

## Instructional Technology Foundations and Theories of Learning

EDIT 704, Spring 2011  
Wednesday, 4:30–7:10 pm  
Commerce II, 100

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### COURSE DESCRIPTION

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Prerequisites: None

Course Description from University Catalog: Reviews practical and pedagogical issues related to design and development of technological instruction. Emphasizes investigating instructional design as a field and community of practice, and reviewing core learning theory constructs applicable to design of instructional technology.

### NATURE OF COURSE DELIVERY

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The course is structured around readings, reflections on those readings, in class discussions and activities, and participation in a series of model lessons designed to reflect instructional strategies based on learning theories. Using this collection of activities, the methodology of the course seeks to build clear bridges between theoretical/research perspectives, instructional models/strategies, and classroom practice.

### RELATIONSHIP OF EDIT 704 TO PROGRAM GOALS AND PROFESSIONAL ORGANIZATION

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This course adheres to the following Instructional Technology Program Goals and Standards for Programs in Educational Communications and Instructional Technologies established by the Association of Educational Communication and Technologies (AECT) under the National Council for the Accreditation of Teacher Education (NCATE).

*Standard 1 - Design*

- 1.1.b Identify theories from which a variety of instructional design models are derived and the consequent implications.
- 1.1.2.a Demonstrate in-depth synthesis and evaluation of the theoretical constructs and research methodologies related to instructional design as applied in multiple contexts.
- 1.1.3.b Utilize the research, theoretical, and practitioner foundations of the field in the development of instructional materials.
- 1.1.4.a Conduct basic and applied research related to technology integration and implementation.
- 1.1.5.c Articulate the relationship within the discipline between theory, research, and practice as well as the interrelationships between people, processes, and devices.
- 1.3.a Identify multiple instructional strategy models and demonstrate appropriate contextualized application within practice and field experiences.

## STUDENT OUTCOMES

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By the end of this course, students will be able to demonstrate capabilities in the following areas:

- Identify the underlying principles for each of the learning paradigms/theories discussed in this course;
- Describe the general characteristics of each of the learning paradigms/theories and their impact on knowledge acquisition;
- Compare and contrast the three learning paradigms and their ensuing theories from a cognitive perspective;
- Identify descriptive and prescriptive learning theories;
- Describe the relationship between learning theory, instructional theory, and the practice of instructional design;
- Identify instructional theories, models, and strategies that are suited for each of the learning paradigms/theories;
- Identify instructional applications for each of the learning paradigms/theories discussed in this course;
- Describe the advantages and disadvantages of each of the learning paradigms/theories from an instructional perspective;
- Identify practical applications of each of the learning paradigms/theories in the field of Instructional Technology;
- Describe the implementation of each of the learning paradigms/theories from an Instructional Design perspective.

## REQUIRED READINGS

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- Dricoll, Marcy P. Psychology of Learning for Instruction, Third Edition.
- Medsker and Holdsworth. Models and Strategies for Training Design.
- Additional articles/readings are available on the class Blackboard site.

## COURSE REQUIREMENTS: ATTENDANCE

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Class attendance is required, and I expect that you will make every effort to be in class on time. Class participation and in-class assignments can be made up for **two** absences during the semester; additional absences cannot be made up. To make up attendance points, you must send an email requesting make up assignment within **one week** of the absence.

## COURSE REQUIREMENTS: ASSIGNMENTS

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Assignments are due in class on the day shown on the Course Schedule. Assignments may be turned in up to one week late with a 10% grade deduction. No late assignments will be accepted beyond one week after the due date. **Exception: The Classroom Teaching assignment must be completed as scheduled; no late credit will be given for this assignment.**

Check the Blackboard site (“see Assignment Descriptions”) for additional information about each assignment listed below, including evaluation criteria for each.

- **Weekly Readings:** As outlined in the class schedule below.
- **Research Essay (200 pts):** An essay based on significant research in books and peer-reviewed journals around a job-related issue/problem.
- **Research Essay Topic Approval (10 pts)**
- **Weekly Reflections (250 pts):** Weekly written reflections posted online about class topics.
- **Instructor Guides – two (100 pts each = 200 pts):** Develop curriculum based on the theories/strategies learned in class.
- **Classroom Teaching (100 pts):** Teach a 20-30 minute lesson based on theories/strategies learned in class.
- **Class Participation/In-class assignments (200 pts):** Actively participate in activities and assignments in class.
- **Syllabus Quiz (10 pts):** Demonstrate understanding of the syllabus and assignments in an online quiz.
- **Job Aid (30 pts):** Personalized job aid encompassing all theories/strategies learned in the class.

#### PERFORMANCE-BASED ASSESSMENT, AND EVALUATION CRITERIA

This class includes three performance-based assessments: the classroom teaching, and the two instructor guides.

#### EVALUATION CRITERIA

Your final grade will be based on the following scale:

<b>A</b>	940 – 1000 pts
<b>A-</b>	900 – 939 pts
<b>B+</b>	870 – 899 pts
<b>B</b>	830 – 869 pts
<b>C</b>	750 – 839 pts
<b>F</b>	749 pts or lower

An Incomplete (IN) is a rarely used grade that indicates a contract between instructor and student to complete classwork after the end of the term. The University Catalog states, “The

grade of IN may be given to a student who is passing a course but who may be unable to complete scheduled course work for a cause beyond reasonable control”.

