EDUC 5303 Applied Learning Theories Summer 2020, Online

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Office: BEP 204

**Office Hours:** Tuesday & Wednesday 3:00 – 4:30 pm (& by appointment)

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#### **COURSE DESCRIPTION:**

This course will provide the learner with an overview of major contemporary approaches to the study of human learning. The focus of the course will be the linkage between theory and educational practice.

## STUDENT LEARNING OUTCOMES:

After completion of this course, students will be able to:

- 1. Understand, compare, critique, and apply key theories of learning and development.
- 2. Understand, synthesize, and apply key constructs in cognition and motivation.
- 3. Identify, understand, and use individual difference and contextual factors to promote student learning.
- 4. Analyze and develop classroom scenarios that apply components of key theories of learning and development to promote student learning

## **Required Student Resources:**

#### **Textbook:**

Schunk, D. H. (2020). *Learning Theories: An Educational Perspective (8<sup>th</sup> Ed)*. Columbus, OH: Pearson.

ISBN: 9780134893754

Available from the UTT bookstore or online.

Ormrod, J.E. (2016). *Human Learning (7th Ed.)*. Upper Saddle River, NJ: Pearson.

Note: It is not required that you purchase Ormrod (2016). Required readings from this particular book will be available on Canvas!

## Additional Readings (to be distributed by instructor):

- Baddeley, A. (2012). Working memory: theories, models, and controversies. *Annual review of psychology*, 63, 1-29.
- Burkhardt, H., & Schoenfeld, A. H. (2003). Improving educational research: Toward a more useful, more influential, and better-funded enterprise. *Educational researcher*, *32*(9), 3-14.
- Chinn, C. A., & Brewer, W. F. (1993). The role of anomalous data in knowledge acquisition: A theoretical framework and implications for science instruction. *Review of educational research*, 63, 1-49.
- Dunlosky, J., Rawson, K. A., Marsh, E. J., Nathan, M. J., & Willingham, D. T. (2013). Improving students' learning with effective learning techniques: Promising directions from cognitive and educational psychology. *Psychological Science in the Public Interest*, 14, 4-58.
- Graham, S., & Weiner, B. (1996). Theories and principles of motivation. In D. C. Berliner & R. C. Calfee (Eds.). Handbook of Educational Psychology (pp. 63 84). New York: Simon & Schuster Macmillian
- Kirschner, P. A. (2017). Stop propagating the learning styles myth. *Computers & Education*, 106, 166-171.
- Kirschner, P. A., & van Merriënboer, J. J. (2013). Do learners really know best? Urban legends in education. *Educational psychologist*, 48(3), 169-183.
- Mayer, R. E. (2009). Constructivism as a theory of learning versus constructivism as a prescription for instruction. In S. Tobias & T. M. Duffy (Eds.). *Constructivist instruction: Success or failure* (pp. 184 200). New York: Routledge
- Mayer, R. E., & Moreno, R. (2003). 9 ways to reduce cognitive load in multimedia learning. *Educational Psychologist*, 38, 43 52.
- Miller, M. D. (2011). What college teachers should know about memory: A perspective from cognitive psychology. *College Teaching*, *59*, 117 122.
- Moreno, R., & Mayer, R. E. (2010). Techniques that increase generative processing in multimedia learning: Open questions for cognitive load research. *Cognitive load theory*, 153-177.
- Pashler, H., McDaniel, M., Rohrer, D., & Bjork, R. (2008). Learning styles: Concepts and evidence. *Psychological science in the public interest*, *9*, 105-119.
- Rescorla, R. A. (1988). Pavlovian conditioning: It's not what you think it is. *American Psychologist*, 43, 151 160.

Van Merrienboer, J. J., & Sweller, J. (2005). Cognitive load theory and complex learning: Recent developments and future directions. *Educational psychology review*, 17, 147-177.

