

## EDPS 6451/7451 Foundations of Learning

Fall 2024

Location/Time: IVC/Wednesday, 5-8 pm

Office Hours: By appointment/remote

Instructor: Tracy Dobie, Ph.D.

University of Utah

Department of Educational Psychology

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*This syllabus is meant to serve as an outline and guide for the course. Please note that it may be modified by the instructor at any time so long as reasonable notice is provided to students of the modification. Should you have any questions or concerns about the syllabus, it is your responsibility to contact the instructor for clarification.*

### **OVERVIEW**

#### **Course Description:**

This course consists of discussion and analysis of major learning theories that have influenced learning and instruction. There will be a focus on applications and implications of current research in a variety of educational settings. Students enrolled in EDPS 7451 will be held to a higher standard of performance and assigned additional work.

During the Fall 2024 semester, this class will be held using the IVC (Interactive Video Class) format. Using this format there will be synchronous class meetings on Canvas (Zoom) on Wednesdays starting at 5 pm and running for approximately 90 minutes. Every week there will be some readings, activities, discussions, and video assignments that need to be completed before class. In-class synchronous sessions will focus on small group and whole class discussions of theories and applications to a variety of settings. After class, there will be group theory work to complete in preparation for the theory debates. The class will conclude with a final project where you collect and analyze data on student learning to develop your own learning theory.

Three of our classes will be held in person in the Hub (1st floor, next to Jeeva's): August 21 (our first class), September 25 (week 6), and October 23 (week 9). The week 6 and week 9 sessions will be theory debates. Those classes will last 90 minutes-2 hours (ending no later than 7 pm).

All materials, including readings, can be accessed through Canvas, the University of Utah's online course management system. Go to <http://www.utah.edu/students/> and click on "My Classes" on the top-right portion of your screen. You can log in with your UNID and password. Select from the available courses, EDPS 6451/7451: Foundations of Learning, Instructor Dobie.

The weekly meetings will be held on Canvas/Zoom. You can access the Zoom link via Canvas, and it is available here:

<https://utah.zoom.us/j/96533473924>

Passcode: learning

#### **Course Objectives:**

Upon completion of this course students should be able to:

- Explain the main theories, methodologies, and controversies among learning theories;

- Apply each learning theory to a variety of educational and instructional settings;
- Formulate and explain their own personal theory of learning;
- Use discourse and writing skills to convey to others what they have learned.

### **Readings:**

All required and optional readings will be available as PDF files in Canvas.

## **COURSE REQUIREMENTS**

- 1. Participation and Readings.** You are expected to complete all readings and participate in all activities, discussions, and video assignments. If you expect to be unable to participate, please contact the instructor by email ahead of time.

There will be assigned reading each week. Required reading assignments will typically be 1-3 chapters and/or articles that will be available on Canvas. There are also Additional Optional Readings on Canvas; these are meant to supplement the required readings and include examples of empirical studies using a particular theory. EDPS 7451 students are required to read at least one of the additional readings each week. There will also be online activities, discussions, and video assignments about the readings in preparation for each synchronous class meeting. The readings, activities, video assignments, and discussions will be available on Canvas as part of weekly modules. Twice during the semester (weeks 5 and 11), we will use a jigsaw reading approach in which you will work in small groups to each read one article and then teach your peers about your reading. On the left menu bar of your course Canvas page, click on “Modules,” and you will see all the materials organized in weekly folders. It is important for you to read the assigned papers and complete other activities, discussions, and video assignments **before** class.

- 2. Theory Group page**

Each student will be randomly assigned to a theory group (Behaviorism, Cognition, Situated Cognition, Cognitive Development, Social Interactionist) whose purpose is to create a Wikipedia-style page outlining the major principles and arguments of a specific theory. In addition, the theory pages should provide examples of how each theory might apply to various educational settings.

Each group will work as a team to complete a Wiki page (see Pages link on Canvas). Each page needs to answer a set of predetermined questions/issues for that theory. You can edit the theory page using text, images, links to websites, video, audio, etc. Anything you post on the Wiki must be related to the theory module and must be well explained. In addition, because this content is for course-wide use, do not include any content that your classmates might find offensive or inappropriate. Any such content will be removed by the instructor.

