- Authorization To Offer Non-Degree Extension Credit Course Through Extended Studies -

1. Desired Term: Spring 2008

2a. Course abbreviation and Number: EDST E1017

2b. Abbreviated Title: (No more than 25 characters, including spaces)
Introduction to Online Learning

3. Type of Instruction: Lecture

4. Number of Units: 3

5. Billing Units: 0 ($0)

6. Allowed Student Levels: UG X CR X EE X (Default is to check all three levels)

7. Grading Method: 
- Normal (N) (Default is Letter Grade)
- Normal Plus Report-in-Progress (NP) (As for Normal; also allows Report-in-Progress)
- Credit/No Credit Only (C)
- Credit/No Credit or Report-in-Progress Only (CP)

8. Mode of Instruction:
(See pages 17-23 at http://www.calstate.edu/cin/data-elem-
dic/APDB-Transaction-DED-SectionY.pdf for definitions of
the Course Classification Numbers)

<table>
<thead>
<tr>
<th>Type of Instruction</th>
<th>Number of Credit Units</th>
<th>Instructional Mode (Course Classification Number)</th>
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<tbody>
<tr>
<td>Lecture</td>
<td>3</td>
<td>C-02</td>
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<td>Activity</td>
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<td>Lab</td>
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9. 'Attributes: Course Requires Consent for Enrollment? Yes X No
   Faculty Credential Analyst Dean Program/Department - Director/Chair

   Prerequisites: __________________________ Co-requisites: __________________________

10. Does this course impact other discipline(s)? (If there is any uncertainty as to whether a particular discipline is affected, check "yes" and obtain signature.) Yes X No
    If yes, obtain signature(s). Any objections should be stated in writing and attached to this form.

    Support __________ Oppose __________

    Disciplines __________________________ Signatures __________________________ Dates __________________________

    Support __________ Oppose __________

    Disciplines __________________________ Signatures __________________________ Dates __________________________

Important: Please Complete

1. Instructor: Kathy Norman

2. Extension Course Proposal Form (attached)

SIGNATURES: (COLLEGE LEVEL)

Kathy Norman 2/4/08
1. Program Director/Chair

Wyckoff 2/4/08
2. College Dean (or Designee)

SIGNATURES: (UNIVERSITY LEVEL)

3. Dean of Extended Studies (or Designee)

4. President for Academic Affairs (or Designee)
Introduction to On-Line Learning Edited Syllabus 2007

Faculty Information

Faculty Name: Dr. Juliana Texley
Address: Box 215, New Baltimore, MI 48047
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Email Address: j.texley@att.net or juliana.texley@cambridgecollege.edu

Faculty Name: Suzanne M. Flynn
Address: 799 Thomas Jefferson Lane, North Fort Myers, Fl. 33917
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Course Title: Intro to Online Learning

Course Description: This course introduces students to teaching and learning science as defined by the National Science Education Standards and to ways these principles can be implemented in an online environment. Students explore how to capitalize on diverse learning styles and multiple intelligences and to design a plan for personal professional growth. During five weeks, students read a variety of content materials and perform assignments, including 1-2 discussion board activities per week, activities comprising about 45 hours of “student seat time.” Students taking the course for 3 graduate credits complete a 10-15 page Action Research Paper.

Course Delivery: Critical to the professional-development experience of teachers today is learning to function effectively in an online learning environment, one that is destined to expand in the future. Intro to Online Learning is an online course completed in five weeks, with an additional one-week grace period for submitting assignments. This course includes approximately 80 pages of course documents developed specifically by JASON for the course. Although students may work on assignments offline, all course content, links to supplementary information, interaction among students in the class, class discussions, assessments, submission of assignments, and interaction with the instructor are carried out online, through email and the course site. This online format is designed for educators who need access to professional development on a flexible schedule and who are in different locations worldwide. Not all participants in this course will earn college credit; some are earning CEUs or auditing. However, these teachers are generally highly motivated and bring seasoned perspectives to discussions and to their own projects. Students demonstrate
achievement of course goals through objective tests, weekly assignments, participation in threaded discussion and a final action research project which combines the development of classroom methods and scholarly research. Participation in online discussions will be limited to two weeks for each thread. After that time, the discussions will be archived and no longer available for modification or for earning credits. Students earning college credit are required to participate in advanced discussions and complete all assignments.

Course Objectives/Outcomes:
Performance Objectives
In this course, students will:

1. Achieve outcomes in science teaching and online pedagogy.
2. Develop knowledge and understanding of the methods used in online instruction, including competencies in the use of software and hardware and competencies in facilitating online communities of learners.
3. Develop an understanding of how multiple intelligences and diverse learning styles can be served by online methods.
4. Develop an understanding of the National Science Education Standards and the correlation between this document and state and local standards.
5. Analyze and diversify traditional activities in order to meet the needs of diverse students.
6. Compare local, state, and national science education standards.
7. Improve their ability to manage personal learning in an online environment.
8. Learn how to diversify educational methods for all students.
9. Learn how to correlate their programs with local, state, and national standards.
10. Learn how to implement a personal action plan for further professional growth.

