GEORGE MASON UNIVERSITY
COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT
GRADUATE SCHOOL OF EDUCATION
EDIT 704 - B01- SUMMER 2015, 3 CREDITS
Instructional Technology Foundations and Theories of Learning
"**Course meets online via** MyMasonPortal/Courses"

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COURSE DESCRIPTION

Reviews the practical and pedagogical issues related to design and development of technological instruction. Emphasizes investigating instructional design as a field and community of practice, and reviews core learning theory constructs applicable to design of instructional technology.

NATURE OF COURSE DELIVERY

This course will be delivered online using an **asynchronous** (not "real time") format via the Blackboard learning management system. The course will utilize a combination of readings, lectures, hands-on experiences, research activities, threaded discussions, and projects to help participants understand the content of this course. To access the course, go to the Blackboard login page at https://mymasonportal.gmu.edu. Your GMU email username is also your Blackboard ID and your GMU e-mail password is also your Blackboard password. Once logged in, you will see a listing of all the courses for which you have registered. Select **EDIT 704**, and browse the course website.

TECHNICAL REQUIREMENTS:
To participate in this course, students will need the following resources:
- High-speed Internet access with a standard up-to-date browser, either Internet Explorer or Mozilla Firefox. Opera and Safari are not compatible with Blackboard;
- Consistent and reliable access to their GMU email and Blackboard, as these are the official methods of communication for this course
- Students may be asked to create logins and passwords on supplemental websites and/or to download trial software to their computer or tablet as part of the course requirements.
- A headset microphone for use with the Skype conferencing tool.

EXPECTATIONS:
- **Course Week:** Because asynchronous courses do not have a "fixed" meeting day, our week will **start** on Monday of every week, and **finish** on Sunday.
- **Log-in Frequency**: Students must actively check the course Blackboard site and their GMU email for communications from the instructor, at a minimum this should be **5** times per week.

- **Participation**: Students are expected to actively engage in all course activities throughout the semester, which include viewing of all course materials, completing course activities and assignments, and participating in course discussions and group interactions.
- **Technical Competence**: Students are expected to demonstrate competence in the use of all course technology. Students are expected to seek assistance if they are struggling with technical components of the course.
- **Technical Issues**: Students should expect that they could experience some technical difficulties at some point in the semester and should, therefore, budget their time accordingly. Late work will not be accepted based on individual technical issues.
- **Workload**: Student success in this course is priority one. We have a great deal to cover in a relatively short period of time, so please keep on track. This course is an intensive version of the 15 week version of EDIT 704. The scope and intensity of this course is such that playing "catch up" will prove to be extremely challenging. Expect to log in to this course **every day during these seven weeks** to read announcements, participate in the discussions, and work on course materials. If there is anything you don't understand, or if work or personal challenges threaten to derail your progress, please send me an email as quickly as possible, and we will talk.
- **Advising:** If you would like to schedule a one-on-one meeting to discuss course requirements, content or other course-related issues, we can meet via telephone or web conference. Send me an email to schedule your one-on-one session and include your suggested dates/times.
- **Netiquette:** Our goal is to be **collaborative**, not combative. Experience shows that even an innocent remark in the online environment can be misconstrued. I suggest that you always re-read your responses carefully before you post them to encourage others from taking them as personal attacks. **Be positive in your approach to others and diplomatic with your words.** I will do the same. Remember, you are not competing with each other but sharing information and learning from one another as well as from the instructor.

COURSE LEARNING OUTCOMES OR OBJECTIVES

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;
- Describe the implementation of each of the learning paradigms/theories from an Instructional Design perspective.

PROFESSIONAL STANDARDS

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 Use 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.

REQUIRED TEXTBOOK/READINGS

- Driscoll, Marcy P. Psychology of Learning for Instruction, Third Edition.
- Additional articles/readings are available on the weekly modules on the Blackboard site.

COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT CORE VALUES COMMITMENT

The College of Education & Human Development is committed to the following five values: collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles http://cehd.gmu.edu/values/*.*
For additional information on the College of Education and Human Development, Graduate School of Education, please visit our website [See http://gse.gmu.edu/].

GMU POLICIES AND RESOURCES FOR STUDENTS

a. Students must adhere to the guidelines of the George Mason University Honor Code (See **http://oai.gmu.edu/the-mason-honor-code-2/**).

b. Students must follow the university policy for Responsible Use of Computing (See **http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/**).

c. 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.

d. 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/**).

e. 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/**).

f. Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.

g. 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/**).

