Advanced Topics in Developmental Psychology (PSY 563): How Children Learn (Sec 001) Spring 2022

Where: Lecture: T/R 9:30 -10:45am (Funkhouser rm. 307B)

Who:

Professor: Dr. Pooja Sidney (Addressed as Dr. Sidney)

Pronouns: she/her/hers pooja.sidney@uky.edu

Office hour: Tuesday 11am – 12pm or by appointment via email

If Online: (TBA)

COURSE DESCRIPTION

This course is designed to provide in-depth study of a specialized topic in developmental psychology. In our section, we will focus on the mechanisms of and contexts that facilitate children's cognitive development, in other words, *how children learn*. Along the way, we will consider the practical applications of this research and practice critical analysis, presentation, and leadership. Your *active participation* is critical to your learning – you will get out what you put in!

<u>Prerequisites</u>: Courses required include PSY 195, PSY 215, PSY 216, and an advanced lecture lab (PSY 460 is recommended). You may not take them concurrently without instructor approval.

Student Learning Outcomes

At the end of this course, you should be able to (a) understand and describe major ways in which human learning occurs throughout childhood, (b) integrate across multiple sources to make claims and ask questions, and (c) interpret and explain scientific findings from empirical research.

Required Readings: Empirical articles posted to Canvas, see schedule below.

COURSE OVERVIEW

What will I do in this class?

- 1. Read journal articles every week, at least a few days before class
- 2. Post to a Canvas discussion board by 12pm the day before each class
- 3. Actively participate in class discussion
- 4. Present two provided empirical articles to the class
- 5. Lead class discussion on weeks you are presenting
- 6. Write a final (10-12 page) paper on a topic of your choosing

ACTIVITIES & ASSIGNMENTS

Readings & Discussion Questions

Readings are assigned for every class day, and you will read at least one day <u>BEFORE</u> class. You will be more successful if you read well ahead of time! A guide for reading empirical journal articles can be found on Canvas. I strongly encourage you to use the guide to help you take notes on every article you read. <u>AFTER</u> reading, **post one substantive question or comment** about the reading on that day's discussion board in Canvas by 12pm the day before. Each post should be at least 4 sentences. A complete response will include your original thoughts (e.g., links to other things you know, observations about the implications of the reading for parenting, education, or public policy, criticism or critiques of the reading, and/or new questions about the reading) and will clearly demonstrate your understanding of at least one reading for that day. *Late posts will not be accepted, but you may miss 3 without penalty*.

Class Participation

The learning in this class will primarily occur via collaborative discussion, so your attendance and participation is critical! On each class day, you will earn points for attendance and active participation. If you will miss class, you may write a 250-300 word reflection paper based on the readings and turn it in for full credit for that day.

Reflection Papers

At any two points during the semester, you will write a 1-2 page reflection paper on that day's topic of discussion. The reflection paper can include 1) what you thought about the topic before reading, 2) what you've learned about the topic, 3) your commentary or extension on what you learned and/or 4) what questions you still have. Alternatively, you may reflect on your experience as discussion leader.

Article Presentation

Twice this semester, you present an empirical article to the class. Articles will be assigned at the beginning of the semester (you will have some choice). Presentations should be between 10 and 15 minutes and should include an overview of the article's introduction, method, findings (results), and implications (discussion). You should be familiar enough with the article that you can answer any clarification questions as if it were your own work. Your presentation must include some visual aspect, but it can take any format including presenting slides (e.g., PowerPoint), interactive tools (e.g., Prezi), or relevant video. It should be engaging and informative!

Discussion Leader

During the week you present your articles, you will also lead our discussion, along with a discussion leader partner. To do this, you will 1) read the assigned readings ahead of time, 2) prepare your article presentation, 3) read students' posts on the discussion board ahead of time, and 4) make a plan to lead discussion. You are responsible for coordinating with your discussion leader partner to plan for leading class. Both students should fill out the "Discussion Planning Worksheet". You do not need to make a discussion post during your leader weeks. *If you cannot attend your leading day(s) for some reason, alert your partner(s) and Dr. Sidney ASAP*.

