

## Professional Development Course Syllabus

Course Number: ED 550.1122

Course Title: **21st Century Teaching and Learning**

Instructor: Amy Michalowski Semester Credit(s): 1 Total Cost for Credit: **\$80.00**

**Online registrations must be submitted within one week of the start date ([www.nnu.edu/cereg](http://www.nnu.edu/cereg))**

### 1. Educational Goals for the Course:

- 21st Century Teaching and Learning explores the technology literacy and Information and Communications Technology (ICT) skills needed for effective 21st century teaching and learning.
- Teachers will gain a better understanding of the need for web-based instruction in classroom practice, as they become students in an online course.

### 2. Instructional Learning Objectives:

- Use the Internet in instruction efficiently and effectively to develop student-centered, project-based learning that supports the development of 21st century skills;
- Create new lessons that incorporate technology applications into their core curriculum;
- Transform curriculum with technology-based real-world learning for your students;
- Design content that enhances learning and fosters students' engagement with technology;
- Integrate technology and core content to teach problem solving, analytical skills, and techniques for presentation;
- Cite Internet sources and online safety; and
- Develop assessment strategies.

### 3. Course Requirements: Each week, students are required to read information on 21st century literacies, post their thoughts on a subject, and research ways to design lessons that integrate digital literacies. Participants are required to log in to class and submit written work at least four times a week, and to complete all assignments by their due dates.

#### **Participants will:**

##### **In Class:**

- Complete all course assignments as listed on the VHS course site. Progress will be monitored by VHS instructors.
- Discussion:  
Students are given open-ended questions related to the course material and are asked to post thoughtful responses to the starter questions and to their classmates' comments. The course instructor facilitates the discussion and encourages students to interact with one another and to make deeper connections between the material and the course objectives.

##### **Out of Class:**

##### *Problem-Based Learning Project: Teachers as Learners*

Students are expected to produce a final presentation to answer an essential question. Students use a problem-solving approach that integrates information searches, research skills and technology tools in a systematic process that allows students to find, use, apply and evaluate information required to complete a task. Students learn powerful and effective information and technology problem-solving strategies.

##### *Reading*

Students are asked to read material provided on the web. They are expected to engage in discussion with their classmates and to make substantial connections between the reading material and the course objectives.

### 4. Dates, Times and Location of Proposed Course:

*(1 Semester Credit Equals 15 Professor Contact Hours plus an additional 30 Hours Outside Work)*

Online course to meet time requirements as outlined above between April 15 and May 27, 2009.

## Center for Professional Development

623 Holly Street - Nampa, Idaho 83686 ~ 208-467-8439 ~ 800-349-6938 ~ Fax 208-467-8426 ~ [cscoordinator@nnu.edu](mailto:cscoordinator@nnu.edu) ~ [www.nnu.edu/continuingstudiesed](http://www.nnu.edu/continuingstudiesed)

## Professional Development

5. **Due Date for Completion of Course Requirements:** May 27, 2009

6. **Learning Resources and Required Text:** VHS Course *21st Century Teaching and Learning*

**Week 1: What are 21st Century Skills and Why do They Matter?**

- Learning for the 21st Century <[http://www.21stcenturyskills.org/images/stories/otherdocs/p21up\\_Report.pdf](http://www.21stcenturyskills.org/images/stories/otherdocs/p21up_Report.pdf)>
- Standards for Technology Supported Learning Environments  
<<http://www.iste.org/Template.cfm?Section=NETS&Template=/ContentManagement/ContentDisplay.cfm&ContentID=4963>>
- NETS for Students <[http://cnets.iste.org/students/s\\_stands.html](http://cnets.iste.org/students/s_stands.html)>
- NETS for Teachers <[http://cnets.iste.org/teachers/t\\_stands.html](http://cnets.iste.org/teachers/t_stands.html)>

