

**GEORGE MASON UNIVERSITY
COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT
GRADUATE SCHOOL OF EDUCATION
Learning Technologies in Schools**

**EDIT 781 001- Designing for Information Using
3 Credits, Fall 2016
Thursday 7:20-10:00 pm TH L028- Fairfax Campus**

Faculty

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Prerequisites/Corequisites

EDIT 780, Principles of School Based Design

University Catalog description

Explores ways in which PreK-12 teachers can design digital environments that connect learners' ability to search, sort, create, communicate, and synthesize information and information resources with learning activities. Emphasizes teachers' ability to design for digital citizenship and information use.

Course Overview

Not Applicable

Course Delivery Method

The nature of course delivery uses a blended delivery approach, weekly combining asynchronous online and face-to-face instruction. Blended learning is the thoughtful fusion of face-to-face and online learning experiences. Blended learning is not an addition that builds another layer of instruction. Rather, it represents a restructuring of course activities and assignments to enhance engagement and to extend access to a range of web-based opportunities. Blended learning emerges from an understanding of the relative strengths of face-to-face and online learning to provide learning activities consistent with course goals. Blended learning combines the properties and possibilities of both to go beyond the capabilities of each separately.

Learner Outcomes or Objectives

This course is designed to enable students to:

1. develop a comprehensive understanding of the information use as a digital learning goal;
2. develop a comprehensive understanding of the connection between information use and content learning goals;

3. develop a comprehensive understanding of design principles, processes, and patterns for promoting information use within the context of content learning goals;
4. develop comprehensive knowledge of technologies that afford PreK-12 learners' ability to develop information use within the context of content learning goals; and
5. design learning opportunities for PreK-12 learners at the intersection of effective design, technology affordances, and content that promote information use.

Professional Standards

Upon completion of this course, students will have met the following professional standards: The Designing Digital Learning in Schools (DDLs)-CERG certificate and 6 course core of the MED concentration (DDLs) is informed by the International Society for Technology in Education Standards for Teachers (ISTE Standards•T) (<http://www.iste.org/standards/standards-for-teachers>). For the purposes of evaluation of performance-based assignments and program assessment, the ISTE standards have been collapsed and restated to better reflect program goals. Thus, DDLs-CERG and DDLs concentration standards are:

- Standard 1: Content Knowledge and Reflective Practice - Student demonstrates reflective practice through thoughtful, comprehensive descriptions of their learning with clear connections to concept/theories studied, personal teaching beliefs, experiences, and learning goals, technology's role in supporting and extending learning, and the design of teaching and learning in classroom settings.
- Standard 2: Knowledge of Tools and Designing Instruction - Student demonstrates ability to use a variety of technology tools to produce products that reflect appropriate mechanics, principles of design, and appropriate technology affordances
- Standard 3: Connections to Practice – Designing Learning Opportunities - Student demonstrates understanding and ability to use a variety of technology resources integrated with classroom practice that includes an authentic problem, integration of instructional principles of design, connections with content learning, assessment of learning outcomes, and teacher reflection on implementation.

Required Texts

1. Johnson, C. (2012). *The information diet: A case for conscious consumption*. Beijing: O'Reilly Media.
2. Hobbs, R. (2010). *Copyright clarity: How fair use supports digital learning*. Thousand Oaks, CA: Corwin Press.
3. Rheingold, H. (2014). *Net smart: How to thrive online*. Cambridge, MA: The MIT Press.
4. Gardner, H. & Davis, K. (2014). *The App Generation: How Today's Youth Navigate Identity, Intimacy, and Imagination in a Digital World*, New Haven, CO: Yale University Press.
5. Selected articles and web resources.

Course Performance Evaluation

Students are expected to submit all assignments on time in the manner outlined by the instructor (e.g., Blackboard, Tk20, hard copy)

- **Assignments and Examinations**
 1. Designer's Blog (30 points) – Five times during the course, student will respond to a reflection prompt provided by the instructor entered around the student's developing understanding of the role of design as an instructional process bridging technology, content, and student learning. Access to the blogs will be provided for both the course instructor and for selected classmates to facilitate interaction through comments.
 2. Lesson Design Document (15 points) - Student will submit a design document detailing the design of a lesson appropriate for their teaching context. Rubric and format will be provided in class.
 3. Instructional WebQuest (25 points) – Student will submit a design document for the design of a WebQuest appropriate for their teaching context. Once approved, student will transition their design document to a web-based instructional WebQuest. (This PBA will be used as part of the accreditation data gathering process.)
- **Other Requirements**
 1. Participation is mandatory, as discussions, readings and activities are important parts of the course.
 2. Each student is expected to complete all readings and participate in all discussions, both face to face and online.
 3. Each student is expected to participate in and complete all projects.
 4. Students who must miss either online or face to face activities are responsible for notifying the instructor (preferably in advance) and for completing any revised assignments, readings, and activities.
 5. All assignments must be completed electronically. Assignments are to be submitted on the date due. Late assignments will not be accepted without making prior arrangements with the instructor.
- **Course Performance Evaluation Weighting**

Since this is a graduate level course, high quality work is expected on all assignments. Points for all graded assignments will be based on the scope, quality, and creativity of the assignments. All assignments are due on the date stipulated in the Schedule of Activities section below. Late assignments will not be accepted without making arrangements with the instructor.