The theory page for your group must be completed and submitted to the instructor by the deadline listed on the course calendar (11:59 pm on Friday).

- 3. Theory Debates**

You will quickly discover that the ideas behind some of the theories covered in this course contrast sharply with one another. To bring these contrasting issues to the forefront, and to determine whether and/or how these theories can be reconciled and integrated, particularly in reference to educational issues, we will hold two theory debates (week 6 and week 9).

EDPS 7451 students are responsible for developing questions that highlight

important similarities and discrepancies between the theories being discussed, as well as important issues to consider concerning the application to classroom practice. Each EDPS 7451 student should develop 5 of these comparative/contrastive questions (and their answers) for each of the two debates. These questions will inform the development of debate questions and are due on Canvas the Monday of each debate week.

Debates will be held in person. All EDPS 6451/7451 students will be randomly split into two teams at the beginning of class. This means that you won't know ahead of time which side you'll be on, so you'll need to be prepared to take either side. You will be making arguments about the important assumptions and instructional applications of a given theoretical perspective. Your job is to provide convincing answers to the questions asked during the debates, given the information provided in class, the readings, and the theory group Wikis.

#### 4. Final Project: Developing a Personalized Learning Theory

You will conduct an iterative project over the semester that will result in developing your own personalized learning theory. This project consists of planning, data collection, analysis, and writing.

- a. **Part 1: Planning for data collection, writing up your initial learning theory, and exchanging it with a peer for feedback.** First, as part of the planning process, you should schedule an individual meeting (during the week of 9/23 or 9/30) with Dr. Dobie to discuss your plans and ideas. After that meeting, you will write up your initial learning theory and your data collection plan along with the relevant rationale (*due on Friday, October 4<sup>th</sup> at 11:59 pm*). Then you will exchange it with a pre-assigned peer and provide constructive criticism to that peer during class on *October 16<sup>th</sup>*. Based on that feedback, you will revise your learning theory and data collection plan and then submit it for a grade (*due on October 18<sup>th</sup>*). Your write-up should include the following sections:
  - a. A description of your initial personal theory of learning (inputs, means/mechanism, and results/outputs).
  - b. A description of your data collection plan. This plan should include logistic details (e.g., number of participants, the background of participants, interview or instructional protocol, survey questions, etc.) along with a rationale for how your planned data will address your theory of learning. You should also discuss how you anticipate analyzing the data after it is collected. Finally, you should include some ideas about what might go awry and how you might address those challenges.
- b. **Part 2: Collecting Data.** As planned, you will collect data that speaks to your learning theory. It can involve interviews, small groups, or whole class settings. It can be online or in-person. The data can be with children, adolescents, or adults, in a formal or informal educational setting. The data could be qualitative or quantitative; for instance, video, audio, written, digital, survey, or some other format. However, the data should be substantial enough to support analysis; for instance, 15-minute interviews with 6-8 individuals, video of three related classroom lessons (can be online), or a survey filled out by one or two classrooms of students. *This will be done in November.*
- c. **Part 3: Analysis of Data—Learning Theory**  
You will analyze the previously collected data and write a report summarizing your findings. Based on your analysis of your data, you will infer what your theory of teaching and learning is. Then you will summarize your found theory of learning and teaching. Compare your “found” theory with your “implicit” theory.

Although each of the theories that we will discuss throughout this course has important influences on educational practices, they will each fall short in some way. Many educators, in fact, end up forming their own personalized theories of learning and instruction (often called teaching philosophies) that combine elements from several, different, often competing, theories. The goal of your final paper for this class is to write a paper that clearly outlines your own personalized theory of learning and instruction based on your data collection. After you collect your data, you will analyze it and write up your results. Your paper should include the following sections:

- i. A clear description of your initial personal theory of learning (must include inputs, means, and outputs)
- ii. An analysis of your theory: What are the major tenets of the theory? What are the specific learning principles or guidelines that influence the instructional practices? Are there other factors that have influenced your theory? Include some justifications and rationale for the instructional design, motivation, feedback, assessment, etc.
- iii. A description of your data collection methods and participants
- iv. A description of your analysis: What did you find? How are your findings similar/different from what you expected given your initial theory of learning?
- v. Compare your theory to the learning theories we've read this semester. Which theories are most similar/different from your theory? Is your theory an integration of many theories? Is your theory at odds with a particular learning theory?
- vi. Conclude your paper by discussing future questions. If you were to collect and analyze more data, what open questions or phenomena would you investigate?