Final Project

The final project is meant to deepen your knowledge on a topic of your choosing. The outcome of the final project will be a 10-12 page double-spaced APA style paper. (This page requirement includes the abstract, body of the manuscript, and any tables and/or figures, but not title page or references.) You may choose from the following types of papers:

- 1) **Review Paper**. This type of paper summarizes the research on a particular topic to inform readers. Review papers should be aimed at answering one overarching research question by summarizing, and integrating across, key existing research findings. They should motivate the importance of this question at the beginning and include a section on what interesting questions you think remain unanswered (i.e., a "future directions" section).
- 2) **Study Proposal**. This type of paper proposes a new research study on a topic of your choosing. Study proposals should include an introduction (reviewing relevant research and setting up a research question), a proposed method (with expected participants and planned recruitment, design, materials/measures, and procedures sections), expected results (with relevant figures to represent hypotheses), and a discussion section (including implications for theory and/or practice, noted limitations, and future directions). *Note: You do not need to conduct the study, just design it! You may choose to extend an existing study in some important way.*
- 3) **Intervention Development**. This type of paper describes an practical intervention based on research in cognitive developmental psychology. The intervention may target parents, teachers, schools, or other stakeholders. You should identify and describe an existing problem or need, review the relevant research that could be used to address that problem or need, and design and describe a research-based intervention that could address that problem or need. The paper should also include a section briefly describing how the intervention could be tested with an appropriate sample (effectiveness, feasibility, and generalizability should be addressed). *Note: You do not need to conduct the study, just design it! You may propose to improve an existing intervention.*

To facilitate your work on this project, you will choose a general topic early in the semester (due 2/13/22). Later, you will submit an annotated bibliography (due 3/27/22). The bibliography will consist of a list of 10-12 APA style reference citations along with summaries of each reference (in your own words – no plagiarism). At least 8 references must be empirical articles, metanalysis, or review papers. Towards the end of the semester, you will bring a rough draft to class for peer review (due 4/26/22 in class). Late work will be penalized 1pt/day for these preliminary assignments, 5pts/day for the final paper.

GRADING

Grades will be assigned based on the following proportions:

| In-Class Participation | 110 pts (22 x 5pts each) |
|------------------------|----------------------------|
| Discussion Posts | 135 pts (18 x 7.5pts each) |
| Reflection Papers | 20 pts (2 x 10pts each) |
| Discussion Leader | 60 pts (2 x 30pts each) |
| Article Presentation | 70 pts (2 x 35pts each) |

| Final Project TOTAL | <u>110 pts</u> |
|------------------------|----------------|
| Topic due | 5 pts |
| Annotated Bibliography | 10 pts |
| Rough Draft | 10 pts |
| Paper | 80 pts |

Grades will be assigned as follows:

| Average | Course Grade |
|-------------------------|--------------|
| 90-100% (450-500 pts) | A |
| 80-89.99% (400-449 pts) | В |
| 70-79.99% (350-399 pts) | C |
| 60-69.99% (300-349 pts) | D |
| 00-59.99% (0-299 pts) | E |

Note: I do not curve or round grades.