## **COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT STATEMENT OF EXPECTATIONS**

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For additional information on the College of Education and Human Development, Graduate School of Education, please visit our website [See <http://gse.gmu.edu/>].

### **Student Expectations**

- Students must adhere to the guidelines of the George Mason University Honor Code [See <http://academicintegrity.gmu.edu/honorcode/>].
- Students with disabilities who seek accommodations in a course must be registered with the George Mason University Office of Disability Services (ODS) and inform their instructor, in writing, at the beginning of the semester [See <http://ods.gmu.edu/>].
- Students must follow the university policy for Responsible Use of Computing [See <http://universitypolicy.gmu.edu/1301gen.html>].
- Students are responsible for the content of university communications sent to their George Mason University email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students solely through their Mason email account.
- Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.
- Students are expected to exhibit professional behaviors and dispositions at all times.

### **Campus Resources**

- The George Mason University Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students’ personal experience and academic performance [See <http://caps.gmu.edu/>].
- The George Mason University Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing [See <http://writingcenter.gmu.edu/>].

## **ADDITIONAL NOTE ON PLAGIARISM**

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Plagiarism is the intentional or unintentional use of other’s ideas, words, data, figures, pictures, sequence of ideas, or arrangement of materials without clearly acknowledging the source (based on Mason Honor Code online at <http://mason.gmu.edu/~montecin/plagiarism.htm> . This statement is from the Honor Code:

**B.** Plagiarism encompasses the following:

1. Presenting as one's own the words, the work, or the opinions of someone else without proper acknowledgment.

2. Borrowing the sequence of ideas, the arrangement of material, or the pattern of thought of someone else without proper acknowledgment.

In this class, any plagiarized work will earn a “0” for the assignment. To discourage plagiarism, you may be required to turn in some assignments in both electronic and hard copy versions so I have the option to use SafeAssign (GMU’s plagiarism prevention program).

**COURSE SCHEDULE (SUBJECT TO CHANGE)**

Week	Date	Class Topics and Readings Due	Assignments due (+ Reflections)
1	1/26	Introductions	
2	2/2	Introduction to Learning Theories Learning Paradigms <ul style="list-style-type: none"> <li>• Driscoll, Chapter 1</li> <li>• Ertmer, P.A., &amp; Newby, T.J. (1993). Behaviorism, cognitivism, constructivism: Comparing critical features from an instructional design perspective.</li> </ul>	Syllabus Quiz
3	2/9	Radical Behaviorism <ul style="list-style-type: none"> <li>• Driscoll, Chapter 2</li> </ul>	
4	2/16	Behaviorist Models and Strategies <ul style="list-style-type: none"> <li>• Medsker, Chapters 1 and 3</li> </ul>	
5	2/23	Cognitive Information Processing <i>Behaviorism Classroom Teaching</i> <ul style="list-style-type: none"> <li>• Driscoll, Chapter 3</li> <li>• Medsker, Chapter 6</li> </ul>	
6	3/2	GMU libraries and databases: Wendy Mann Meet at Fenwick Library at 4:45. Enter the building and go up the stairs to the left of the circulation desk – the instruction room is at the top of the stairs.	Instructor Guide #1
7	3/9	Conditions of Learning <i>Mnemonics Classroom Teaching</i> <ul style="list-style-type: none"> <li>• Driscoll, Chapter 10</li> <li>• Medsker, Chapter 4</li> </ul>	Research Essay Topic Approval
8	3/16	Meaningful Learning and Schema Theory <i>9 Events of Learning Classroom Teaching</i> <ul style="list-style-type: none"> <li>• Driscoll, Chapter 4</li> <li>• Medsker, Chapter 9</li> </ul>	
9	3/23	Situated Cognition <i>Advance Organizer Classroom Teaching</i> <ul style="list-style-type: none"> <li>• Driscoll, Chapter 5</li> <li>• Medsker, Chapter 10</li> </ul>	
10	3/30	Interactional Theories of Cognitive Development <i>Cognitive Inquiry Classroom Teaching</i> <ul style="list-style-type: none"> <li>• Driscoll, Chapter 7</li> </ul>	
11	4/6	Constructivism <ul style="list-style-type: none"> <li>• Driscoll, Chapter 11</li> <li>• Medsker, Chapter 11</li> </ul>	Research Essay

EDIT 704 Syllabus

Week	Date	Class Topics and Readings Due	Assignments due (+ Reflections)
12	4/13	Learning and Motivation <i>Constructivism Classroom Teaching</i> <ul style="list-style-type: none"> <li>• Driscoll, Chapter 9</li> <li>• Medsker, Chapter 15</li> </ul>	
13	4/20	Adult Learning Theory <i>ARCS Classroom Teaching</i> <ul style="list-style-type: none"> <li>• Medsker, Chapter 16</li> </ul>	Instructor Guide #2
14	4/27	<i>Adult Learning Classroom Teaching</i> Conclusion <ul style="list-style-type: none"> <li>• Bednar, Cunningham, Duffy, &amp; Perry (1992). Theory into practice: How do we link?</li> </ul>	Job Aid