George Mason University College of Education and Human Development Instructional Design and Technology Program (IDT) EDIT 730 - Advanced Instructional Design – Section 001 – 3 Credits Fall 2018 Syllabus

General Information

Time: Tuesdays, 4:30 PM – 7:10 PM **Location:** Thompson Hall L003 **Instructor:** Dr. Nada Dabbagh **Phone:** (703) 993-4439

Division of Learning Technologies

IDT Program: http://learntech.gmu.edu/idt/ Office: Thompson Hall, L047 (office hours by appointment) Email: ndabbagh@gmu.edu

Course Description

<u>Catalog Description</u>: Provides students with the knowledge and skills for designing highly contextualized and engaging problem-solving learning environments using a grounded, theory-based design approach. Emphasizes the design of technology supported learning environments using a variety of pedagogical models and instructional strategies.

Expanded Description: Provides students with the knowledge and skills for designing and facilitating highly contextualized, engaging, and meaningful learning experiences based on the principles of constructivism, situated cognition, and connectivism. Readings expose students to a range of epistemological and theoretical perspectives as evidenced by instructional design literature and applications. The focus is on **grounded or theory-based design**, which differs from the systematic process of instructional design as discussed in EDIT 705 (e.g., ADDIE). However, the principles of systematic instructional design are fundamental to understanding and implementing this design approach. The course also emphasizes the design of **online or technology supported learning environments** (**TSLEs**) using proven pedagogical models, instructional strategies, and learning technologies.

<u>Pre-requisites</u>: EDIT 705; students are expected to be proficient in the principles and processes of instructional design (e.g., performing task and audience analysis, writing learning outcomes or instructional objectives, and aligning learning outcomes with taxonomies for identifying learning domains and assessment).

<u>Course Delivery Method</u>: The course will be conducted through a mixture of lecture, in-class discussions and activities, online discussions, and individual and collaborative activities including a final design project.

Learner Outcomes or Objectives

- 1. Develop an understanding of epistemological approaches to learning and cognition such as objectivism, behaviorism, cognitivism, constructivism, situated cognition, and connectivism.
- 2. Develop an understanding of grounded design or theory-based design.
- 3. Develop an **applied** understanding of **constructivism** and its implications for designing **meaningful learning experiences** using the **Meaningful Online Learning Design Framework**.
- 4. Examine a variety of constructivist-based **pedagogical models and instructional strategies** and their implications for the design of meaningful learning experiences using a variety of learning technologies.
- 5. Appreciate the importance of the linkage between theories of learning and instructional design practice.

Professional Standards

The learning outcomes for this course align with the 2012 International Board of Standards for Training, Performance and Instruction (IBSTPI) competencies of *Professional Foundations* and *Design and Development* as follows (see http://www.ibstpi.org/instructional-design-competencies/):

- Professional Foundations (2): Apply research and theory to the discipline of instructional design
- *Planning & Analysis (9):* Analyze the characteristics of existing & emerging technologies & their potential use
- Design & Development (10): Use an instructional design & development process appropriate for a given project
- Design & Development (11): Organize instructional programs/products to be designed, developed, and evaluated
- Design & Development (12): Design instructional interventions

Required Texts

Dabbagh, N., Marra, R.M., & Howland, J.L. (2019). *Meaningful online learning: Integrating strategies, activities, and learning technologies for effective designs.* Routledge.

Additional readings are provided on Blackboard (Bb) or as handouts in class. The Blackboard course website will have a variety of **instructional resources organized according to the learning modules in the timeline below and should be explored with each module**. To access Blackboard, go to <u>mymason.gmu.edu</u>

Learning Activities, Performance Based Assessments, and Grading Policy

Students are expected to submit all assignments on time in the manner outlined by the instructor (e.g., Bb, TK20, etc.)

CLE (Constructivist Learning Environment) Criteria and Application

In groups, students will (a) identify theoretical principles and instructional characteristics of Constructivist Learning Environments (CLEs) based on the readings and additional reliable resources, (b) contrast these to the theoretical principles and instructional characteristics of Objectivist or Behaviorist Learning Environments (OLEs), (c) find and share an example of a CLE that is **technology supported** and subscribes to the CLE principles and characteristics identified, and (d) critique the extent to which the selected CLE example embodies the principles of constructivism. The end product for this assignment is a 20-25 minute in-class presentation that describes the findings of the group with respect to these items. More detail is provided on the course website under assignments.