Format. Your paper should be between 3000-5000 words and in APA format. Please include your data or artifacts as an Appendix. The paper should be submitted via Canvas as an attachment and is due *December 6<sup>th</sup> at 11:59 pm*.

## **COURSE POLICIES**

### **Grading Policy**

Participation in online activities and discussions	20%
Theory Group page	15%
Reading Jigsaw (Week 5 and Week 11)	15%
Final Project: Developing a Personalized Learning Theory - Part 1: Writing up initial learning theory and exchanging it with a peer for feedback. The first write-up is due on 10/4, then you will exchange it with a peer and provide that peer constructive criticism remotely and online during class on 10/16. After that you will turn in your initial learning theory on 10/18.	10%
-Part 3: Final Paper—Personalized Learning Theory. Due 12/6.	40%

### **Readings, Sharing, and Participation**

It is important for you to complete the reading and participate in the online discussion before coming to class. See the class schedule for readings each week. All readings will be uploaded to the Canvas.

## Extra Credit

No extra credit will be given.

## Assignment Submission

All assignments are due online on Canvas on the date listed in the course schedule (mostly Fridays at 11:59 pm). Five points will be deducted for each late day. Assignments should be well-written and submitted in APA format. If you have questions about APA formatting, I suggest the following online resource: <https://owl.english.purdue.edu/owl/resource/560/01/>

## COURSE SCHEDULE

### Week 1: Introduction: Role of Theory in Educational Practice

August 21, 2024

Readings:

- Driscoll, M. P., (2005). *Psychology of learning for instruction*. Boston: Pearson Allyn and Bacon. *Chapter 1. Introduction to Theories of Learning and Instruction (pp. 1-15)*
- Bransford, J. D., Brown, A. L., & Cocking, R. R. (2000). *How people learn*. Washington, D.C.: National Academy Press. *Chapter 1: Learning: From Speculation to Science (pp. 3-28)*

*Additional Optional Readings:*

- diSessa, A. A. (1991). If we want to get ahead, we should get some theories. *Plenary talk presented at the North American Chapter of the International Group for the Psychology of Mathematics Education*, Blacksburg, Virginia.
- Bereiter, C. (1990). Aspects of an educational learning theory. *Review of educational research*, 60(4), 603-624.
- Thomas, G. (1997). What's the use of theory? *Harvard educational review*, 67(1), 75-105.
- Rajagopalan, K. (1998). On the theoretical trappings of the thesis of anti-theory; or, why the idea of theory may not, after all, be all that bad: A response to Gary Thomas. *Harvard Educational Review*, 68(3), 335-353.

### Week 2: Behaviorism

August 28, 2024

Readings:

- Schunk, D. H. (1996). *Learning theories*. Prentice Hall Inc., New Jersey. *Chapter 3: Behaviorism. (pp. 71-116)*

*Additional Optional Readings:*

- Skinner, B. F. (1958). Teaching machines. *Science*, 128 (3330), 969-977.
- Hill, W.F. (2002). Learning: A survey of psychological interpretations (7th ed.). Three early connectionist theorists (pp. 25-34). New York: Harper & Row.

Assignments:

- Behaviorism Theory Group wiki page due 8/30

### **Week 3: Cognition: Information processing approach**

September 4, 2024

#### Readings:

- Driscoll, M. P., (2005). *Psychology of learning for instruction*. Boston: Pearson Allyn and Bacon. *Chapter 3: Cognitive Information Processing*. (pp.71-110)
- Mayer, R. E. (1996). Learners as information processors: Legacies and limitations of educational psychology's second. *Educational psychologist*, 31(3-4), 151-161.