COURSE SCHEDULE

| <u>w</u> | <u>Date</u> | Topic | Readings & Due Dates |
|----------|-------------|----------------------------------|--|
| 1 | 1/11 | Introduction & Syllabus Review | Syllabus |
| | 1/13 | What is <i>learning</i> ? | Rovee-Collier et al. (1980) Siegler (2000) Bonawitz et al. (2011) |
| 2 | 1/18 | Theories: Overview & Piaget | Newcombe (2013) Fischer & Henke (1996) Optional: Siegler & Alibali Ch. 2 |
| | 1/20 | Piaget cont.: Symbolic Thinking | Weisberg (2015) DeLoache et al. (2004) |
| 3 | 1/25 | Theories: Sociocultural Theory | Tomasello (2000) Chavajay & Rogoff (2002) Optional: Siegler & Alibali Ch. 4 |
| | 1/27 | Theories: Information Processing | Siegler (2005) McNeil & Alibali (2004) Optional: Siegler & Alibali Ch. 3 |
| 4 | 2/1 | Learning to Understand Faces | Kelly et al. (2007) Scott & Monesson (2009) Optional: Siegler & Alibali Ch. 5 |
| | 2/3 | Learning from Movement | Campos et al. (1992) Soska et al. (2010) Optional: Cook et al. (2013) |
| 5 | 2/8 | Learning Shapes Language | Saffran et al. (1996) Senghas & Coppola (2001) Optional: Siegler & Alibali Ch. 6 |
| | 2/10 | Language Shapes Learning | Pyers & Senghas (2009) Boroditsky & Gaby (2010) Optional: Majid et al. (2004) Optional: Landy et al. (2013) |
| 6 | 2/15 | Learning to Remember | Morrison et al. (1995) Ornstein & Coffman (2020) Optional: Siegler & Alibali Ch. 7 |
| | 2/17 | Learning & Attention | Grenell & Carlson (2021) Zelazo & Carlson (2012) Optional: Diamond (2014) |

| 7 | 2/22 | Learning with Analogy | Thompson & Opfer (2010) Gentner et al. (2016) Optional: Chen et al. (2004) Optional: Sidney & Thompson (2019) |
|----|------|--------------------------------------|---|
| | 2/24 | Learning as Conceptual Change | Vosniadou (2007) de la Hera et al. (2019) Optional: Shtulman & Valcarcel (2012) |
| 8 | 3/1 | Learning about the Social World | Moty & Rhodes (2021) Brey & Shutts (2015) Optional: Siegler & Alibali Ch. 9 |
| | 3/3 | Social World shapes Learning | Beilock et al. (2010) Harris & Corriveau (2011) Optional: Buttelman et al. (2013) |
| | 3/8 | Dr. Sidney away for travel: No Class | |
| 9 | 3/10 | Dr. Sidney away for travel: No Class | |
| 10 | 3/15 | | |
| | 3/17 | Spring Break: No Class | |
| 11 | 3/22 | Home Mathematics | Carraher et al. (1985) Berkowitz et al. (2015) Optional: Easton et al. (2020) |
| | 3/24 | Classroom Mathematics | Fyfe et al. (2015) Laski & Siegler (2014) Optional: Rittle-Johnson et al. (2015) |
| 12 | 3/29 | Science in Museums | Haden (2010) Callanan & Oakes (1992) Optional: Crowley et al. (2001a) Optional: Crowley et al. (2001b) |
| | 3/31 | Science in School | Schwartz et al. (2011) Kelemen et al. (2014) Optional: Carey (2000) |
| 13 | 4/5 | Learning to Reading | Raynor et al. (2002) Baker et al. (1997) Optional: Duke & Pearson (2009) |
| | 4/7 | Dyslexia & Dyscalculia | Shaywitz (1996) Mazzocco et al. (2011) Optional: Butterworth et al. (2011) |

| 14 | 4/12 | Thinking about Learning | Metcalfe (2006) Stevenson et al. (1993) Optional: McCormick (2003) |
|----|------|---|--|
| | 4/14 | Motivating Learning | Rosek et al. (2017) Silvia (2008) Optional: Wigfield et al. (2019) |
| 15 | 4/19 | No Class: Work on Final Paper | |
| 13 | 4/21 | No Class: Work on Final Paper | |
| 16 | 4/26 | Final Paper Peer Review: Draft Due! | |
| | 5/3 | Final Paper is Due Tuesday May 3 rd by 11:59pm | |

Note: The course content, calendar, and grading policies may be changed at the discretion of the instructor. Any changes will be announced in class, email, and/or Canvas. Each student is responsible for noting and recording these changes when they occur. Due to the ongoing pandemic, some classes may be held online via Zoom. Dr. Sidney will alert you; please use the Zoom link in Canvas.

