COURSE GOALS

o to understand how various theories attempt to explain learning processes
o to appreciate how these theories underpin approaches to and methods of instruction

Course Objectives
By the end of this course, you are expected to be able to:
1 use basic concepts and principles to describe and explain human learning
2 critically examine the epistemological assumptions that underpin theoretical concepts, educational goals, and teaching practice
3 discuss the implications of various theories of learning to teaching practice
4 analyze current issues that confront both conventional and distance education, and explore solutions anchored on research and theory

Module 1 Learning Objectives
o define learning in more refined ways
   o *What is learning?*
   o *When and how does it occur?*
o explain the roles and implications of theory & research on instruction
   o *What are theories? What characterize good theories?*
   o *How do different types of educational research contribute to learning theories?*
   o *What is the impact of learning theories on learning and instruction?*
   o *What does it mean to view learning from a scientific perspective?*

2. What is Learning?

We have been learning all our lives.
   o *But what do we know about learning?*
   o *What is it?*
   o *What events constitute learning and what events do not?*
   o *As learners yourself, what are your ideas about learning?*

2. 1. Perspectives and Conceptions about Learning

Consider the questions below as you read about the topic.
   o *Is the concept of learning as proposed by Schunk adequate or oversimplified?*
   o *Are the ways we conceive learning related to particular ways that we approach how we teach or study?*
   o *What other ideas or arguments can you derive to enrich your definition of learning?*

2. 1. Perspectives and Conceptions about Learning

Roberts, G. (2013). *What Is Learning?* [20-minute YouTube video].
   https://www.youtube.com/watch?v=EtT31Sn1Ukk

o *What key points about learning does George Roberts bring up in his lecture? What are different types of learner (or different approaches to learning)? What kind of learner are you?*

Oxford Centre for Staff and Learning Development (2013, April 30). *What is Learning*. [Video File]. Retrieved (28 April 2017), from
https://www.youtube.com/watch?v=EtT31Sn1Ukk

2. 1. Perspectives and Conceptions about Learning

Atherton J S (2013). Learning and Teaching;What is learning?

http://doceo.co.uk/l&t/learning/whatlearn.htm

• *What is Atherton trying to suggest about the relationships between what is taught, what is taught and learned, and what is learned but not taught. Please refer to the figure on his article.*
• *Though only partially relevant at this point, you may want to read further about hidden curriculum and implicit learning mentioned in the article.*
• *Think about your own experiences in school; generate a list of items that you may include in the "hidden curriculum" from which you may have implicitly learned.*
• *What is the difference between maturation and learning?*
Atherton J S (2013) *Learning and Teaching; What is learning?* [On-line: UK] .Retrieved (3 May 2017), from http://doceo.co.uk/l&t/learning/whatlearn.htm

2. 1 .Perspectives and Conceptions about Learning

Smith, M. K. (2003). '*Learning theory*'. *The Encyclopedia of Informal Education.*

http://infed.org/mobi/learning-theory-models-product-and-process/

- • *How do behaviorists and cognitivists differ in their conceptions of learning?*
- • *Compare "learning as a product" and "learning as a process".*
- • *How would you categorize the ways you learned as a student?*
- • *Which type of learning do you consider more effective, productive or worthy?*

Smith, M. K. (2003). 'Learning theory', *the encyclopedia of informal education.* [Blog post]. Retrieved (28 Apr 2017), from *http://infed.org/mobi/learning-theory-models-product-and-process/*

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2. 1. Perspectives and Conceptions about Learning

Education Theory (UCD Teaching and Learning)

http://www.ucdoer.ie/index.php?title=Education_Theory

- • *How is "learning theories" defined? Why use theories?*

Jennings, D., Surgenor, P., & McMahon, T. (2013). Education Theory/Constructivism and Social Constructivism in the Classroom - UCD - CTAG. Ucdoer.ie. [Blog post]. Retrieved (1 May 2017), from http://www.ucdoer.ie/index.php/Education_Theory/Constructivism_and_Social_Constructivism_in_the_Classroom

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2. 2. Learning versus Maturation

On maturation:
What is the difference between maturation and learning? What is the role of maturation in learning?

On the definition of learning:
Compare Schunk's and Huitt's definitions of learning. In what ways are they the same? In what ways do they differ?

It may not be a bad idea to ask again:

WHAT IS LEARNING? WHAT DOES IT ENTAIL?

Bransford, JD;Brown, AL;and Cocking, RR (2000). Chapter 1 – Learning: From Speculation to Science. In *How People Learn: Brain, mind, experience, and school (Expanded Edition)*. National Academy of Sciences.