Online and In-Class Participation

The course includes online and in-class discussions and activities. Online activities include the use of blogs, vlogs, or discussion forums (15%) designed to help you articulate your understanding of the readings, share multiple perspectives and provide constructive peer feedback. In-class activities (10%) include group work and whole group discussions. *Students are expected to come to class fully prepared to discuss the readings*. Rubrics for evaluating class participation are provided on the course website under assignments. **On time class attendance is critical to successful class participation**.

Research Brief

Each student will select a constructivist based pedagogical model (e.g., cognitive apprenticeship, community of practice, situated learning, problem based learning) OR an instructional strategy (e.g., collaboration, articulation, scaffolding, problem solving), OR a learning technology (e.g., immersive tools, collaboration tools, knowledge representation tools) and write a **research brief** based on the *5 Things You Need to Know About*: (1) What is it? (2) How does it work? (3) Who is doing it? (4) How effective is it? (5) What are its implications for instructional design? References should include course readings as well as new empirical research related to the selected model, strategy, or technology. More detail is provided on the course website under assignments.

Designing a Technology Supported Constructivist Learning Environment (TSCLE) 25% of grade

Individually or in small groups, students will select a constructivist based pedagogical model or the meaningful learning characteristics and will apply a **grounded design approach** i.e. the **Meaningful Online Learning Design Framework** to develop **a prototype of the TSCLE** for a specific target audience and learning content. The prototype will demonstrate how supportive, dialogic, and exploratory instructional strategies are implemented. <u>This is a</u> **Performance Based Assessment or PBA (rubric provided at end of syllabus).**

The final deliverable for this assignment should include the following three components:

- 1. A **proposal** (design document) describing the parameters of the TSCLE including the learning problem, target audience, learning outcomes (knowledge/skills/content), pedagogical model or meaningful learning framework, instructional strategies, learning activities, learning technologies, and assessment approach.
- 2. A **design table** depicting the grounded design of the TSCLE. The table is a blueprint or storyboard of the prototype and should illustrate the mapping or alignment of the following design elements: (1) learning outcomes, (2) instructional strategies, (3) learning activities or tasks (what the learners will do) and how these activities support meaningful learning, (4) the learning technologies that will enable learners to accomplish these tasks, and (5) assessment criteria.
- 3. A **prototype** of the TSCLE showing the **learning activities** that the learners will engage in and the supporting learning technologies. The prototype can be developed in PPT or a technology of your choice (e.g., wiki, googlesites, Wix, Wordpress, Adobe Captivate, etc.).

25% of grade

25% of grade

25% of grade

Grades are based on the successful completion of course requirements and on the scope, quality and creativity of the assignments. To get an A in this course, students should demonstrate critical thinking skills through active synthesis of reading material, integration of prior knowledge and experience, and through problem-solving, argumentation, and reasoning.

Grade distribution is as follows: A + = 97 - 100 (exceeds expectations on all requirements); A = 93 - 96 (meets expectations, excellent performance); A = 90 - 92 (meets expectations, very good performance), B + = 86 - 89 (meets most expectations, good performance), B = 83 - 85 (meets most expectations, satisfactory performance); B = 80 - 82 (meets some expectations, average performance); C = 70 - 79 (notably below expectations).

The instructor reserves the right to deduct up to 10% of an assignment grade per day for late submissions without a valid excuse. Missing more than 2 classes over the semester can also result in grade reduction. If you miss class, it is your responsibility to make up the work (this includes classwork).

Professional Dispositions

Students are expected to exhibit professional behaviors and dispositions at all times. See https://cehd.gmu.edu/students/polices-procedures/

Core Values Commitment

The College of Education and Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles: <u>http://cehd.gmu.edu/values/</u>

GEORGE MASON UNIVERSITY POLICIES AND RESOURCES FOR STUDENTS

Policies

- Students must adhere to the guidelines of the Mason Honor Code (see https://catalog.gmu.edu/policies/honor-code-system/)
- Students must follow the university policy for Responsible Use of Computing (see http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/)
- Students are responsible for the content of university communications sent to their Mason 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 with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor (see http://ds.gmu.edu/).
- Students must silence all sound emitting devices during class unless otherwise authorized by the instructor.

Campus Resources

- Support for submission of assignments to Tk20 should be directed to <u>tk20help@gmu.edu</u> or <u>https://cehd.gmu.edu/aero/tk20</u>. Questions or concerns regarding use of Blackboard should be directed to <u>http://coursessupport.gmu.edu/</u>.
- For information on student support resources on campus, see <u>https://ctfe.gmu.edu/teaching/student-support-resources-on-campus</u>

For additional information on the College of Education and Human Development, please visit our website https://cehd.gmu.edu/students/