**\*\*Note: Read the Driscoll chapter first and the Mayer article second.**

### **Week 4: Cognition: Metacognition and problem solving**

September 11, 2024

#### Readings:

- Gredler, M. E. (1997). *Learning and instruction: Theory into practice*. Prentice Hall. *Chapter 7, Cognitive Perspectives: II Metacognition and Problem Solving*. (pp. 226-261)

#### *Additional Optional Readings*

- *Problem solving:*
  - Chi, M. T., Glaser, R., & Rees, E. Expertise in Problem Solving. In R. J. Sternberg (Ed.) *Advances in the psychology of human intelligence*, (Vol. 1). Hillsdale, NJ: Erlbaum.
  - Schoenfeld, A. H. (1992). Learning to think mathematically: Problem solving, metacognition, and sense making in mathematics. *Handbook of research on mathematics teaching and learning*, 334-370.
- *Cognitive Load:*
  - Tuovinen, J. E., & Sweller, J. (1999). A comparison of cognitive load associated with discovery learning and worked examples. *Journal of educational psychology*, 91(2), 334.
- *Metacognition:*
  - White, B., & Frederiksen, J. (2005). A theoretical framework and approach for fostering metacognitive development. *Educational Psychologist*, 40(4), 211-223.

#### Assignments:

- Cognition Theory group wiki page due 9/13 (*Note: This covers both weeks 3 and 4*).

### **Week 5: Situated Cognition**

September 18, 2024

#### Readings (you will be assigned one):

- Lave, J. (1996). Teaching, as learning, in practice. *Mind, culture, and activity*, 3(3), 149-164.
- Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational researcher*, 18(1), 32-42.
- Goodwin, C. (1994). Professional vision. *American Anthropologist*, 96(3), 606-633.

#### *Additional Optional Readings*

- Rogoff, B. (2008). Observing sociocultural activity on three planes: Participatory appropriation, guided participation, and apprenticeship. *Pedagogy and practice: Culture and identities*, 58-74.
- Brown, A. L., Ash, D., Rutherford, M., Nakagawa, K., Gordon, A., & Campione, J. C. (1993). Distributed expertise in the classroom. *Distributed cognitions: Psychological and educational considerations*, 188-228.

Assignments:

- Situated Cognition Theory group wiki page due 9/20
- Reading Jigsaw: Everyone will be assigned one of the three papers ahead of time. You will read that paper and write a 2-page summary and then email it to your jigsaw peers and submit it on Canvas before class. During class time on 9/18 you will teach peers about your paper.

**\*\*Note:** During the synchronous class on 9/18 we will do an activity to begin thinking about one's initial learning theory for the final paper.

**Week 6: Debate Behaviorist vs. Cognitive approaches**

September 25, 2024

Assignments:

- Everyone: In preparation for the debate please review all of the previous Theory group's Wikis.
- 7461 Students: Submit debate questions on Canvas by 9/23

*Additional Optional Readings*

- Greeno, J. G., Collins, A. M., & Resnick, L. B. (1996). Cognition and learning. *Handbook of educational psychology*, 77, 15-46.

**\*\*Note:** On September 25<sup>th</sup> we will meet in person. \*\*

**Week 7: Cognitive Development: Piaget and Bruner**

October 2, 2024

Readings:

- Driscoll, M. P., (2005). *Psychology of learning for instruction*. Boston: Pearson Allyn and Bacon. *Chapter 6: Cognitive and Knowledge Development (pp.185-222) and Chapter 7: Interactive Theories of Development (pp. 223-245)*

*Additional Optional Readings*

- Ginsburg, H. P., & Opper, S. (1988). *Piaget's theory of intellectual development*. Prentice-Hall, Inc. Chapter 6. pp. 237-256
- Case, R. (1993). Theories of learning and theories of development. *Educational Psychologist*, 28(3), 219-233.