Points will be assigned to all graded assignments using a rubric process. Both course participants and the course instructor will be involved in assessment of graded assignments. Prior to the due date for any assignment, the student will participate in the review and/or development of an assessment rubric. This rubric will provide course objectives and an elaboration of qualities and components associated with excellence in completion of the assignment. See rubric(s) below.

- **Grading Policies**

Requirements	Points
Course Participation ¹	30
Designer's Blog – 6 Entries– 5 points each	30
Instructional WebQuest – Design Document and web-based product	25
Lesson Design Document	15

Grade	Point Range
A	94-100
A-	90-93
B+	86-89
B	80-85
C	70-79
F	69-below

Professional Dispositions

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

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: <http://cehd.gmu.edu/values/>.

¹ Course participation is inclusive of both face to face class participation in all discussions and activities as well as the extensive activities and discussions which occur on the course Blackboard site as part of the blended learning format of the course.

GMU Policies and Resources for Students

Policies

- Students must adhere to the guidelines of the Mason Honor Code (see <http://oai.gmu.edu/the-mason-honor-code/>).
- 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://ods.gmu.edu/>).
- Students must follow the university policy stating that all sound emitting devices shall be silenced during class unless otherwise authorized by the instructor.

Campus Resources

- Support for submission of assignments to Tk20 should be directed to tk20help@gmu.edu or <https://cehd.gmu.edu/api/tk20>. Questions or concerns regarding use of Blackboard should be directed to <http://coursessupport.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/>).
- 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 Office of Student Support staff helps students negotiate life situations by connecting them with appropriate campus and off-campus resources. Students in need of these services may contact the office by phone (703-993-5376). Concerned students, faculty and staff may also make a referral to express concern for the safety or well-being of a Mason student or the community by going to <http://studentsupport.gmu.edu/>, and the OSS staff will follow up with the student.

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

Class Schedule

Please see attached Master schedule.

Note: Faculty reserves the right to alter the schedule as necessary, with notification to students.

Assessment Rubric(s)

	Exceeds Standard 25 points	Meets Standard 15 points	Fails to Meet Standard 5 points
Instructional WebQuest	Addresses creatively and comprehensively all components specified on WebQuest template, Implements web publication accurately and aesthetically	Addresses all components specified on WebQuest template, Implements web publication accurately with few errors	Addresses most components specified on WebQuest template, Difficulties evident in implementation of web publication

Fall Semester, 2016

Master Schedule EDIT 780 and 781
 (Also provided week by week on the Course Blackboard Site)

Week 1	9/1 – 9-7		Week 9	10/26 – 11/3
Week 2	9/8 – 9/15		Week 10	11/2 – 11/10
Week 3	9/14 – 9/22		Week 11	11/9 – 11/17
Week 4	9/21 – 9/29		Thanksgiving Break	
Week 5	9/28– 10/6		Week 12	11/16 – 12/1
Week 6	10/5– 10/13		Week 13	11/30 – 12/8
Week 7	10/12 – 10/20		Week 14	12/7 – 12/15
Week 8	10/19 – 10/27		Week 15	12/14 – 12/21

	Face to Face Sessions	Throughout the Week
Week 1	<p>WELCOME TO THE PROGRAM</p> <p>Overview of Syllabus/Class/ Program</p> <p>Meet Blackboard</p> <p>Evaluation rubrics and creating Learning Schedules</p> <p>All Summer in a Day</p> <p>Mini-lecture on planning vs design</p> <p>Examine examples of Design (F. L. Wright, Butchart Gardens, Constitution, MS and Apple Table)</p> <p>Definition of Design</p> <p>Subsets: Principles, Processes, Patterns, Stuff</p> <p>What's Your Job; Your Purpose; Why Does a Culture</p>	<ol style="list-style-type: none"> 1. Read - <i>The Saber-tooth curriculum</i>. 2. Visit and explore websites carefully. Make a list of what these organizations say are the important purposes of 21st century education with a few bullet points explaining each. Print your list and bring to class. 3. Identify three objects or systems in your world that are designed. Take a picture and then open a word processing document, merge or insert the pictures, and write a paragraph or two about each picture stating why you choose this and how it represents design. Print and bring to class.