Project Due Dates

- 1. **Topic** due SUNDAY 2/13/22 at 11:59pm
- 2. **Annotated Bibliography** (10+ sources) due SUNDAY 3/27/22 at 11:59pm
- 3. Rough Draft (paper copy in class) due TUESDAY 4/26/22 at 9:30am
- 4. Final Paper due TUESDAY 5/3/22 at 11:59pm

COURSE POLICIES

Course policies for all UK courses (https://www.uky.edu/universitysenate/acadpolicy), including the diversity, equity, and inclusion policy (https://www.uky.edu/universitysenate/syllabus-dei), apply to this course. If you have a question about course policy and cannot find the answer below, please check the policies in this link.

Attendance & Absences

Regular attendance is expected. Class will begin on time every day; please arrive accordingly.

If you cannot attend class at its scheduled time, you must notify me at least <u>two</u> days in advance, unless the absence is due to an emergency. You can let me know by sending an e-mail, by speaking with me before or after class, or by dropping by office hours. Unless I approve your absence in advance, you *must* provide documentation of the reason for your absence (e.g., doctor's excuse for an illness) or you will not be allowed to take a make-up. You will receive a zero for participation that day if you have an unexcused absence.

Students are expected to withdraw from the class if more than 20% of the classes scheduled for the semester are missed (excused or unexcused) per university policy.

Academic Integrity

Per University policy, students shall not plagiarize, cheat, or falsify or misuse academic records. Plagiarism and cheating are serious breaches of academic conduct. Each student is advised to become familiar with the various forms of academic dishonesty as explained in the Code of Student Rights and Responsibilities. Complete information can be found at the following website: http://www.uky.edu/Ombud. A plea of ignorance is not acceptable as a defense against the charge of academic dishonesty. It is important that you review this information as all ideas borrowed from others need to be properly credited.

Plagiarism. Senate Rules 6.3.1 (see http://www.uky.edu/Faculty/Senate/ for the current set of Senate Rules) states that all academic work, written or otherwise, submitted by students to their instructors or other academic supervisors, is expected to be the result of their own thought, research, or self-expression. In cases where students feel unsure about a question of plagiarism involving their work, they are obliged to consult their instructors on the matter before submission.

Plagiarism includes reproducing someone else's work (including, but not limited to a published article, a book, a website, computer code, or a paper from a friend) without clear attribution. Plagiarism also includes the practice of employing or allowing another person to alter or revise the work, which a student submits as his/her own, whoever that other person may be. Students may discuss assignments among themselves or with an instructor or tutor, but when the actual work is done, it must be done by the student, and the student alone.

When a student's assignment involves research in outside sources or information, the student must carefully acknowledge exactly what, where and how he/she has employed them. If the words of someone else are used, the student must put quotation marks around the passage in

question and add an appropriate indication of its origin. Making simple changes while leaving the organization, content, and phrasing intact is plagiaristic.

Cheating. In this class, you are allowed to collaborate with others. Collaboration is an important skill in science and in life! However, you may not turn in others' work as your own. This will be considered cheating. At the minimum, all work must be in your own words, unless otherwise specified. To avoid the appearance of cheating, I suggest that you always write independently from your classmates after discussing key ideas.

Academic dishonesty will not be tolerated. Any cases of academic dishonesty will be dealt with by giving an "E" for the course, and expulsion from the university may also result.

Accommodations

I am committed to providing, upon request, appropriate academic accommodations for qualified students with disabilities. If you have a documented disability that requires academic accommodations (documented by the Disability Resource Center), please see me as soon as possible during office hours. You can find more information about the Disability Resource Center here: http://www.uky.edu/DisabilityResourceCenter.

Communication with the Instructors

The syllabus is given to you for a reason. Please check it frequently! If you have additional questions, you are welcome to contact me. You may email me or visit me during office hours. Please be sure to address and sign your email appropriately for formal communication with an instructor. Here are some tips for communicating with faculty: https://www.insidehighered.com/views/2015/04/16/advice-students-so-they-dont-sound-silly-emails-essay

I will do my best to answer your email within 24 hours. I will typically get to emails sent over the weekend on the next business day (usually Monday).

The class schedule and format is subject to change due to unforeseen circumstances, such as professor illness or inclement weather. **Please check your email each morning**, as changes and cancellations will be announced through email.