Course Description

The purpose of this course is to explore the uses of instructional media. The primary foci are on developing theoretical and practical tools to evaluate, adapt, and effectively integrate technology in the classroom. The class will be taught from the point of view of the teacher--what the teacher needs to know and do to be able to teach effectively with technology. Participants in this course will:

• gain an appreciation for instructional design as it applies to instructional media
• become aware of educational technologies that enhance the learning experience
• incorporate storytelling in the teaching and learning process
• integrate multimedia technology into the curriculum
• review and critique educational technologies for use in the classroom
• evaluate and use the Internet and other electronic resources to facilitate learning
• understand the importance of meeting district, state, and/or national technology standards for students, teachers, or administrators
• organize and present information related to the use of educational technologies in the student's own discipline or area of responsibility
• continue to develop as a reflective and collaborative professional

Course Objectives

An important aim of this course is for students to be empowered with computer-based technology. Students will gain a solid introduction and the motivation to use technology for personal and professional purposes. This class is designed to provide a positive beginning to a lifelong learning process. Upon completion of this course, students will be able to:

1. incorporate storytelling and multimedia in the curriculum;
2. analyze and synthesize articles pertaining to teaching with technology;
3. analyze some social and ethical issues related to the increased use of technology in education and society;
4. demonstrate an understanding of and an ability to use word processing, presentation, spreadsheet, and web authoring applications; as well as other multimedia to meet a variety of educational and professional needs;
5. create standards-based, technology-rich lessons;
6. demonstrate an understanding of and an ability to use email to communicate electronically with others;
7. demonstrate good information management habits such as backing up files and organizing files in a logical fashion;
8. locate and evaluate resources from the Internet and other electronic databases for use in teaching and learning;
9. demonstrate an understanding of and an ability to use digital cameras, scanners, digital image software, and digital audio software to enhance learning;
10. reflect upon and modify lessons appropriately;
11. deal with personal frustration inherent in the use of technology; and
12. Advocate for the use of technology in ways that transform teaching and learning practices.

Readings/Standards


International Society for Technology in Education: NETS for Teachers 2008

Montana Technology Content Standards – scroll down the chart for Technology
http://opi.mt.gov/Curriculum/#gpm1_7

Themes of a Learning Community

It is part of the human condition that we simultaneously strive to be self-sufficient individuals and respected members of larger social communities. Although we value personal autonomy, we are ultimately social creatures who need each other not only for companionship but also to bring meaning and purpose to our lives. It is through our connections with others, our shared decision-making, our common purpose, and our support for each other’s growth that we satisfy our needs as humans.

A learning community is a special kind of community that is sometimes created in the classroom or in an educational institution as a whole. It comes into being when everyone involved in the learning process shares a common purpose and commitment to learning. A growing body of research now supports the view that learning occurs best in communities. Because the concept of learning community has been used in many different contexts, it must have a specific meaning before it can be of value as a unifying theme. For our purposes, then, a learning community is one characterized by the following elements:

• Integration of Ideas
  Members of a learning community look beyond the traditionally segmented curriculum and think about the interrelationships among ideas. They work with a variety of fields of study and search for unifying themes that cross disciplinary lines. There is an emphasis on ideas that either explain realities or help deal with actual problems.

• Cooperative Endeavors
  In a learning community knowing and learning are viewed as communal acts, and members are encouraged to assist each other to learn and grow. There is a commitment to engage all learners cognitively, emotionally, and psychologically in constructing knowledge that is active and personally meaningful. In the process members create a cohesiveness that encourages a sense of personal responsibility and commitment to their group and its goals.