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2. 2. Learning versus Maturation

Read **Why Study Educational Psychology? http://www.edpsycinteractive.org/topics/intro/whyedpsy.html**

(Huitt, 2011) to find out how *learning, maturation, and teaching* are closely related, but still distinct, concepts.

Huitt, W. (2011). Why study educational psychology? *Educational Psychology Interactive*. Valdosta, GA: Valdosta State University. [Blog post]. Retrieved (1 May 2017), from http://www.edpsycinteractive.org/topics/intro/whyedpsy.html

See Eldan Goldenberg's lab notebook http://blog.case.edu/exg39/2005/10/03/necessary_and_sufficient_conditions_for_learning

Goldenberg, E. (2005). *What Constitutes Learning?.* [Blog post]. Retrieved [1 May 2017] from http://blog.case.edu/exg39/2005/10/03/necessary_and_sufficient_conditions_for_learning

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2. 3. Learned vs Unlearned (supplement)

Learned vs. Unlearned
Credits to former student, *Karol Zepeda*, for bringing up this resource.

http://peace.saumag.edu/faculty/kardas/courses/GPWeiten/C6Learning/LearnedUnlearned.html

LeFrancois, G. R. (2014). *Learned vs Unlearned.* Thomson Wadsworth: Belmont, CA. [Blog post]. Retrieved 1 May 2017 from http://peace.saumag.edu/faculty/kardas/courses/GPWeiten/C6Learning/LearnedUnlearned.html

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3. The Roles and Implications of Theory and Research

Map Metaphor

Dewey (2011) cites Henry H. Bauer who uses the **map metaphor** to draw attention to several important facts about scientific theories, thus:
"Scientific theories are like maps. They preserve information about selected portions of reality. Like maps, they are schematic (incomplete or "skeletal") but extremely useful in particular situations."
Click and read more about the *map metaphor*.

http://www.intropsych.com/ch01_psychology_and_science/model_building_and_mapping_reality.html

Dewey, R. (2007). *Model Building or "Mapping" Reality*. [Blog post]. Retrieved 1 May 2017 from http://www.intropsych.com/ch01_psychology_and_science/model_building_and_mapping_reality.html

3.1. Historical-Philosophical Perspectives

Evolution of Psychology as a Science
In "How People Learn," Hammond, Austin, Orcutt, and Rosso (2001) describe the evolution of perspectives about learning theories from its philosophical to the modern psychological bases.

Hammond, LD, Austin, K., Orcutt, S. & Rosso, J. (2001). *How People Learn: Introduction To Learning Theories* [Web log post]. Retrieved (2 May 2017) from {http://www.stanford.edu/class/ed269/hplintrochapter.pdf

Read the article to find out how **Rationalism** and **empiricism** may be distinguished.

What were the major tenets of each?
How did the works of Wundt, Ebbinghaus, the Structuralists, and the Functionalists help to establish psychology as a science? *(In other words, how did psychology evolve as a science?)*

Schunk, D. (2012). Chapter 1 – Introduction to the Study of Learning. *In Learning Theories An Educational Perspective.* (pp. 1-28).Pearson Education Inc.

3.1. Historical-Philosophical Perspectives

Watch
Annenberg Media: Discovering Psychology-- Understanding Research (1990, 2001).

http://www.learner.org/vod/vod_window.html?pid=1499

Ronald de Sousa: Religion is the Price You Pay for Science (18 minutes). (Contents are rather advanced and more appropriate for the graduate level)

http://thesciencenetwork.org/programs/beyond-belief-enlightenment-2-0/ronald-de-sousa%20%20

De Sousa, R. (n.d.). Religion is the Price You Pay for Science.. [Video Film] Retrieved (2 May 2017) from http://thesciencenetwork.org/programs/beyond-belief-enlightenment-2-0/ronald-de-sousa%20%20

3.2. Theory and Research

Guide Questions
- *What are theories? What characterize good theories?*
- *What are different types of research used to gather information in educational psychology; how do they contribute to learning theories?*
- *How do theories help learning and instruction?*
- *Know these terms:*
        facts
        concepts
        principles
        laws
        hypotheses
        theories

3.2. Theory and Research

Learning Resources
- Cherry, K. *What Is a Theory?*
  https://www.verywell.com/what-is-a-theory-2795970

- *Psychology Research Methods Study Guide*
  https://www.verywell.com/psychology-research-methods-study-guide-2795700

- Biddix, P. *What is Educational Research?*
  https://researchrundowns.com/intro/whatisedresearch/

- SparkNotes. *Research Methods in Psychology*
  http://www.sparknotes.com/psychology/psych101/researchmethods/

- *Types of Educational Research*
  http://www.innovativelearning.com/educational_psychology/educational_research.html