Assignments:

- Initial learning theory and plan for data collection. Due on 10/4 to be submitted on Canvas and exchanged with a peer.
- Cognitive Development: Piaget and Bruner Theory group wiki page due 10/4

**\*\*No class on October 9, 2024 – FALL BREAK\*\***

**Week 8: Social Interactionist Theories: Bandura and Vygotsky**

October 16, 2024

Readings:

- Driscoll, M. P., (2005). *Psychology of learning for instruction*. Boston: Pearson Allyn and Bacon. *Chapter 7: Interactive Theories of Development (pp. 245-263)*
- Gredler, M. E. (1997). *Learning and instruction: Theory into practice*. Prentice Hall. *Chapter 10, Albert Bandura's Social-Cognitive Theory (pp. 350-363, 372-381)*

*Additional Optional Readings*

- Vygotsky, L.S. (1978). *Mind in society: The development of higher psychological processes*. Chapter 4: Internalization of higher psychological functions (pp. 52-57) and Chapter 6: Interaction between learning and development (pp. 79-91). Cambridge, MA: Harvard University
- Tharp, R. G., & Gallimore, R. (1988). *Rousing minds to life: Teaching, learning and schooling in social context*. Chapter 1: The redefinition of teaching and schooling (pp.13-70). Cambridge University Press.

Assignments:

- Social Interactionist Theories: Bandura and Vygotsky Theory group wiki page due 10/18
- Final Project, part 1, re-submission after peer review and feedback due on 10/18

**\*\*Note:** During the synchronous class on 10/16 you will have an opportunity to provide verbal feedback to your pre-assigned peer on their Final Project, part 1.

**Week 9: Debate Developmental vs. Interactional Cognition**

October 23, 2024

Assignments:

- Everyone: In preparation for the debate please review all of the previous Theory group's Wikis.
- 7461 Students: Submit debate questions by 10/21.

**\*\*Note:** On October 23<sup>rd</sup> we will meet in person. **\*\***

**Week 10: Constructivism**

October 30, 2024

Readings:

- Driscoll, M. P., (2005). *Psychology of learning for instruction*. Boston: Pearson Allyn and Bacon. *Chapter 11: Constructivism (pp. 384-410)*
- Yilmaz, K. (2008). Constructivism: Its theoretical underpinnings, variations, and implications for classroom instruction. *Educational Horizons*, 86(3), 161-172.



### *Additional Optional Readings*

- Anderson, J. R., Reder, L. M., & Simon, H. A. (1999). Applications and Misapplications of Cognitive Psychology to Mathematics Education

### **Week 11: Motivation and Self-Regulation**

November 6, 2024

#### Readings:

- Schunk, D. H. (1996). *Learning theories*. Prentice Hall Inc., New Jersey. *Chapter. 8: Motivation (pp. 345-398)*
- Dweck, C. S. (2002). Messages that motivate: How praise molds students' beliefs, motivation, and performance (in surprising ways). In Aronson, J. (2002). *Improving academic achievement: Impact of psychological factors on education* (Educational psychology series; Educational psychology). Amsterdam: Academic Press (pp. 37-60).
- Deci, E. L., & Ryan, R. M. (2002). The paradox of achievement: The harder you push, the worse it gets. In Aronson, J. (2002). *Improving academic achievement: Impact of psychological factors on education* (Educational psychology series; Educational psychology). Amsterdam: Academic Press (pp. 61-87).

#### Assignment:

- Reading Jigsaw: Everyone will be assigned one of the three papers ahead of time. You will read that paper, write a 2-page summary, and then email it to your jigsaw peers and submit it on Canvas. During class on 11/6, you will teach peers about your paper.

### **Week 12: Topic: TBA**

November 13, 2024

*\*\*Topic and readings will be determined by mutual agreement*

### **Week 13: Topic: TBA**

November 20, 2024

*\*\*Topic and readings will be determined by mutual agreement*

**\*\*No class November 27, 2024---THANKSGIVING\*\***

### **Week 14: Topic: TBA**

December 4, 2024

*\*\*Topic and readings will be determined by mutual agreement*

#### Assignment:

- Everyone: Final Paper-Personalized Learning Theory, *Due on December 6<sup>th</sup> at 11:59pm.*

## UNIVERSITY POLICIES

1. ***The Americans with Disabilities Act.*** The University of Utah seeks to provide equal access to its programs, services, and activities for people with disabilities. If you will need accommodations in this class, reasonable prior notice needs to be given to the Center for Disability & Access, 162 Olpin Union Building, (801) 581-5020. CDS will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in an alternative format with prior notification to the Center for Disability & Access.
  - a. In compliance with ADA requirements, some students may need to record course content. Any recordings of course content are for personal use only, should not be shared, and should not be made publicly available. In addition, recordings should be destroyed at the conclusion of the course.
  