• Respect for Diversity and Individual Worth
  A learning community embraces diversity with respect to ideas, abilities, viewpoints, ages, learning styles, and cultural backgrounds. Diversity is valued and the inherent worth of each individual is respected. The ethics of caring and mutual respect are viewed as essential for creating supportive learning environments that enhance each member’s self-esteem and foster risk-taking, creative conflict, and excellence.
When people gather purposefully to transmit knowledge and share ideas in an institution such as a university, a synergy is created that can result in learning of the highest order. Teachers and learners assume many roles, often shared, often overlapping, always interdependent. They respect each other in those roles. The community of learners is aware of the uniqueness of each other's background and values this uniqueness as it contributes to the diversity of the whole. Ideas, too, are valued for their diversity, as well as for their correspondence to current teachings and opinions. People delight in their opportunities to pursue and construct knowledge actively and cooperatively, regardless of age, academic status, cultural heritage, or interest. They discover together the connections among discrete subject areas and among people, ultimately coming to understand and value the importance of lifelong learning for full citizenship in a global society. (C&I Graduate Handbook, 2010, pp. 1-2)

**Attendance/Participation**

Students are expected to attend and participate in all course meetings and activities. The nature of this course, although online, depends on the active participation of all members and will provide ultimate benefit to everyone who is engaged in meaningful discussions and the sharing of learning through projects and activities.

**Assignments**

**Participation/Discussion Forums** (Due in even numbered weeks – 3 pts./week - 21 points))

Every other week, we’ll each contribute to a discussion forum on readings and reflections from the course.

**Blog Part 1** (Due Week #1, 5 pts.)

Create a blog for sharing your assignments and projects for this course. Use blogspot.com. Enter your first blog. It should outline what you are hoping to learn in this course, your technology expertise level (in your opinion), what grade you teach or hope to teach, how long you've been teaching or how long until you graduate, and something interesting about you that we might not already know. Additionally, consider how this could blog tool could serve as an electronic portfolio, especially if you are in the licensure program and must submit a portfolio during your student teaching semester.

**Google Forms** (Due Week #2, 3 pts.)

Complete the survey in the class blog. Create your own survey for each of us to complete. Reflect on your potential use of spreadsheets and easy data collection from community members as well as students.

**Personal Tale 1** (Due Week #3, 5 pts.)

Create a two to three-minute digital video personal tale. Upload to your blog to share with all.

**YouTube Link on Blog** (Due Week #4, 3 pts.)

Surf the YouTube videos and select one of interest to you to embed on our blog. There are many related to technology, as well as appropriate other areas.

**Google Earth Tour** (Due Week #5/6, 5 pts.)

Prepare a 3-minute tour on Google Earth that starts at your school and travels the world to at least two other places. Use street view and 3-D buildings layers and narrate your tour. Post to your blog.

**Digital Whiteboard Lesson** (Due Week #7, 5 pts.)

Prepare a lesson that uses a Smartboard, Interwrite Board, or any of the digital whiteboards available and video record your 3-minute lesson using the board. Post to your blog. We have Smartboards and Interwrite boards if you do not have access to one (see me for a time you could video record your short lesson at the digital whiteboard).
Podcast (Due Week #9, 5 pts.)
Prepare a 30-second to 1-minute podcast, audio or video, to share a public service type announcement. Post to your blog.

Presentation Software (Due Week #10, 5 pts.)
Create a presentation using Google Presentation, Prezi, or any presentation software application that you have never used before (or need more practice on). The topic should be on a technology application, issue, or device of your choice, again, something you are interested in learning more about. Post to your blog.

Personal Tale 2 with Rubric (Due Week #12, 10 pts.)
Use the discussion from week #4 to create your own rubric (with points that tally 10) to assess your second personal tale in which you again tell a 3-minute maximum story using multimedia appropriately. Complete the rubric on your own tale. Email me the filled in rubric, but post the blank rubric to your blog and post the new tale to the blog as well.

WebQuest (Due Week #14, 10 pts.)
Create a WebQuest to assist the learning of content, your choice. More information will be provided on this assignment by Spring Break.

Blog Part 2 (Due Week #15, 8 pts.)
Polish your blog and add a final blog post about your learning in the course.

“Technofied” Lesson (Due Final Exam Week, 15 pts.)
This is the culminating project for the course. Project rubric is appended to the last page of this syllabus.

