
6	Oct 2	Scientific Peer-Review Process: Reviewing Peer Review	Hands-On: Prepare a Peer Review No readings	
		Quasi Experiments II	Read and post 2 questions Chapter 6: Shadish et al. (2002)	
		Hands-On: Guest presenter: Dr. Adam Barnas Using R for Graphs		
7	Oct 9	Dissertation Defense Practice Julia Farrell	Student presentation No readings	
		Practical Problems	Read and post 1 question per article/chapter	
			Chapter 9: Shadish et al. (2002)	
		"Dream Project" Preparation	Chapter 10: Shadish et al. (2002)	
		Dissertation Proposal Practice <i>Kylie Wright</i>	Student presentation No readings	
		Longitudinal Designs and Causal	Read and post 1 question per article/chapter	
		Inference	Chapter 2: Laursen et al. (2013)	
			Hofer, S. M., & Piccinin, A. M. (2010). Toward an integrative science of life-span development and aging. <i>The Journals of Gerontology: Series B: Psychological Sciences and Social Sciences</i> , 65(3), 269-278.	
9	Oct 23	Poster Presentation Practice <i>Stephanie Washburn</i>	Student presentation No readings	
		AI Application in Psych Science Guest Speaker: Dr. Olivia Dizon-Paradis Zoom: https://ufl.zoom.us/j/94084939713?p wd=WimQs9tUAKVy053DDTDLF O3uvmsx4U.1		
		Longitudinal Data Collection and Analysis	Read and post 1 question per article/chapter: Chapter 8: Laursen et al. (2013) Chapter 14: Laursen et al. (2013)	
10	Oct 30	"Dream Project" Preparation Dr. Ebner at NIH Study Section	No readings	
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Week	Date	Topic	Readings/Assignments	
		Watch Kitchen Stories	Observation methods	
		Hands-On: Guest presenter: Dr. Tian Lin Mediation, Moderation, Moderated Mediation	Read and post 1 question per article/chapter: Chapter 18: Laursen et al. (2013)	
			Muller, D., Judd, C. M., & Yzerbyt, V. Y. (2005). When moderation is mediated and mediation is moderated. <i>Journal of Personality and Social Psychology</i> , 89(6), 852-863.	
11	Nov 6	Masters Defense Practice Yongyong Xu	Student presentation No readings	
		Ecologically-Based and Event- Frequency Methods	Read and post 1 question per article/chapter: <i>Chapter 4</i> : Laursen et al. (2013) or <i>Chapter 5</i> : Laursen et al. (2013)	
			Timmons, A. C., Baucom, B. R., Han, S. C., Perrone, L., Chaspari, T., Narayanan, S. S., & Margolin, G. (2017). New frontiers in ambulatory assessment: Big data methods for capturing couples' emotions, vocalizations, and physiology in daily life. <i>Social Psychological and Personality Science</i> , 8(5), 552-563.	
		Hands-On: Guest presenter: Dr. Shanting Chen Experience Sampling Methodology		
12	Nov 13	AI Application in Psych Science:	Read and be ready to discuss:	
		Discussion	https://www.psychologicalscience.org/obse rver/machine-learning-transforming- psychological-science	
			https://www.psychologicalscience.org/publications/observer/ais-limits-psychologicalresearch.html	
		Nonindependence	Read and post 2 questions	
		"Dream Project" Preparation	Chapter 30: Laursen et al. (2013)	
13	Nov 20	Dissertation Proposal Practice Alayna Shoenfelt	Student presentation No readings	
		Meta Analysis	Read and post 2 questions Chapter 37: Laursen et al. (2013)	

Week	Date	Topic	Readings/Assignments
		"Dream Project" Presentations	
14	Nov 27	Thanksgiving Break (no class)	N/A
15	Dec 4	Poster Presentation Practice Kiana Cogdill-Richardson Stephanie Washburn Chun-Che Hung	Student presentation No readings
		"Dream Project" Presentations	

Course Website

Go to http://elearning.ufl.edu/ to access the course website. A copy of the syllabus and course readings, class announcements, etc., will be posted on this website. Use of the course website will be reviewed during the first day of class. Also, please check your email accounts regularly as announcements may be sent via email as well.

Assignments and Grading

1 Credit Option

Students registering for 1 credit will attend class weekly and complete all assigned readings ahead of class, and actively participate in class discussions and activities. In particular, the 1 credit option will include the following assignments:

- 1) **Attendance (30 points).** All students should attend each week (exception: November 27, Thanksgiving Break) and will receive 2 points for attendance for a total of 30 points. Students can miss one week for a legitimate (pre-approved) reason without it impacting their grade.
- 2) Active In-Class Participation (70 points). Discussion points/questions need to be brought up during class. Per contribution 2.5 points can be earned for up 5 points per class session with possibility for active participation (14 sessions).

Total: 100 Points

3 Credit Option

Students taking the course for 3 credits will need to complete all the above requirements and will complete the extended readings as well as the following assignments. Additional readings and examples associated with each assignment may be posted on Canvas. It is the students' responsibility to read each of these and incorporate them into the assignment.

1) **Posting of Discussion Points/Questions (65 points)**. Each student will turn in the requested discussion points/questions on Canvas (based on the talks/readings). Discussion points/questions need to be submitted by the Monday 11:59 PM before each class session with readings. At least two of the discussion points/questions need to be brought up during class. Posting of discussion points/questions (3 points) and bringing up in class at least two discussion point/question (2 points) will result in 5 points per class session with readings (13 sessions with readings).