PROFESSIONAL DISPOSITIONS

Students are expected to exhibit professional behaviors and dispositions at all times.

COURSE REQUIREMENTS: ASSIGNMENTS

Assignments are due on the day shown on the Course Schedule by 11:59 pm. Assignments may be turned in up to 3 days late with a 25% grade deduction. No late assignments will be accepted beyond 3 days after the due date.

"What I Believe" Part One (10% of the course grade)
Submit under "Course Assignments" by Sunday 5/24
Using bullets, identify 15 notions, thoughts, and opinions you hold about adult learning and learning theory. These should be characteristics and/or behaviors of adult learners, or elements or characteristics of what you believe to be good instructional design. No references are required. The purpose of this assignment is for you to bring together in one place your personal beliefs.

Here's an example: "I believe that learning takes place through imitation of others' actions."

"What I Believe" Part Two (15% of the course grade)
Submit under "Course Assignments" by Sunday 6/28
In a more scholarly paper, re-visit your beliefs from "What I Believe Part One." Using those original 15 bullets, revise, reject or validate your original thoughts and notions in the Part One paper. For each belief, cite references in APA format to support the characteristics and behaviors of adult learners or effective practices in teaching adult learners. Use a minimum of six (6) professional literature sources, including the textbooks, to reaffirm or modify your original 15 beliefs, citing a specific source for each belief. Substantial points are reduced if you just list the citations on a list at the end of the paper; I want the bullet, discussion, and then citation.

Here's an example: "The learning environment affects adult learners."

What I've learned in this course validates my original belief. Albert Bandura's Social Learning Theory explains the causal relationship between behavior, environment and an individual. In a learning context, the behavior of an individual is linked to that individual's response to the environment.

Learning Theory Presentation and Abstract (20% of the course grade)
***Submit on the Learning Theory Presentation Discussion Thread on the due date. Also submit for
grading under assignments.***
Rubric is provided on Blackboard under Course Assignments.

Individually, you are asked to conduct scholarly research of a learning theory. You will select your theory
from a list of theories that will be posted in the course schedule and under the discussion thread. Please
check out http://learning-theories.com for brief reviews of the theories to determine which one may
interest you. In a short (6-7 minute) **AUDIO NARRATED** PowerPoint presentation to the other learners
in EDIT 704, provide an overview of the theory, similar or related theories, identify the contribution the
theorist made to the field of learning theory, and identify four (4) particularly relevant points regarding
teaching/learning of adults and the design of instruction for adults. In addition to the PowerPoint
presentation, prepare for our learning community an abstract, one-page front and back, covering the
same topics as the presentation. Include your references in APA. A sample abstract and presentation will
be provided.

Instructor Guide (25% of the course grade)
Submit under "Course Assignments" by Tuesday 7/6

In ***Pairs,*** develop a curriculum based on the theories and strategies learned in class.

Prepare a "package" (one- stop shopping) for an instructor to plan and deliver a lesson. At a minimum,
identify the:

- Topic or lesson
- Objective(s)
- Audience: Who are the learners?
- Sequence of instruction
- Materials and resources. You can't just say "video" or "supplemental materials." You have to
  develop and include the materials or include the link, length and the actual materials
- Clear instructions for all activities (The design of the learning activities should include
  methodologies and strategies from different learning theories covered in this course)
- Instructor scripting (if appropriate)
- How learning will be assessed
- Strategy for learning to transfer
- Summary and lesson conclusion

In addition to the lesson, develop a one- to two-page explanation to include a brief synopsis of the
learning theory and model/strategy used, and explanation for why the particular model/strategy is
appropriate for the topic, and a short description of how the lesson reflects learning theory. This two-
page summary is an excellent way to "frame" your instructor guide. If you use power point, prepare one
word document with the power point slides "pasted" in the appropriate place in the lesson. I will only
review one self-contained document.

An example of prior student work will be provided by the instructor as well as a grading rubric.

Instructor Guide Proposal (5% of the course grade)
Submit under Discussion Board thread "Instructor Guide Proposal" by Monday 6/8.