# Supportive (Optional Readings – but potentially useful for projects/LRA's):

- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191 215.
- Bandura, A. (1989). Human agency in social cognitive theory. *American psychologist*, 44(9), 1175.
- Nairne, J. S., & Neath, I. (2013). Sensory and working memory. In A. F. Healy & R. W. Proctor (Eds.), *Comprehensive handbook of psychology, second edition, Vol. 4: Experimental Psychology* (pp. 419-445). New York: Wiley.
- Neath, I., & Surprenant, A. M. (2005). Mechanisms of memory. In K. L. Lamberts, & R. L. Goldstone (Eds.), *Handbook of cognition* (pp.221-238). London: Sage Publications.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American psychologist*, 55(1), 68.
- Schunk, D. H., & Zimmerman, B.J. (2003). Self-regulation and learning. In W.M. Reynolds & G.E. Miller (Eds), *Handbook of Psychology (Volume 7: Educational Psychology)*, (pp 59-78). Hoboken, NJ: Wiley.
- Skinner, B. F. (1989). The origins of cognitive thought. *American Psychologist*, 44(1), 13.
- Zimmerman, B. J. (2011). Motivational Sources and Outcomes of Self-Regulated Learning and Performance In B. J. Zimmerman & D. H. Schunk (eds.) *Handbook of self-regulation of learning and performance* (pp. 49-64). Routledge.

## **Course Policies and Expectations:**

Course Environment: This is an online course that is delivered through the Canvas Learning Management System. As such, it is imperative that you check Canvas for necessary information and course materials. If you experience technical problems or have a technical question about this course, you can obtain assistance by emailing <a href="mailto:itsupport@patriots.uttyler.edu">itsupport@patriots.uttyler.edu</a>. When you email IT Support, be sure to include a complete description of your question or problem including: (1) the title and number of the course, (2) the page in question, (3) If you get an error message, a description and message number, and (4) what you were doing at the time you got the error message

**Written Assignments:** All written assignments should be typed (double-spaced, Times New Roman, 12-point font) and submitted by midnight Central Standard Time on the due date. All written assignments should be submitted through the assignment link that I will provide. Please name written assignments using the following convention: last name, first

initial, assignment title (ex. Last\_F\_Assignmenttitle). Late assignments <u>will not be</u> <u>accepted and will receive a score of 0</u>. Assignments completed for other courses may **NOT** be turned in for this course and will be considered **academic dishonesty**.

**Email:** Questions and concerns about course content and assignments should be submitted to my email. I will make every effort to respond quickly to your emails. Generally speaking, I check email twice a day during the workweek and less frequently on the weekend. If my schedule makes me unavailable to answer emails for an extended period, I will try to post an announcement so that you can plan accordingly. My priority is communicating with you and providing you with the tools needed to be successful in the course, so if there are any problems, we will work to solve them.

#### **Student Assignments & Projects:**

The course is designed to be delivered in a "module format." This means that there will be a few different modules that you will work through that include their own readings, assignments, quizzes, and tests. The modules will be presented in a standardized format. The following are standard activities that will be included in the modules:

**Readings**: This course requires a considerable degree of independent reading to ensure that you develop content mastery. There will be two main reading requirements throughout the semester. Specifically, you will be required to read selections from the course textbook and research articles that I will assign. All research articles will be available on the Canvas site. I will also be posting supplemental readings for many of the topics that we will cover this semester. These readings are optional and are provided for those who would like to explore the course topics in more detail.

**Lecture Videos:** Each week, I will post short lecture videos to the Canvas site to support the development of content mastery. The topic of each lecture video(s) will be related to key concepts found within the readings for that week. The lecture video(s) for each topic will be available on the Canvas site each Monday morning beginning at 9:00 am Central Standard Time.

**Quizzes:** There will be several short quizzes in the semester (roughly one per chapter). These will be delivered online and will serve to provide a check of your understanding. The quizzes will also provide you with an idea of the types of questions you may see in the tests). Late quizzes will not be accepted and will receive a score of 0.

**Discussion Boards:** You will participate in 11 discussion forums across the semester. The topic for each discussion forum will be the related to the content of the reading and lecture for that week so finishing the reading and watching course lectures early in the week is advisable. The forum postings will be assessed primarily by looking to see that you have contributed your thinking to the topic of the week and can make meaningful connections among topics covered in the course. Late discussion board postings **will not be accepted and will receive a score of 0**.

**Tests**: There are three multiple choice tests in this course (one per module). The tests will require a full understanding of the theories and applications of those theories, the ability to synthesize the theories presented in the course readings, and the ability to apply the content to examples. Late tests **will not be accepted and will receive a score of 0 Learning Reflection Assignments:** There are also in-depth written assignments for each module (these are called "Learning Reflection Assignments"). These assignments are used to ensure that you can analyze, summarize, and apply the theories in each module. These will be outlined in more detail but are generally short analysis and reflection papers that require the *explanation* **and** *application* of specific theories, personal philosophy statements and defenses for theories of learning and motivation (EX: "what do YOU believe...why? Who agrees with you from the field?"). Late LRA's **will not be accepted and will receive a score of 0.** 

Research Pool Requirement: Students enrolled in specified SOE courses must fulfill a research pool requirement each semester. The research pool requirement must be completed before the final week of the academic semester. The research requirement for these courses can be satisfied in one of two ways. First, students can fulfill the research pool requirement by volunteering to participate in approved research studies offered by the School of Education. Alternatively, students can satisfy the research pool requirement by completing alternative assignments that are equal in time and effort to the research opportunities.