**Week 2: Designing Content that Enhances 21st Century Literacy**

- Learning and Teaching Information Technology--Computer Skills in Context.  
<<http://searcheric.org/digests/ed465377.html>>
- Inquiry-based learning <<http://www.thirteen.org/edonline/concept2class/inquiry/index.html>>
- Resource-based learning <<http://library.queensu.ca/inforef/tutorials/rbl/rblintro.htm>>
- Problem-based learning <<http://www.imsa.edu/programs/pbln/tutorials/>>
- Project based learning <[http://www.edutopia.org/php/article.php?id=Art\\_1723](http://www.edutopia.org/php/article.php?id=Art_1723)>
- Taskonomy: A Taxonomy of Tasks <<http://edweb.sdsu.edu/webquest/taskonomy.html>>
- Finding Powerful Keywords <<http://21cif.imsa.edu/tutorials/micro/mm/keywords>>
- Brainstorming for Keywords <<http://library1.utb.edu/starting/brainstorming.htm>>
- Essential Questions <[http://www.myprojectpages.com/support/mypp\\_essential\\_questions.pdf](http://www.myprojectpages.com/support/mypp_essential_questions.pdf)>
- What is a Query?  
<<http://21cif.imsa.edu/tutorials/micro/mm/query?603>>
- What are Synonyms? <<http://21cif.imsa.edu/tutorials/micro/mm/synonyms/>>
- What Are Hyponyms, and Hypernyms? <<http://21cif.imsa.edu/tutorials/micro/mm/hypernyms/>>
- Search Indexes <<http://21cif.imsa.edu/tutorials/micro/mm/subjectindexes/>>
- Search Engines <<http://www.sc.edu/beaufort/library/pages/bones/lesson1.shtml>>
- Metasearch Engines <<http://www.sc.edu/beaufort/library/pages/bones/lesson2.shtml>>
- Subject Directories <<http://www.sc.edu/beaufort/library/pages/bones/lesson3.shtml>>
- What Is The Invisible Web? How Can You Search It? Why Would You Want To?  
<<http://21cif.imsa.edu/tutorials/micro/mm/invisible/>>
- What Is The Nearly Invisible Web Or Opaque Web? How Can I Search It?  
<<http://21cif.imsa.edu/tutorials/micro/mm/opaque>>
- Information Literacy: Search Strategies: Choose the Best Search for Your Information Need  
<<http://www.noodletools.com/debbie/literacies/information/5locate/adviceengine.html>>
- NoodleQuest: Search Strategy Wizard <<http://www.noodletools.com/noodlequest/>>
- Creating a Search Strategy <<http://www.sc.edu/beaufort/library/pages/bones/lesson6.shtml>>
- Search Tools  
<<http://mciu.org/~spjvweb/searchtip.html>>
- Information Fluency Tips <[http://21cif.imsa.edu/resources/tips/locate\\_tips](http://21cif.imsa.edu/resources/tips/locate_tips)>

**Week 3: Using the Internet Effectively - Exposing the Information**

- College Students Fall Short in Demonstrating the ICT Literacy Skills Necessary for Success in College and the Workplace  
<<http://www.ets.org/portal/site/ets/menuitem.c988ba0e5dd572bada20bc47c3921509/?vgnextoid=340051e5122ee010VgnVCM10000022f95190RCRD&vgnnextchannel=d89d1eed91059010VgnVCM10000022f95190RCRD>>
- Ensuring the Net Generation Is Net Savvy  
<<http://www.educause.edu/ir/library/pdf/ELI3006.pdf>>

## Professional Development

- Getting Past Google: Perspectives on Information Literacy from the Millennial Mind  
<<http://www.educause.edu/ir/library/pdf/ELI3007.pdf>>
- ABCs of Web Site Evaluation  
<<http://kathyschrock.com/abceval/index.htm>>
- Criteria for Evaluating Internet Resources <<http://www.library.ubc.ca/home/evaluating/>>
- Evaluating Web Pages: Techniques to Apply & Questions to Ask:  
<<http://www.lib.berkeley.edu/TeachingLib/Guides/Internet/Evaluate.html>>
- Critical Evaluation of Resources on the Internet: <<http://www.library.ualberta.ca/guides/criticalevaluation/index.cfm>>
- Evaluating Internet-based Information: A Goals-based Approach <<http://landmark-project.com/evaluation/index.html>>