This is only an initial plan for your instructor guide. Some elements may be modified as we explore the remaining theories. Your proposal should state the following very briefly:
1. Theory or strategy you are planning to use
2. Your lesson's topic. What are you planning to teach?
3. Learning objectives for your lesson/guide. Here's a link to GMU's Center for Teaching Excellence Guide for faculty to design learning objectives:http://ctfe.gmu.edu/teaching/student-learning-outcomes/

Discussion Questions (25% of the course grade)
*Discussion Questions are due on Wednesdays of every week
*Comments on classmates' posts are due on Sunday of every week

We will be using Blackboard's discussion board as our discussion platform in this course. Every week you will be asked to respond to discussion questions. The questions will ask you to reflect on the course readings for that week. Discussion questions are due on Friday of every week. In addition to posting your answers, you will be asked to **comment on 2 of your classmates' posts by Sunday of every week.** **Please do not wait till Sunday to engage in Discussions. Post your first comment by Friday and your Second comment by Sunday.** Your comments should refer to the course readings and/or personal experience. You may also ask questions or clarify a point that your classmates are discussing. You are also encouraged to share external resources whenever suitable.

COURSE SCHEDULE

Week	Class Topics and Readings	Assignments
Week 1: 5/18- 5/24	**Introductions** **Overview of Learning Theories**: • Watch the Course Orientation Video • Visit the following website and familiarize yourself with the different types and classifications of learning theories. http://www.learning-theories.com/ • Watch this video for a brief description of each of the learning paradigms/theories: https://www.youtube.com/watch?v=CaZW15J-Xuc&feature=youtube_gdata_player **Learning Paradigms**: • **Driscoll, Chapter 1** • **Ertmer, P.A. & Newby, T.J. (1993).**	• Post a 1-3 minute video introducing yourself by Tuesday 5/19 under discussion board. Welcome your peers by posting a welcome note. • Respond to Discussion Question 1 by Wednesday 5/20 • Respond to 2 of your classmates' posts by Sunday 5/24 • **"What I Believe" Part One** by Sunday 5/24 • Start connecting with peers to select your Instructor Guide (Final Project) team member.
Week 2: 5/25 – 5/31	**Behaviorist Models and Strategies:** • **Driscoll, Chapter 2** • Medsker and Holdsworth, Chapters 1 & 3 (Attached under week 2 module) • Watch the following videos on behaviorism: http://study.com/academy/lesson/be	• Respond to Discussion Question 2 by Wednesday 5/27 • Respond to 2 of your classmates' posts by Sunday 5/31 • Submit your Learning Theory selection and presentation topic

	haviorism-overview-practical-teaching-examples.html • https://www.youtube.com/watch?v=RTVQHhbhYbA	by Tuesday 5/26.
Week 3: 6/1- 6/7	**Cognitivist Theories** Cognitive Information Processing Meaningful Learning and Schema Theory Conditions of Learning • **Driscoll, Chapter 3, 4 & 10** **Learning Theory Presentations:** • Cognitive Inquiry • Conditions of Learning • Meaningful Learning and Schema Theory • Mnemonics	• Respond to Discussion Question 3 by Wed. 6/3 • Respond to 2 of your classmates' posts by Sunday 6/7 • Learning Theory Presentation by Monday 6/1
Week 4: 6/8- 6/14	**Constructivist Theories** Situated Cognition Discovery Learning (Bruner) Social Development Theory (Vygotsky) • **Driscoll, Chapters 5, 7 & 10** **Learning Theory Presentations:** • Communities of Practice • Cognitive Apprenticeship • Distributed Cognition	• **Instructor Guide Proposal** due on Monday 6/8 • Respond to Discussion Question 4 by Wed. 6/8. • Respond to 2 of your classmates' posts by Sunday 6/14 • Learning Theory Presentation by Monday 6/8
Week 5: 6/15- 6/21	**Motivational Theories** • **Driscoll, Chapter 9** **Learning Theory Presentations:** • ARCS Model of Motivational Design • Maslow's Hierarchy of needs	• Respond to Discussion Question 5 by Wed. 6/17 • Respond to 2 of your classmates' posts by Sunday 6/21 • **Instructor Guide:** Submit audience and sequence of Instruction by 6/21 • Learning Theory Presentation by Monday 6/15
Week 6: 6/22- 6/28	**Adult Learning Theory** • Medsker and Holdsworth, Chapter 16 (Attached under week 6 module) **Connectivism** • http://www.ingedewaard.net/papers/connectivism/2005_siemens_ALearningTheoryForTheDigitalAge.pdf **Learning Theory Presentations:** • Andragogy	• Respond to Discussion Question 6 by Wed. 6/24 • Respond to 2 of your classmates' posts by Sunday 6/28 • **"What I Believe" Part two**, due Sunday 6/28 • **Instructor Guide:** Submit "How learning will be assessed and Strategies for transfer of learning by 6/28"

