



EDCI 53100

Learning Theory and Instructional Design

Spring 2016

Instructor

Faculty Instructor

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Course Meeting Time and Room

Thursday 1:30pm – 4:20pm
BRNG Room 3292

Course Description

This course has been designed to help you learn how theories of human learning and motivation, can be applied to the instructional process in order to make the process more effective, efficient, and/or appealing. The focus of the course throughout the semester will be on two areas: 1) the theoretical principles that have contributed to the field of Instructional Design (ID), and 2) how those principles can be applied within practical settings. Reading and studying the assigned chapters in the texts will acquaint you with the key theories. The discussions and writing assignments will focus on the application of the derived principles.

Course Goals

- Identify and describe the basic tenets of behavioral, cognitive, and constructivist learning theories.
- Compare and contrast the contributions of various learning theories to the field of instructional design.
- Identify and describe the basic components within various motivational theories and their impact upon the learning process.
- Select appropriate principles derived from given theories and apply those within practical learning situations.

Course Philosophy

There are several things you should keep in mind as you begin this course. First, I don't believe you can learn everything there is to know from this course. You could spend years studying learning and motivation. But I want you to learn some of the major principles from these theories and how you can use the principles as a foundation for decisions you make as an instructional designer.

Second, don't think that I know it all. I enjoy teaching because, in the process, I have the privilege of learning from you. I've taught this course several times and I always come away with a large amount of

new knowledge. Don't be afraid to challenge what the rest of us say -- I certainly will try to challenge you.

Third, active participation is a must. We want (and will require) you to participate in our discussions. This doesn't mean that you need to dominate every discussion and it doesn't mean that you have to respond to every comment that is made. But it does mean that you should take an active part in the discussions. Think of the course as an ongoing discussion about learning that will take different directions each week. Try to synthesize the collected wisdom from the class in a way that makes sense to you. Contribute those ideas and the rest of us will add our thoughts as well.

Fourth, take time to think reflectively about the readings and discussions. You all have a lot of experience as learners (and maybe as educators or trainers) that you can use to help you make sense of what you read in the textbook. In fact, I will often specifically ask you to think back over your experiences as a learner as you consider some ideas from the text. So, take time to go beyond just reading the chapter. Explore, discover, and look for connections that are important to you. If you find yourself getting lost and confused, take some time to reflect, and ask for help if necessary.

Fifth, attack this course with an open mind. Don't come in with a preset notion for or against a specific theory. Instructional designers don't have the luxury of ignoring potentially helpful principles that may come from a wide variety of sources. For example, even though you may believe that behaviorism is an obsolete theory with little to offer current practitioners, keep an open mind. You may just be surprised.

Finally, writing facilitates the reflective thinking process. One of the advantages of this course is that we will be able to "see" our thought processes. You may notice this once we've completed a couple of assignments. The writing projects will reinforce this. When any of us teach (or write so others can understand) it requires us to think and explain in a logical manner. This is a helpful tool that enables us to make the connections among ideas.

Course Text

Required Texts

Driscoll, Marcy (2000). Psychology of learning for instruction (2nd edition). Needham Heights, MA: Allyn & Bacon.

Mager, R. F., & Pipe, P. (1997). Analyzing Performance Problems or You Really Oughta Wanna (3rd edition). Atlanta: The Center for Effective Performance, Inc.

Reading:

Ertmer, P.A., & Newby, T.J. (2013). Behaviorism, cognitivism, and constructivism: Connecting yesterday's theories to today's contexts. *Performance Improvement Quarterly*, 26(2), 65-71.

Course Assignments

| Assignments | Points |
|---|--------|
| 1. Attendance and Active Participation in Discussions (12 weeks X 5 points) | 60 |
| 2. Group Project | |
| Learning Theory Class Facilitation | 30 |
| Learning Theory Class Facilitation Materials | 30 |
| Learning Theory Comparative Organizer | 25 |
| 3. Individual Projects | |
| Case Studies (2 cases X 30 points) | 60 |
| Final Paper Project | |

| | |
|--------------------------------------|------------|
| Final Paper Proposal & Meeting | 15 |
| Final Paper Manuscript Final | 60 |
| Final Paper Round Table Presentation | 20 |
| Total | 300 |

Class Attendance and Active Discussion Participation

As mentioned previously, active participation is a must in this course. We want (and will require) you to participate in our discussions each week. Please attend each class and take an active part in the discussions. Think of the course as an ongoing discussion about learning that will take different directions each week. Try to synthesize the collected wisdom from the class in a way that makes sense to you.