2. ***University Safety Statement.*** The University of Utah values the safety of all campus community members. To report suspicious activity or to request a courtesy escort, call campus police at 801-585-COPS (801-585-2677). You will receive important emergency alerts and safety messages regarding campus safety via text message. For more information regarding safety and to view available training resources, including helpful videos, visit <https://safeu.utah.edu>
  
3. ***Addressing Sexual Misconduct.*** Title IX makes it clear that violence and harassment based on sex and gender (which includes sexual orientation and gender identity/expression) is a civil rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veteran's status or genetic information. If you or someone you know has been harassed or assaulted, you are encouraged to report it to the Title IX Coordinator in the Office of Equal Opportunity and Affirmative Action, 383 South University Street, 801-581-8365, or the Office of the Dean of Students, 270 Union Building, 801-581-7066. For support and confidential consultation, contact the Center for Student Wellness, 426 SSB, 801-581-7776. To report to the police, contact the Department of Public Safety, 801-585-2677(COPS).
  - a. **Lauren's Promise:** Lauren's Promise is a vow that anyone – faculty, staff, students, parents, and community members – can take to indicate to others that they represent a safe haven for sharing incidents of sexual assault, domestic violence, or stalking. Anyone who makes Lauren's Promise vows to: 1.) listen to and believe those individuals who are being threatened or experiencing sexual assault, dating violence or stalking; 2.) represent a safe haven for sharing incidents of sexual assault, domestic violence, or stalking; and 3.) change campus culture that responds poorly to dating violence and stalking. By making Lauren's Promise, individuals are helping to change campus cultures that respond poorly to dating violence and stalking throughout the nation.
  
4. ***Academic Misconduct Statement.*** It is expected that students adhere to University of Utah policies regarding academic honesty, including but not limited to refraining from cheating, plagiarizing, misrepresenting one's work, and/or inappropriately collaborating. This includes the use of generative artificial intelligence (AI) tools without citation,

documentation, or authorization. Students are expected to adhere to the prescribed professional and ethical standards of the profession/discipline for which they are preparing. Any student who engages in academic dishonesty or who violates the professional and ethical standards for their profession/discipline may be subject to academic sanctions as per the University of Utah's Student Code: <https://regulations.utah.edu/academics/6-410.php>

5. **Drop/Withdrawal Policies.** Students may drop a course within the first two weeks of a given semester without any penalties. Students may officially withdraw (W) from a class or all classes after the drop deadline through the midpoint of a course. A "W" grade is recorded on the transcript and appropriate tuition/fees are assessed. The grade "W" is not used in calculating the student's GPA. For deadlines to withdraw from full-term, first, and second session classes, see the U's Academic Calendar.
6. Other important information to consider including:
  - a. Student Code: <http://regulations.utah.edu/academics/6-400.php>
  - b. Accommodation Policy (see Section Q): <http://regulations.utah.edu/academics/6-100.php>
7. **Supports for Students.** Your success at the University of Utah is important to all of us here! If you feel like you need extra support in academics, overcoming personal difficulties, or finding community, the U is here for you. Please refer to the [Student Support Services page for the U](#) for updated information.
8. **Basic Needs Student Support Statement.** Success at The University of Utah includes learning about and using available resources. The [Basic Needs Collective](#) (BNC) is a coordinated resource referral hub. They educate about and connect students to campus and community resources to help them meet their basic needs. As a central location for resource referrals related to food, housing, health insurance, managing finances, legal services, mental health, etc., any student experiencing difficulty with basic needs is encouraged to contact them. Drop into their office located in the Union basement or schedule with them online for an in-person or virtual visit through their webpage: <https://basicneeds.utah.edu/>.