**Due Date:** Unless stated otherwise, all assignments are due before Midnight on Sunday the week that they appear on the course schedule. Stated another way, each week's assignments are due before Midnight on Sunday.

Grade Item	Total Points
Quizzes	10 points each X 12 quizzes = 120 total points
Tests	50 points each X 3 = 150 points
Learning Reflection Assignments	25 Points each X 3 = 75 points
Discussion Board Posts	10 points each X 11 DB posts = 110 total points
Course Total	555 points

Please note: The number, content focus, and point value of all assessments and assignments is an approximation and may change.

Letter Grades: Letter grades will be assigned using the following guidelines: A: 90.00% of points or above, B: 80.00% -89.999% of points, C: 70.00% - 79.999% of points, D: 60.00% -69.999% of points, F: 59.999% of points or below

Proposed Semester Schedule					
Date	Topic(s)	Required Reading(s)	Supplemental Readings (Optional)	Discussion Board Post	Assignments
Week 1					
June 1 <sup>st</sup> – June 7 <sup>th</sup>	<ul> <li>Introduction to the Study of Learning</li> <li>The Neurological Basis for Learning</li> <li>Pavlovian Conditioning</li> </ul>	<ul> <li>Schunk: Chapter 1</li> <li>Burkhardt &amp; Schoenfeld, 2003</li> <li>Ormrod Chapter 2</li> <li>Schunk: Chapter 3 (pgs. 78 – 92)</li> <li>Rescorla, 1988</li> </ul>		<ul> <li>Introductions</li> <li>Brain-Based Learning</li> <li>Rescorla: Main Points</li> </ul>	<ul> <li>Quiz:         <ul> <li>Perspectives on Learning</li> </ul> </li> <li>Quiz:         <ul> <li>Neuroscience of Learning</li> </ul> </li> <li>Quiz: Pavlovian Conditioning</li> </ul>
Week 2					
June 8 <sup>th</sup> – June 14 <sup>th</sup>	<ul> <li>Operant         Conditioning</li> <li>Reciprocal         Interactions,         Observational         Learning, Self-         Efficacy</li> </ul>	<ul> <li>Schunk: Chapter 3 (pgs. 93 - 123)</li> <li>Schunk: Chapter 4</li> </ul>	<ul> <li>Driscoll, 2005 (Chapter 2)</li> <li>Skinner, 1989</li> <li>Bandura, 1977</li> <li>Bandura, 1989</li> <li>Application of Triadic Reciprocal Causation</li> </ul>	Operant     Conditioning     Application	<ul> <li>Quiz: Operant Conditioning</li> <li>Quiz: Social Cognitive Theory</li> <li>LRA #1</li> <li>Test #1</li> </ul>

Week 3					
June 15 <sup>th</sup> – June 21 <sup>st</sup>	<ul> <li>Information processing Theory: Encoding and Storage</li> <li>Information Processing Theory: Retrieval and Forgetting</li> <li>Complex Cognitive Processes, Concept Learning &amp; Conceptual Change</li> </ul>	<ul> <li>Schunk: Chapter 5</li> <li>Baddeley, 2012</li> <li>Schunk: Chapter 6</li> <li>Miller, 2011</li> <li>Schunk: Chapter 7</li> <li>Chinn &amp; Brewer, 1993</li> </ul>	<ul> <li>Neath &amp; Surprenant, 2005</li> <li>Nairne &amp; Neath, 2013</li> </ul>	<ul> <li>Baddeley: Main Points</li> <li>Application of Conceptual Change Research</li> </ul>	<ul> <li>Quiz: Encoding &amp; Storage</li> <li>Quiz: Retrieval &amp; Forgetting</li> <li>Quiz: Cognitive Learning Processes</li> </ul>
Week 4					
June 22 <sup>nd</sup> – June 28 <sup>th</sup>	<ul> <li>Piaget's, Bruner's, &amp; Vygotsky's Theory</li> <li>Cognitive Load Theory</li> <li>Expectancy/Value, Attribution, Self- Determination, &amp; Goals</li> </ul>	<ul> <li>Schunk: Chapter 8</li> <li>Mayer, 2009</li> <li>Van Merrienboer &amp; Sweller, 2005</li> <li>Mayer &amp; Moreno, 2003</li> <li>Moreno &amp; Mayer, 2010</li> <li>Schunk: Chapter 9</li> <li>Graham &amp; Weiner, 1996</li> </ul>	Ryan & Deci, 2000	Constructivism in Practice	<ul> <li>Quiz: Constructivism</li> <li>LRA #2</li> <li>Test #2</li> <li>Quiz: Motivation &amp; Affect</li> </ul>