Learning Theory Group Class Facilitation & Comparative Organizer

Class Facilitation Plan and Facilitation

The first week, we will form **8 groups of students (2-3 in each group)** and select a learning theory to complete a thorough investigation of that learning theory.

The group will lead a **90-minute, in-class discussion or learning experience** that they have prepared. This experience will help all of us understand what the **key principles** are within this learning theory. The focus should be on the principles **relevant to instructional design** based on the learning theory. Groups will develop an **interactive class experience** that discusses the assigned learning theory and should use a number of different methods (e.g., small group discussions, debates, etc.) in an effort to keep it interesting!

For example, if **Constructivism** is your group's learning theory, you could develop activities that are inquiry-based or problem-based, or use group debates in combination with online exploration or virtual inquiry. Again the focus should be on the key principles of the learning theory.

NOTE: Meeting with Instructor

Each group's class facilitation plan and materials are due the **TWO WEEKS PRIOR to their facilitation.**

The group will meet with the instructor and **bring the FOLLOWING MATERIALS** that will be used during the class facilitation:

- a. **Guiding Visual** (Powerpoint, Keynote presentation)
- b. 90-minute **Class/Lesson Plan** and **Accompanying Student Materials** for Learning Activities
- c. **Handout** for Students (Lesson Flow & Comparative Organizer)
- d. **Comparative Organizer** should discuss:
 - What is/are the common/accepted name(s) for the theory?
 - Who are the representative theorists (individuals known to be associated with this theory)?
 - From this theoretical perspective, what are the key factors that influence learning?
 - What is the role of the teacher/instructor in the learning process?
 - What is the role of the student/learner?
 - What are the types of learning best explained by this position?
 - What are some basic strategies used to exemplify this theory?
 - What are this theory's major strengths/weaknesses?
 - What are some good references (articles/websites) pertaining to this theoretical perspective?

Case Studies

For the two case assignments, you will be taking on the role of an instructor and developing a case study that will help to illustrate key principles applied from the theories that have been discussed in class. The

case studies should be 3-4 pages double-spaced. Each of your written cases will consist of the following:

- **Case description.** This should be a brief (1 page or so) scenario of a practical learning situation (for example, “Mentor training within a manufacturing environment”). You may want to develop this from a situation you are familiar or you may find it easier to create this out of your own head. Either way, the description will outline some type of learning problem.
- **Reflective questions.** After the description, list several (perhaps 4 to 6) questions that could be generated by individuals reviewing the case description or things you would want those reviewers to think about. These should be questions that help the reader think about the situation in terms of the theories being considered. That is, specifically tie together your case description with the target theory via the questions.
- **Outline of a potential solution.** Briefly (within a page or two) identify a key principle (or principles) taken from a specific theory and explain how it would be applied to solve the learning problem presented in the case. This doesn’t have to be the definitive “answer” to the case. But it should select the key theoretical principles and apply them appropriately.

Final Paper Project

Final Paper Proposal & Meeting

In this final assignment, all students **will write a literature review paper** that focuses on learning theory/principle/strategies for instructional design within a specific learning context. Drawing from a variety of theoretical perspectives and instructional approaches, please identify a learning theory/principle/strategies that may be applied to a learning context that you are interested in and passionate about. For example, if I were to work on a final paper, I would probably work on the topic of *Effective Instructional Strategies for Attitudinal Change Learning in an Open, Online Learning Context (such as MOOCs)*. For the final paper proposal meeting with the instructor, please prepare a proposal to share the following items with me:

- **Problem statement:** Identify gaps in the topic and argue the need for literature review in the field.
- **Research question:** Share your research question in one sentence.
- **Sub questions:** Share your sub questions that will be answered within the paper.

Final Paper

The learning theory/principle/strategies’ application to this particular context must be explained and supported by relevant, comprehensive literature review of both **1) theoretical research, 2) empirical research.** The paper will also need to **3) provide directions for future research.** Papers should be 6000 words, double-spaced, with APA style formatting and references (please see <https://owl.english.purdue.edu> for APA resources).

Final Round Table Presentation

This round table presentation is a place for us to share what we have learned through our final papers and the course in general. We will have get into groups to engage in round table sessions. Please prepare a 15-minute presentation with a guiding visual (such as Powerpoint or Keynote) that discusses the following:

- a) A summary of your final paper project.
- b) Your major take-aways from this course.