- 2) "Dream Project" (135 points). In the last two class sessions, each student will give a 20-min presentation on a major study they are currently conducting (it can be at any point in the process, from conceptualization to journal submission; thesis related or not). During the semester, there are several sessions reserved during class towards preparation of this assignment.
 - Students will present their current study in two ways:
 - 1. The <u>ideal way</u> the study would be run if resources and time were *unlimited*. Based on what students have learned in class, what is the ideal test of a most ambitious question? What would this dream study look like? This proposal needs to be expansive and idealistic, as well as scientifically justified. For example, it is not enough to say: "I would include both White and African American children if money were unlimited." Why these particular groups? And why would this extension be useful or not? The students should consider using multi-level longitudinal designs, representative cross-cultural samples, ecological assessments, multiple control groups, etc.
 - 2. The <u>actual way</u> the study will (or has been run). What compromises did the student have to make in the face of practical problems? What are they now unable to conclude due to methodological limitations? How are their findings more tentative and circumscribed than they would ideally like? What can they do to maximize validity, reliability, generalizability, power, and casual inferences, etc. in their actual study?

In the class presentations, students will need to reference and use as many concepts and readings from the class as possible in relation to their study. They will need to engage their classmates with interesting questions and make conceptual, factual, and theoretical links between the readings from the semester. They may present in any format they like (e.g., handouts, with PowerPoint slides, by writing on the board, using class exercises). Students need to submit all final presentation materials right after their in-class presentation session to Dr. Ebner for her use in evaluating the class assignment. Selection of papers and quality of the class presentation and the learning activity will be considered in the final grade for up to 75 points.

Total (additional to the 1 credit version): 200 Points

Grading follows the scale below:

Grade	Points (1 credit)	Points (3 credits)
A	90 - 100	270 - 300
A-	80 - 89	240 - 269
B+	70 - 79	210 - 239
В	60 - 69	180 - 209
В-	50 - 59	150 - 179
C+	40 - 49	120 - 149
C	30 - 39	90 - 119
C-	20 - 29	60 - 89
D	10 - 19	30 - 59
E	< 9	< 29

Note. Point values will be used to calculate final grades. Do not plan on rounding up for calculation of final grades.

Course Policies

Requirements for class attendance, assignments, and other work in this course are consistent with university policies that can be found at:

https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Students Requiring Accommodations

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting https://disability.ufl.edu/students/get-started/. It is important for students to share their accommodation letter with their instructor and discuss their access needs as early as possible in the semester.

Course Evaluations

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at https://gatorevals.aa.ufl.edu/. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://gatorevals.aa.ufl.edu/.

Dr. Ebner also welcomes students to be in touch via email or in person for additional questions, comments, or concerns.

Policy Related to Academic Dishonesty

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, students are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If students have any questions or concerns, please consult Dr. Ebner.

Student Privacy

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see:

http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html

Sexual Harassment

Sexual Harassment is not tolerated in this class, in the Department of Psychology, or at UF. Sexual harassment includes: the inappropriate introduction of sexual activities or comments in a situation where sex would otherwise be irrelevant. Sexual harassment is a form of sex discrimination and a violation of state and federal laws as well as of the policies and regulations

of the university. All UF employees and students must adhere to UF's sexual harassment policy which can be found here: https://hr.ufl.edu/formspolicies/policies-managers/sexual-harassment/. Please review this policy and contact a university official if you have any questions about the policy. As mandatory reporters, university employees (e.g., administrators, managers, supervisors, faculty, teaching assistants, staff) are required to report knowledge of sexual harassment to UF's Title IX coordinator. You can also complete a Sexual Harassment Complaint Form (Title IX) here: https://titleix.ufl.edu/title-ix-complaint-form/

Campus Resources

Health and Wellness

- Center Contact information for the Counseling and Wellness Center: http://www.counseling.ufl.edu/cwc/Default.aspx, 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.
- Sexual Assault Recovery Services (SARS), Student Health Care Center, 352-392-1161.
- Sexual Harassment Complaint Form (Title IX): https://titleix.ufl.edu/title-ix-complaintform/
- U Matter, We Care: If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575 so that a team member can reach out to the student.
- University Police Department at 352-392-1111 (or 9-1-1 for emergencies), or http://www.police.ufl.edu/.

Academic Resources

- E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learningsupport@ufl.edu. https://lss.at.ufl.edu/help.shtml.
- Library Support, http://cms.uflib.ufl.edu/ask. Various ways to receive assistance with respect to using the libraries or finding resources.
- Writing Studio, 302 Tigert Hall, 352-846-1138. Help brainstorming, formatting, and writing papers. https://writing.ufl.edu/writing-studio/.
- Teaching Center, Broward Hall, 352-392-2010 or 352-392-6420. General study skills and tutoring. https://teachingcenter.ufl.edu/.
- Career Resource Center, Reitz Union, 352-392-1601. Career assistance and counseling. https://www.crc.ufl.edu/.
- Student Complaints Campus: https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf.
- On-Line Students Complaints: http://www.distance.ufl.edu/student-complaint-process.

****If necessary, Dr. Ebner may change the specific topics, dates, and assignments on this syllabus. Students are responsible for all announcements made in class or posted on the course website.