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3.2. Theory and Research

Learning Resources

- Cherry, K. *What Is a Theory?*

Cherry, K. (2016). What Is a Theory. [Blog Post]. Retrieved (3 May 2017) from https://www.verywell.com/what-is-a-theory-2795970

- *Psychology Research Methods Study Guide*

Cherry, K. (2016). What Is a Theory. [Blog Post]. Retrieved (3 May 2017) https://www.verywell.com/psychology-research-methods-study-guide-2795700

3.2. Theory and Research

Learning Resources

- Biddix, P. *What is Educational Research?*
  https://researchrundowns.com/intro/whatisedresearch/

Biddix, P. (n.d.) *What is Educational Research?* [Blog Post] retrieved (3 May 2017) from https://researchrundowns.com/intro/whatisedresearch/

- SparkNotes. *Research Methods in Psychology*
  http://www.sparknotes.com/psychology/psych101/researchmethods/

SparkNotes Editors. (2005). *SparkNote on Research Methods in Psychology*. [Web Post] Retrieved (3 May 2017) from
http://www.sparknotes.com/psychology/psych101/researchmethods/

3.2. Theory and Research

Learning Resources

- Cullata, R. *Types of Educational Research*
  http://www.innovativelearning.com/educational_psychology/educational_research.html

Culatta, R. (2011). Types of Educational Research [Web Post]. Retrieved (3 May 2017) from
http://www.innovativelearning.com/educational_psychology/educational_research.html

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3.2. Theory and Research

Science as a way of Knowing
Read: Assessment, measurement, evaluation, and research

http://www.edpsycinteractive.org/topics/intro/sciknow.html

- Why is science a "better" way of knowing?
- What are "scientific processes" to obtain knowledge?
- What comprise scientific knowledge?
- How do scientists organize knowledge information?

Huitt, W., Hummel, J., & Kaeck, D. (2001). *Assessment, measurement, evaluation, and research. Educational Psychology Interactive.* Valdosta, GA: Valdosta State University. [Web Post], Retrieved (2 May 2017) from
http://www.edpsycinteractive.org/topics/intro/sciknow.html

3.2. Theory and Research

What Are Correlational Studies?

Correlational studies help psychologists figure out whether things are **associative**, but not necessarily caused by each other.

- ***Distinguish correlation from causation***.
Learn more about this form of research in this 2-minute video by Dr. Robert Reiner.

http://psychology.about.com/video/What-Are-Correlational-Studies-.htm

https://www.verywell.com/psychology-basics-4014577

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https://www.verywell.com/psychology-basics-4014577

Cherry, K. (2017). Basic Psychology Facts Everyone Should know. [Blog Post]. Retrieved (3 May 2017) https://www.verywell.com/psychology-facts-10-things-you-need-to-know-2795616

4. Some suggestions for your e-Journal

how do theories explain or predict various events or situations; how might theory wisely guide future actions or decisions?

- *How have I myself (i.e., the teacher candidate) learned in school, and how do I learn most effectively? Why do some people learn better than I and I better than others?*
- *How do we know if a person has successfully learned?*
- *Can you suggest a "fairer definition" of learning and academic achievement?*
- *Christa McAuliff e's quote: "I touch the future. I teach."*
- *Put on your creative-thinking hat and come up with one or more brief statements that describe positive aspects of teaching.*

- *After some thinking, write a personal statement about the following: What kind of teacher do you want to become? What strengths do you want to have? What kinds of potential weaknesses might you need to overcome?*
- *(From what you have experienced in this introductory module, what do you anticipate for the rest of the term? How do you envision the course will proceed?)*
- What phenomena (events, situations, or conditions) might you be interested in to investigate?
- How would you state your hypothesis?
- What research method do you think will be appropriate?

Teacher-Initiated Discussion (TID) 1.1: Informed redefinition of LEARNING

We started with Activity 1 where you were encouraged to craft an "informal, uninformed" definition of learning. After studying the module, you must have gained formal insights-- you are now better informed--to be able to refine your definition of learning.

First, recall that Schunk (2012) named three components: change, endurance over time, consequence of experience. You do not have to agree with Schunk. How about you? According to your *informed judgment,* what elements must be present so that an event, process or outcome may be counted as learning?
Then, based on this list of elements, how would you now define learning?
A METACOGNITIVE EXERCISE: Compare your definitions-- before and after you studied the module. Have you moved forward in this learning journey?

Teacher-Initiated Discussion (TID) 1.2: Learned & unlearned. Examples & non-examples
Identify instances of learned and unlearned phenomena. Give examples and non-examples of learning, preferably derived from personal experience.