Week 5					
June 29 <sup>th</sup> – July 3 <sup>rd</sup>	<ul> <li>Self-Regulated         Learning &amp;         Learning Strategies</li> <li>Effective Learning         Environments,         Contextual         Influence's</li> <li>Educational         Misconceptions</li> </ul>	<ul> <li>Schunk: Chapter 10</li> <li>Dunlosky et al., 2013</li> <li>Schunk: Chapter 11</li> <li>Pashler et al. 2008</li> <li>Kirschner &amp; van Merrienboer, 2013</li> <li>Kirschner, 2017</li> </ul>	• Schunk & Zimmerman, 2003	Applications in Cognitive Learning	<ul> <li>Quiz: Self-Regulated Learning</li> <li>Quiz: Contextual Influences</li> <li>LRA#3</li> <li>Test #3</li> <li>Research Participation Requirement Due</li> </ul>

Note: All dates subject to change

#### **UNIVERSITY POLICIES**

# **UT Tyler Honor Code**

Every member of the UT Tyler community joins together to embrace: Honor and integrity that will not allow me to lie, cheat, or steal, nor to accept the actions of those who do.

For a full list of university policies including information related to the topics listed below, click here.

- Students Rights and Responsibilities
- Campus Carry
- Tobacco-Free University
- Grade Replacement/Forgiveness and Census Date Policies
- State-Mandated Course Drop Policy
- Disability Services
- Student Absence due to Religious Observance
- Student Absence for University-Sponsored Events and Activities
- Social Security and FERPA Statement
- Emergency Exits and Evacuation
- Student Standards of Academic Conduct

## **UT Tyler Resources for Students:**

- UT Tyler Writing Center (903.565.5995), <u>writingcenter@uttyler.edu</u>, <u>http://www.uttyler.edu/writingcenter/</u>
- UT Tyler Tutoring Center (903.565.5964), <a href="mailto:tutoring@uttyler.edu">tutoring@uttyler.edu</a>, <a href="https://www.uttyler.edu/tutoring/">https://www.uttyler.edu/tutoring/</a>
- The Mathematics Learning Center, RBN 4021, This is the open access computer lab for math students, with tutors on duty to assist students who are enrolled in early-career courses.
- UT Tyler Counseling Center (903.566.7254) <a href="https://www.uttyler.edu/counseling/">https://www.uttyler.edu/counseling/</a>

University Guidelines, Links and Policies

## COLLEGE OF EDUCATION AND PSYCHOLOGY (CEP) VISION AND MISSION

**Vision:** The College of Education and Psychology is nationally recognized and respected for its academic programs and opportunities. It is a center of academic excellence, scholarly inquiry, and public service. The College prepares leaders to meet the critical challenges of the 21<sup>st</sup> Century through productive contributions to local and global communities and toward individual and cultural equity.

**Mission:** The mission of the College of Education and Psychology is to provide a positive environment that fosters the acquisition of knowledge and skills. The mission is individually and collectively realized through a community of scholars that contributes to knowledge through scholarly inquiry; organizes knowledge for application, understanding and communication; and provides leadership and service. We affirm and promote global perspectives that value individual and cultural diversity to enhance learning, service, and scholarship.

# UT TYLER'S SCHOOL OF EDUCATION STANDARDS FOR EDUCATOR PREPARATION PROGRAMS

<u>Texas Education Standards</u>: The School of Education are committed to teaching and implementing the Texas Educator Standards at the highest level. The School of Education faculty use the Texas Education Standards, along with the Interstate New Teacher Assessment and Support Consortium (InTASC) standards used by educator preparation programs throughout the United States.

The list of <u>Texas Education Standards</u> can be accessed <u>here</u>.

Access the Code of Ethics and Standard Practices for Texas Educators.