	• Connectivism	• Learning Theory Presentation by Monday 6/22
Week 7: 6/29- 7/6	**Applying the Models and Strategies** • Medsker and Holdsworth, Chapter 18 • Bednar, Cunningham, Duffy, &Perry(1995).Theory into practice: How do we link? (Attached under week 7 module)	• **"Instructor Guide"** due Tuesday 7/6.

Grading
Grades for every assignment will be posted on Blackboard.
A+= 98+   A = 97-93   A- = 92-90   B+= 89- 87   B= 86- 83   B- = 82- 80
C+= 79- 77   C = 76- 73   C- = 70-72   F= 57- 0

Grading Rubric for the Instructor Guide

Descriptors	Exceeds Expectations	Meets Expectations	Does not Meet Expectations	Points
Purpose and Learning Objectives 50 points	All key elements of the purpose and learning objectives are included and effectively described. • Pedagogical model is identified • Authentic learning problem is described and aligns with the characteristics of the selected pedagogical model • Target audience is described • General knowledge domain or topic of instruction is described • Complex learning outcomes are presented • Learning activities are described • Assessment is described • Objectives prepared for each major task • Objectives are appropriate and measurable • Instructional strategy addresses each objective	Most key elements of the purpose and learning objectives are included and effectively described OR the purpose and learning objectives are covered, but the alignment across the elements is not clear • Pedagogical model is identified • Authentic learning problem is described and aligns with the characteristics of the selected pedagogical model • Target audience is described • General knowledge domain or topic of instruction is described • Complex learning outcomes are presented • Learning activities are described • Assessment is described • Objectives prepared for each major task • Objectives are appropriate and measurable • Instructional strategy addresses each objective	Key elements of the purpose and learning objectives are missing OR the purpose and learning objectives are not described effectively or do not align with behaviorism • Pedagogical model is identified • Authentic learning problem is described and aligns with the characteristics of the selected pedagogical model • Target audience is described • General knowledge domain or topic of instruction is described • Complex learning outcomes are presented • Learning activities are described • Assessment is described • Objectives prepared for each major task • Objectives are appropriate and measurable • Instructional strategy addresses each objective	
Instructor and/or Student Guidelines 25 points	All key elements of the guide are provided and adhered to • Background / introduction • Skills practice is specified • Feedback and social reinforcement specified • Transfer strategy articulated • Instruction timing, materials, resources, visuals and scripting (if appropriate) are set forth • Writing style appropriate for the primary "reader"	Most key elements of the guide are provided and adhered to • Background / introduction • Skills practice is specified • Feedback and social reinforcement specified • Transfer strategy articulated • Instruction timing, materials, resources, visuals and scripting (if appropriate) are set forth • Writing style appropriate for the primary "reader"	Several key elements of the guide are missing OR not adhered to • Background / introduction • Skills practice is specified • Feedback and social reinforcement specified • Transfer strategy articulated • Instruction timing, materials, resources, visuals and scripting (if appropriate) are set forth • Writing style appropriate for the primary "reader"	
Supporting Materials 50 points	Supporting materials use appropriate technologies to demonstrate all aspects of the guide that are applicable or available to the learner and the	Most aspects of the supporting materials use appropriate technologies OR all aspects of the guide are included but not effectively demonstrated	Several aspects of the supporting materials are missing OR are not demonstrated effectively and consistently	