### **Week 4: Employing the Information with Technology**

- Net Gen Learners: What Are Their Expectations? <<http://www.educause.edu/ir/library/pdf/SAC06005.pdf>>
- Is It Age or IT: First Steps Toward Understanding the Net Generation  
<<http://www.educause.edu/IsItAgeorIT:FirstStepsTowardUnderstandingtheNetGeneration/6058>>
- Technology and Learning Expectations of the Net Generation  
<<http://www.educause.edu/TechnologyandLearningExpectationsoftheNetGeneration/6056>>
- The Digital Disconnect The Widening Gap Between Internet Savvy Students and their Schools.  
<[http://www.pewinternet.org/pdfs/PIP\\_Schools\\_Internet\\_Report.pdf](http://www.pewinternet.org/pdfs/PIP_Schools_Internet_Report.pdf)>
- Listening to Student Voices -- On Technology  
<[http://www.educationevolving.org/studentvoices/pdf/tech\\_savy\\_students.pdf](http://www.educationevolving.org/studentvoices/pdf/tech_savy_students.pdf)>
- Gathering and Organizing Information <<http://www.oslis.k12.or.us/secondary/index.php?page=gatherOrganize>>
- Graphic Organizers <<http://www.teachervision.fen.com/graphic-organizers/printable/6293.html>>
- Graphic Organizers <<http://www.ncrel.org/sdrs/areas/issues/students/learning/lr1grorg.htm>>
- Graphic Organizers <<http://www.eduplace.com/graphicorganizer/index.html>>
- Note-Making <<http://www.englishcompanion.com/Tools/notemaking.html>>

### **Week 5: Expressing Information with Technology**

- Incorporate Text into Presentations <<http://21cif.imsa.edu/tutorials/micro/mm/text/>>
- Incorporate Images into Presentations <<http://21cif.imsa.edu/tutorials/micro/mm/incimages/>>
- Create and Communicate: Product List  
<<http://www.iowa-city.k12.ia.us/Library/Curriculum/InfoLit/EndProdList.htm>>
- Educational Uses of Digital Storytelling  
<<http://www.coe.uh.edu/digital-storytelling/introduction.htm>>
- E-scrapbooking  
<<http://escrapbooking.com/>>
- Virtual Field Trips <<http://eduscapes.com/sessions/virtual/>>
- Stellar Classroom Presentations: Promoting Active Thinking, Interaction, & Meaningful Learning  
<<http://eduscapes.com/sessions/stellar/>>
- Online Writing Lab  
<<http://owl.english.purdue.edu/handouts/index.html>>
- Noodle Tools  
<<http://www.noodletools.com/>>
- Citation Machine  
<<http://citationmachine.net/>>
- East Bib  
<<http://www.easybib.com/>>

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- Ottobib.com  
<<http://ottobib.com/>>
- Build Ref  
<<http://www.buildref.com/>>
- Teacher Helpers: Assessment and Rubric Information <<http://school.discovery.com/schrockguide/assess.html/>>
- The Staff Room  
<<http://www.harding.edu/USER/dlee/WWW/webquest/RUBRICBUILDING.HTM>>
- Problem Based Learning Checklist <<http://pblchecklist.4teachers.org/>>
- Rubistar  
<<http://rubistar.4teachers.org/index.php>>

### ***Week 6: Ethical Use of the Internet***

- Copyright and Fair Use Guidelines for Teachers  
<[http://i.cmpnet.com/techlearning/pdf/db\\_area/archives/TL/2002/10/copyright\\_chart.pdf](http://i.cmpnet.com/techlearning/pdf/db_area/archives/TL/2002/10/copyright_chart.pdf)>
- The Copyright Quiz <[http://www.techlearning.com/db\\_area/archives/TL/2002/10/copyright\\_quiz.php](http://www.techlearning.com/db_area/archives/TL/2002/10/copyright_quiz.php)>
- Copyright Clearance Center  
<<http://www.copyright.com/>>
- Copyright Crash Course <<http://www.utsystem.edu/OGC/intellectualProperty/cprtindx.htm>>
- Acceptable Use Policies: A Handbook <<http://www.pen.k12.va.us/VDOE/Technology/AUP/home.shtml>>
- Internet Safety <[http://www.kidshealth.org/parent/positive/family/net\\_safety.html](http://www.kidshealth.org/parent/positive/family/net_safety.html)>
- i-Safe  
<<http://isafe.org/>>
- Net Smartz Workshop  
<<http://www.netsmartz.org/>>
- Deterring and Detecting Plagiarism  
<<http://www.lib.iastate.edu/commons/resources/facultyguides/plagiarism/detect.html>>
- Teaching Students to Avoid Plagiarism <<http://www.siu.edu/departments/cac/handouts/Plagiarism/Teaching Students How to Avoid Plagiarism/Teaching Students To Avoid Plagiarism.pdf>>
- Internet Plagiarism: A Teacher's Combat Guide <<http://www.citejournal.org/vol1/iss4/currentpractice/article2.htm>>
- Teachers Aim To Curb Online Cheating <<http://www.nbc4.com/education/6791215/detail.html>>
- The Importance of Citing References  
<<http://www.teach-nology.com/tutorials/teaching/citing/help/>>

## **7. Evaluation Procedure: Graded**