Grading

| | | |
|-----------|----------|----------|
| A = 94%+ | B+ = 87% | C+ = 77% |
| A- = 90%+ | B = 84% | C = 74% |
| | B- = 80% | C- = 70% |

Incompletes

A grade of Incomplete (I) will be given only in unusual circumstances. To receive an “I” grade, a **written request must be submitted prior to Week 14 of the term** and approved by the instructor. The request must describe the circumstances, along with a proposed timeline for completing the course work. You will

be required to fill out and sign an "Incomplete Contract" form that will be turned in with the course grades. Any requests made after the course is completed will not be considered for an incomplete grade.

Course policies

CLASS ATTENDANCE POLICY

Purdue University policy states that you are expected to be present for every meeting of classes in which you are enrolled. In the **case of an illness, accident, or an emergency**, you should make direct contact with the instructor as soon as possible. NOTE: being "sick," in and of itself, does not constitute an excuse from submitting an assignment on time unless the illness is critical and a doctor's excuse is provided.

EMERGENCY STATEMENT

In the event of a major campus emergency, course requirements, deadlines and grading percentages are subject to changes that may be necessitated by a revised semester calendar or other circumstances. Updates and emergency information will be posted on Purdue's home page as well as distributed through emergency text alerts (to sign up, go to http://www.purdue.edu/emergency_preparedness/). There are numerous ways to get information about changes in *this* course including the Blackboard course web page, my email address, and my phone.

ADAPTIVE PROGRAMS STATEMENT

Students with special needs must be registered with Adaptive Programs in the Office of the Dean of Students before classroom accommodations can be provided. If you are eligible for academic accommodations because you have a documented disability that will impact your work in this class, please schedule an appointment to talk with me as soon as possible to discuss your needs.

ACADEMIC DISHONESTY STATEMENT

Purdue prohibits "dishonesty in connection with any University activity. Cheating, plagiarism, or knowingly furnishing false information to the University are examples of dishonesty." [Part 5, Section III-B-2-a, [University Regulations](#)] Plagiarism, whether intended or unintended, is an extremely serious offense in academia. Be absolutely sure you are properly citing all references. Instances of plagiarism will result in failure of the assignment in question. More than one instance will result in failure of the course. ***All incidents of plagiarism, whether intentional or not, will be documented with the Dean of Students office.***

Please review the following resource page on plagiarism:

http://www.education.purdue.edu/about_us/discovery/research_integrity.html

You are **required to complete** the following plagiarism tutorial: <https://www.indiana.edu/~istd/>.

In addition, all written assignments will be submitted through **SafeAssign** when assignments are submitted in this course. This will help you become a better writer, identify any potential issues and ensure a high level of integrity is maintained in the program. **You should submit your assignments early enough that you can view the SafeAssign report and rectify any problems and resubmit the assignment before the due date/time has expired.**

Course Schedule

| Week | Topic | Assignments Due At Beginning of Class |
|-----------------|--|--|
| Week 1 1/14 | Course Introduction & Group Formation & Theories of Learning | Read Driscoll, Chp 1 Ertmer & Newby, 2013 |
| Week 2 1/21 | Theories of Learning & Groups Workshop | Your Group's Chapter |
| Week 3 1/28 | Group Behaviorism | Read Driscoll, Chp 2 Mager & Pipe Book |
| Week 4 2/4 | Group Cognitive Information Processing | Read Driscoll, Chp. 3 |
| Week 5 2/11 | Group Meaningful Learning & Schema | Read Driscoll, Chp. 4 |
| Week 6 2/18 | Final Paper Proposal Meetings | Final Paper Proposal Due |
| Week 7 2/25 | Group Situated Cognition | Read Driscoll, Chp. 5 Case Study 1 Due |
| Week 8 3/3 | Group Interactional Theories | Read Driscoll, Chp. 7 |
| Week 9 3/10 | Group Developmental Theories | Read Driscoll, Chp. 6 |
| 3/17 | <i>No Class</i> | <i>Spring Break</i> |
| Week 10 3/24 | Group Constructivism | Read Driscoll, Chp. 11 |
| Week 11 3/31 | Group Gagne's Theory | Read Driscoll, Chp. 10 |
| Week 12 4/7 | Final Paper Progress Meetings | Case Study 2 Due |
| Week 13 4/14 | <i>No Class</i> | <i>AERA</i> |
| Week 14 4/21 | <i>No Class</i> | <i>Final Paper Writing Week</i> |
| Week 15 4/28 | Final Paper Round Tables | Final Paper Round Table Presentations Final Paper Due |
| Week 16 5/5 | No Class (Finals Week) | |

* Course Schedule, Reading and Assignments subject to change during semester.