Dynamic Assignment Summary

<table>
<thead>
<tr>
<th>Description/Assignment</th>
<th>Points</th>
<th>Date Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation/Discussion Forums</td>
<td>21</td>
<td>Even Weeks</td>
</tr>
<tr>
<td>Blog Part 1</td>
<td>5</td>
<td>1/29/12</td>
</tr>
<tr>
<td>Google Forms</td>
<td>3</td>
<td>2/5/12</td>
</tr>
<tr>
<td>Personal Tale I</td>
<td>5</td>
<td>2/12/12</td>
</tr>
<tr>
<td>YouTube link on Blog</td>
<td>3</td>
<td>2/19/12</td>
</tr>
<tr>
<td>Google Earth Tour</td>
<td>5</td>
<td>2/29/12</td>
</tr>
<tr>
<td>Digital Whiteboard Lesson</td>
<td>5</td>
<td>3/11/12</td>
</tr>
<tr>
<td>Podcast</td>
<td>5</td>
<td>3/25/12</td>
</tr>
<tr>
<td>Presentations Software</td>
<td>5</td>
<td>3/30/12</td>
</tr>
<tr>
<td>Personal Tale 2 with Rubric</td>
<td>10</td>
<td>4/15/12</td>
</tr>
<tr>
<td>WebQuest</td>
<td>10</td>
<td>4/29/12</td>
</tr>
<tr>
<td>Blog Part 2</td>
<td>8</td>
<td>5/6/12</td>
</tr>
<tr>
<td>“Technofied” Lesson</td>
<td>15</td>
<td>5/11/12</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Evaluation

A  90-100%
B  80-89%
C  70-79%
D  60-69%
F  <60%
Expectations: The University of Montana Student Conduct Code

All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University.

All students need to be familiar wit the Student Conduct Code. The Code is available for review online at http://life.umt.edu/ypsa/student_conduct.php

Please be aware of the expectations for academic student conduct. If you have any questions related to this code, please ask.

Accommodations

Please let me know if you need accommodations for learning in my classroom or through Disability Services for Students (DSS). I am happy to help facilitate these needs.
Technofy a Traditional Lesson

This is the culminating major assignment of our course (cf. Horejsi, 2010). Plan to submit no later than 5/11/12. Your lesson should be posted to your blog as a text file that contains each of the first five major components to this assignment, and you should use Roman Numerals to indicate that you have addressed each component.

I. First, consider the content/concept for a lesson that you would like to teach. For elementary majors/teachers, this could be a mathematics lesson, a social studies lesson, a science lesson, a language arts/reading lesson, etc. For secondary majors/teachers, choose one from your discipline, perhaps one that you remember from your secondary school days or one you will be teaching yet this semester. In all cases however, the lesson should be what we consider “traditional” meaning without very much technology integration. Then, either write your own traditional lesson plan, or preferably, search the Internet for a traditional lesson plan aligned with your concept/content, and make a digital copy of that lesson plan for this packet including a full citation of where you obtained the lesson.

II. Second, integrate appropriate technology in this traditional lesson to allow learners an opportunity to learn the concept/content in a better way, not just fluff because of the intrigue of technology, but actually a better lesson for student learning. Think outside the box. How do I really best communicate this to my students? Does technology allow you to actually have more time to teach students as the technology could be used to collect, analyze, and present some data? In this integration process, the entire structure of the lesson could change, but the overall goals and objectives for learning a concept would remain. To share this second component, use two columns with the original lesson in the first column and the new lesson in the second column with any changes to the lesson in a different color font, paired where appropriate. In MS Word, to most easily share these two columns, use a two-column table.

III. Third, the new entire technofied lesson with learning outcomes specified in relation to the technology infusion. This time, no colored font is needed, just the complete lesson.

IV. Fourth, write a 500-word essay that explains your revision and addresses why and how the change from the traditional lesson improves student learning. Be very specific and if you feel you are stating the obvious, then you are clearly communicating this component of the assignment.