	Need Schools	
Week 2	<p>PURPOSE OF EDUCATION – MEANS/END, PICKLE</p> <p>Happy Hour Burma Shaves (Powerpoint) Design Principle (PICKLE)</p> <p>Examining Technology Quotes – Consequences of Technology</p>	<ol style="list-style-type: none"> 1. Use Google to create a Blog – directions on Blackboard 2. Post journal entry about <i>The Sabertooth Curriculum</i> and the first design principle created in class. 3. Read the journal entries created by group mates. Add a comments – Links provided on Blackboard 4. Read <i>The Victorian internet</i>. 5. Watch episode 4 from the PBS series, <i>The Day the Universe Changed</i>.
Week 3	<p>TECHNOLOGY – DEFINITION, SOCIAL, COGNITIVE</p> <p>Share charts and Create generalization Share generalizations Pick a Generalization Learn about Infographics, Create Infographic, Share Infographic Design Principle</p> <p>Reflect on BB, Blog, PPT, books, Infographic, Word – How to Choose and Use</p>	<ol style="list-style-type: none"> 1. Post journal entry about <i>The Victoria Internet</i> and the second design principle created in class. 2. Read the journal entries created by group mates. Add a comments – Links provided on Blackboard 3. Begin reading - Vygotsky, L. S. (1978). <i>Mind in Society: The development of higher psychological processes</i>. Read the first half of the book before the next class. 4. Read the article posted on Blackboard - <i>Affordance analysis-matching learning tasks with learning technologies</i>.
Week 4	<p>AFFORDANCE – Choosing and Using</p> <p>Discuss Readings Kahoot activity Ozobot Activity Analysis of affordances Design Principle</p> <p>Mini-lecture on behaviorism</p>	<ol style="list-style-type: none"> 1. Post journal entry about affordances and the third design principle created in class. 2. Read the journal entries created by group mates. Add comments – Links provided on Blackboard 3. Finish reading <i>Mind in Society: The development of higher psychological processes</i>. 4. Pick your favorite educational technology. Write an affordance analysis, print and bring to class
Week 5	<p>LEARNING – MEANINGFUL</p> <p>Share Favorite Tool Analysis</p>	<ol style="list-style-type: none"> 1. Post journal entry about <i>Mind in Society</i> and the fourth design principle created in class. 2. Read the journal entries created by group mates. Add

	<p>Construct Vygotsky Vocab test, Poetry, Map of Vygotsky Mind Design Principle</p> <p>Define Information, Facts, Knowledge – What are the SOLs really?</p>	<p>comments – Links provided on Blackboard</p> <ol style="list-style-type: none"> 3. Read <i>Situated Cognition and the Culture of Learning</i>. Link to pdf is provided. 4. Read selections <i>Teaching with Technology, 2 edition</i>. Link to pdf is provided. 5. Identify the important concepts from the readings and create Kahoot multiple choice quiz
Week 6	<p>KNOWLEDGE – SITUATED</p> <p>Discuss Readings, Play and share Kahoot tests Analyze SOLs for S, P, D The ABCS of Design Don’s Trip to Africa The Perfect Presidential Candidate Discuss activities Design Principle</p> <p>Teacher as Designer Mini-lecture – I Know More About You Than You Think</p>	<ol style="list-style-type: none"> 1. Post journal entry about <i>Situated Cognition and the Culture of Learning</i> and the fifth design principle created in class. 2. Read the journal entries created by group mates. Add comments – Links provided on Blackboard 3. Read <i>Professionalism and teachers as designers</i>. Link to pdf is provided. 4. Read <i>The creative spirit of design</i>. Link to pdf is provided. 5. Open a word processing document. Reflect on teaching practice and how design is or is not a part of that practice. Print and bring to class.
Week 7	<p>DESIGN – TEACHERS AS DESIGNERS</p> <p>Share design examples Classroom Mystery USDA Nutrition – Menu for Dean Discuss activities for principles Design Principle</p>	<ol style="list-style-type: none"> 1. Post journal entry about teachers as designers and the sixth design principle created in class. 2. Read the journal entries created by group mates. Add comments – Links provided on Blackboard 3. Design a lesson or a collection of lessons for any content you choose. Download and use the Lesson Design Document.
Week 8	<p>DESIGN – STUDENTS AS DESIGNERS</p> <p>Discuss design document (1) Make a video – Design in Education – DDLS Infomercial Similarity with Infographic Design Principle</p>	<ol style="list-style-type: none"> 1. Post journal entry about students as designers and the seventh design principle created in class. 2. Read the journal entries created by group mates. Add comments – Links provided on Blackboard. 3. Design a lesson or a collection of lessons for any content you choose. Use the Lesson Design Document provided on Blackboard site.