	facilitator • Clear demonstration of the instructional approach depicted in the selected pedagogical model • Anchoring scenario or learning challenge clearly demonstrated in the guide • Explicit demonstration of the instructional strategies, learning activities, and assessment outlined in the guide • Selected media are innovative, yet appropriate for the chosen strategies	• Clear demonstration of the instructional approach depicted in the selected pedagogical model • Anchoring scenario or learning challenge clearly demonstrated in the guide • Explicit demonstration of the instructional strategies, learning activities, and assessment outlined in the guide • Selected media are innovative, yet appropriate for the chosen strategies.	• Clear demonstration of the instructional approach depicted in the selected pedagogical model • Anchoring scenario or learning challenge clearly demonstrated in the guide • Explicit demonstration of the instructional strategies, learning activities, and assessment outlined in the guide • Selected media are innovative, yet appropriate for the chosen strategies	
Layout 25 points	The layout of the guide is clear, easy to follow and flows in a logical sequence way • Photographs, icons and clip art follow a theme and are appropriate • Text is easy to read, spaced and is aligned; backgrounds enhance layout • Two-page explanation is included and describes how the lesson reflects learning theory	Most aspects of the layout of the guide are clear, easy to follow and flow in a logical way • Photographs, icons and clip art follow a theme and are appropriate • Text is easy to read, spaced and is aligned; backgrounds enhance layout • Two-page explanation is included and describes how the lesson reflects learning theory	Several aspects of the layout of the guide are NOT clear, incomplete or lacks enough detail for someone else to deliver • Photographs, icons and clip art follow a theme and are appropriate • Text is easy to read, spaced and is aligned; backgrounds enhance layout • Two-page explanation is included and describes how the lesson reflects learning theory	
Applied Strategy to Lesson Design 100 points	All key elements of the guide are included and pedagogically aligned • Learning outcomes are representative of the selected pedagogical model • Instructional characteristics of the pedagogical model selected are identified and aligned with instructional strategies and learning outcomes • Learning activities are identified and aligned with the instructional strategies and learning outcomes • Assessment activities or	Most key elements of the guide are included and pedagogically aligned OR all key elements of the design table are included but not pedagogically aligned • Learning outcomes are representative of the selected pedagogical model • Instructional characteristics of the pedagogical model selected are identified and aligned with instructional strategies and learning outcomes • Learning activities are identified and aligned with the instructional strategies and learning	Several elements of the guide are missing or not pedagogically aligned • Learning outcomes are representative of the selected pedagogical model • Instructional characteristics of the pedagogical model selected are identified and aligned with instructional strategies and learning outcomes • Learning activities are identified and aligned with the instructional strategies and learning outcomes • Assessment activities or	

	criteria are identified and aligned with the instructional strategies and learning outcomes	outcomes • Assessment activities or criteria are identified and aligned with the instructional strategies and learning outcomes	criteria are identified and aligned with the instructional strategies and learning outcomes	
Summarized Lesson and Explained Strategy 25 points	All key elements of the lesson were summarized; instructional strategy thoroughly explained • Instructional product is complete and detailed enough for anyone to deliver the instruction • Guide contains all required content	Most key elements of the lesson were summarized; most of the instructional strategy thoroughly explained • Instructional product is complete and detailed enough for anyone to deliver the instruction • Guide contains all required content	Several elements of the lesson were NOT summarized; instructional strategy lack thorough explanation • Instructional product is complete and detailed enough for anyone to deliver the instruction • Guide contains all required content	
Meaningful Organization of Topics 25 points	All key elements of the guide are meaningful and organized in a substantive way • Key sections are included • Rules of grammar, spelling, usage and punctuation are adhered to • APA style is applied correctly and consistently across all areas of the paper • Class readings are synthesized effectively to support the points made in the paper • Appropriate use of references • Paper presents a substantiated introduction to the selected learning theory and its implication for teaching and learning • Paper presents a substantiated description of the pedagogical model, including its principles, characteristics, theoretical grounding, and application	Most key elements of the guide are meaningful and organized OR all key elements are covered but not substantively • Key sections are included • Rules of grammar, spelling, usage and punctuation are adhered to • APA style is applied correctly and consistently across all areas of the paper • Class readings are synthesized effectively to support the points made in the paper • Appropriate use of references • Paper presents a substantiated introduction to the selected learning theory and its implication for teaching and learning • Paper presents a substantiated description of the pedagogical model, including its principles, characteristics, theoretical grounding, and application	Several elements of the paper are missing, not supported substantively, or not adhered to • Key sections are included • Rules of grammar, spelling, usage and punctuation are adhered to • APA style is applied correctly and consistently across all areas of the paper • Class readings are synthesized effectively to support the points made in the paper • Appropriate use of references • Paper presents a substantiated introduction to the selected learning theory and its implication for teaching and learning • Paper presents a substantiated description of the pedagogical model, including its principles, characteristics, theoretical grounding, and application	

Some of the content in this course is adapted from Dr. Karen Gardner's EDIT 704 Syllabus.