V. Fifth, prepare a maximum of a five-minute presentation to share with your classmates via your blog. The time limit on your presentation will not allow you to teach the entire lesson, only to share at least two of your major changes and address the thrust of your essay with the class. As you prepare this presentation, consider the best way to communicate using multimedia appropriately. It could be using a Smartboard, a video, an MS PowerPoint presentation, a Prezi, a teaching guide, etc. Remember to use multimedia that impacts the observer through multiple senses. These first five Roman numerals need to be posted to your blog.

VI. Finally, complete the attached rubric to assess your own learning and submit electronically in one MS Word document using the Roman numerals for each part (however, your presentation may be a separate file and in that case, state the name of the file including the file extension in Roman numeral V) and submit via the Moodle to the grade book.
## Technofy a Traditional Lesson Rubric

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Advanced (3 pts.)</th>
<th>Proficient (2 pts.)</th>
<th>Limited (1 pt.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>How is the application of the technology within the lesson defended as appropriate, useful, and grounded in current pedagogy?</td>
<td>All aspects defended explicitly and with detail sufficient to understand</td>
<td>One aspect not specifically defended, but others are in sufficient detail</td>
<td>Multiple aspects not specifically defended (missing) and low level of relevance</td>
</tr>
<tr>
<td>How does the technology reflect a current or modern expression of the use of instructional technology?</td>
<td>Uses multiple 21st Century technology skills</td>
<td>Uses at least two 21st Century technology skills</td>
<td>Points to 21st Century skills, but does not infuse them</td>
</tr>
<tr>
<td>How does the application of the technology create learning advantages that are impossible with traditional techniques?</td>
<td>Identified a novel, creative approach for teaching a concept not possible without technology</td>
<td>Explains the value of this approach over traditional approaches</td>
<td>Learning negatively impacted by technology</td>
</tr>
<tr>
<td>How does the use of the technology enhance, or increase, the efficiency of the lesson?</td>
<td>Explanation of enhanced or increased efficiency well-documented with specifics</td>
<td>Efficiency only developing in documented lesson/narrative/presentation</td>
<td>Efficiency of the technology in the lesson not established in the lesson/narrative/presentation</td>
</tr>
<tr>
<td>How does the use of the technology enhance, or increase, the effectiveness of the lesson?</td>
<td>Effectiveness of lesson demonstrated through increased student outcomes as documented in lesson/narrative/presentation</td>
<td>Effectiveness communicated through narrative/presentation</td>
<td>Effectiveness of the technology in the lesson not established in lesson/narrative/presentation</td>
</tr>
<tr>
<td>How does the application of the technology motivate the students?</td>
<td>Motivation for learning demonstrated through increased student engagement as cited in literature</td>
<td>Connection to increased motivation discussed with citations</td>
<td>Lacking understandable explanation of increased student motivation – no citations</td>
</tr>
<tr>
<td>How is the lesson referenced?</td>
<td>Identified different sources to support written essay. Cited using APA.</td>
<td>Identifed sources. APA was not done well.</td>
<td>Lacked appropriate sources and failed to cite using APA.</td>
</tr>
<tr>
<td>How does the presentation use appropriate technology and communicate the overall objectives of the lesson?</td>
<td>Used ppt, Prezi, Keynote, Smartboard, video, other (circle appropriately) to seamlessly communicate in sufficiently readable font or audible narration, integrated background, and appropriately documented references.</td>
<td>Used ppt, Prezi, Keynote, Smartboard, video, other (circle appropriately) to satisfactorily communicate in consistent font or audible narration, background of satisfactory non-interference with message, and references cited correctly for the most part.</td>
<td>Presentation lacking appropriate digital application or uniformity in fonts or conflicting color scheme with background/fonts or no references correctly cited.</td>
</tr>
</tbody>
</table>

**Total Points** (24 possible) * 15/24 =

(enter the number of points scored above, then multiple by 15/24 to obtain the number of points earned for this assignment)

**Comments:**