	Introduce GMU Library	<ol style="list-style-type: none"> 4. Complete a Scavenger Hunt and email Dawn (dhathawa@gmu.edu) when you find everything. 5. Read <i>The Information Diet</i>.
Week 9	<p>SORTING AND JUDGING</p> <p>Discuss design document (1) Discussion of Info Diet, Backpack Halo Effect – Evidence-Based Persuasion – Position Paper</p>	<ol style="list-style-type: none"> 1. Post journal entry about <i>The Information Diet</i> and its implications for your practice and student learning. 2. Read the journal entries created by group mates. Add comments – Links provided on Blackboard. 3. Write a summary about your evaluations. Bring your evaluation summary to class. 4. For a content that you teach, choose 3 websites that you would never use and 4 websites that you would choose as Web-based resources. Present your selections and supporting rationale on a Google site page.
Week 10	<p>SEARCHING</p> <p>Share site reflections Intro presentation on searching: map out information, needs and structure search techniques Decades Popplet map</p> <p>Intro to Portfolios and Google Sites</p>	<ol style="list-style-type: none"> 1. Complete Biteslide section on the Decades. 2. Visit web resources and articles provided about search strategies and teaching search strategies. Create a list of strategies that need to be taught to your age group. 3. Design an idea for embedding teaching and student learning about some aspect of searching in a content requirement for your students. 4. Read <i>Copyright clarity: How fair use supports digital learning</i>. 5 5. Complete your portfolio design document and email to Dawn (dhathaw@gmu.edu).
Week 11	<p>INFORMATION ETHICS – COPYRIGHT</p> <p>Discuss Copyright Clarity Parent Brochure – copyright policy and what students will be learning Glogster – Popstar Poetry Posters</p>	<ol style="list-style-type: none"> 1. Post journal entry about <i>Copyright Clarity</i> and its implications for your practice and student learning. 2. Read the journal entries created by group mates. Add comments – Links provided on Blackboard. 3. Read <i>Net smart: How to thrive online</i>. As you read, identify important quotes from <i>Net Smart</i> and bring to class. 4. Following are links posted on Blackboard to expand on <i>Copyright Clarity</i>. Test your knowledge about copyright and fair use infringement by taking this online quiz. 5. Learn about Pecha Kucha as a presentation strategy. Create a

		<p>Pecha Kucha that <i>introduces</i> ethics and copyright to your students. Save your project to a portable storage device and bring to class.</p> <p>7. Work on portfolio</p>
Week 12	<p>CREATING AND COMMUNICATING</p> <p>Discuss and do Top Ten NetSmart Educators Consider using 10 quotes</p> <p>Use census database to help the Sec of State with visiting Education Ministers – audio file</p>	<ol style="list-style-type: none"> 1. Post journal entry about <i>NetSmart</i> and implications for your practice and student learning. 2. Read the journal entries created by group mates. Add comments – Links provided on Blackboard. 3. Read <i>The App Generation: How today's youth navigate identity, intimacy, and imagination in a digital world</i>. 4. Analyze the two scenarios posted on Blackboard. Post your analysis and respond to group members' posts. 5. Think again about your lesson design from Week 10 and expand to include creating and communicating. Print and bring to class. 6. Use links posted on Blackboard to complete a downloaded brochure on WebQuests. 7. Work on portfolio.
Week 13	<p>INFORMATION TOOL AFFORDANCES</p> <p>Discuss <i>The App Generation</i></p> <p>Instructor's Choice Surprise</p>	<p>Post journal entry about <i>The App Generation</i>, information tools and their affordances, and the implications for your practice and for student learning.</p> <ol style="list-style-type: none"> 2. Read the journal entries created by group mates. Add comments – Links provided on Blackboard. 3. Complete Steps 1 thru 3 (research activities) of the Process for Viajamos WebQuest. Bring your research to class. 4. Create a WebQuest design document and bring to class. 5. Complete the "Choose a Tool Affordance" worksheet posted on Blackboard. 6. Work on design document that integrates SSCCS 7. Work on portfolio.
Week 14	<p>PUTTING IT ALL TOGETHER</p> <p>Webquest about Webquests</p>	<ol style="list-style-type: none"> 1. Work on Design Document for SSCCS. Email to Dawn Hathaway (dhathawa@gmu.edu). 2. Finish WebQuest in Google Sites. Email link to Dawn

	Do a WebQuest	Hathaway (dhathawa@gmu.edu). 3. Work on Portfolio. Email to Priscilla (pnorton@gmu.edu) and Dawn Hathaway (dhathawa@gmu.edu).
Week 15	WEBQUEST DESIGN PROCESSES Approval of Design Document Production (Google Sites)	HAVE A GREAT WINTER BREAK!