Lesson Plans

Topic One: Virtual Classroom 101
This Topic explores the potential of the online environment and the significant questions in science education from a basis in research (inquiry, assessment, wait time and learning styles.) To be successful, online learning involves a community of learners. Students meet classmates and practice the skills they need to participate in the community.

Major Ideas:
A. Welcome! Introduces the online learning environment and the various course elements.
B. What Lies Ahead? Provides an overview of the five-week course.
C. The Course Format. Presents guides through the on-line platform and explains the functions of the on-line format.
D. Who is Sitting Next to Me? Introduces Course personnel, Instructors, and class members, and provides directions on how to construct a student home page.
E. Where’s the Beef? Introduces additional online course features, including pop-out boxes, the resource center, and external links.
F. Teachers’ Lounge. Allows students to socialize with each other and to post on the various course Discussion Boards; provides criteria for posting messages and rules of “Netiquette.”

G. Group Pages. Presents group structure and the associated tools.
H. Chat: The Virtual Classroom. Launches the optional chat area.

Topic One Assignments:
   a) Develop a student home page.
   b) Enter the “Teachers Lounge.”
   c) Declare the nature of the credit sought – Graduate, CEU, or Audit.
   d) Read the Course Documents for Topic One.
   e) Explore the potential of online learning through online discussions of key issues in science education.
   f) Take a quiz - measure mastery of content in the Topic Documents. (5%)
   g) Participate in Topic discussions on the appropriate Forum.

Topic Two: Introduction to Inquiry
This Topic examines four of the major strands of research in science education today. Students develop and discuss these ideas, becoming familiar with some of the most respected sources in the field; review current educational research through Internet and text sources; and apply them to their own professional responsibilities. These include the ideas reflected in the National Science Education Standards.

Major Ideas:
A. What Is Inquiry? Defines inquiry in the context of the National Science Education Standards and looks at the fundamental abilities and understandings necessary to do scientific inquiry.
B. Modeling Inquiry in Dialogue. Introduces strategies for increasing the level of inquiry in classroom conversations.
C. Observing Systematically. Illustrates inquiry through an activity using paper towels and water. Controlled Experiments. Explains the difference between independent or manipulated variables and dependent or responding variables; and includes a classroom activity on collecting data through observing a family pet.
D. Creating Problems for Your Students. Delves into discrepant events and constructivist methods of learning; and includes classroom demonstrations using potassium permanganate with diet and regular sodas.
E. 3Rs: Reading, "Riting," and Researching. Reinforces Bloom’s six levels of cognitive learning.
F. Authentic Experiences. Deals with breaking down students’ naïve preconceptions.

Topic Two Assignments:
a) Read the Course Documents for Topic Two.
b) Demonstrate multimedia expertise using a photo to illustrate changes in nature.
c) Take a quiz - measure mastery of content in the Topic Documents. (5%)
d) Participate in Topic discussions on the appropriate Forum.

**Topic Three: Introduction to Learning Styles**
This Topic examines current research on learning styles and multiple intelligences. Students explore the capacity of the online learning environment as they form groups and develop an instructional model for serving diverse learners in the science classroom.

**Major Ideas:**
A. What Is Your Learning Style? Defines the different types of learning styles and helps students to identify their learning style.
B. Tell Me What You Want. Examines the traits of the Sensing-Thinking Mastery learner and offers teaching strategies directed to this learning style.
C. Let Me Figure Out for Myself. Examines the traits of the Intuitive-Thinking Understanding learner and offers teaching strategies directed to this learning style.
D. Dreaming of a Better World. Examines the traits of the Intuitive-Feeling Self-Expressive learner and offers teaching strategies directed to this learning style.
E. The Personal Touch. Examines the Sensing-Feeling Interpersonal learner and offers teaching strategies directed to this learning style.
F. What Are Your Multiple Intelligences? Looks at three of the eight multiple intelligences identified by Howard Gardner and relates these intelligences to appropriate careers.
G. More Multiple Intelligences. Looks at the remaining five multiple intelligences and at a variety of approaches in meeting the needs of different students.
H. What Does This Mean for You as a Teacher? Provides a grid to construct a basis for an integrated learning assessment system.

**Topic Three Assignments:**
a) Read the Course Documents for Topic One.
b) Participate in cooperative groups to develop an outline of methods which would support multiple intelligences and learning styles in one science content area.
c) Take a quiz - measure mastery of content in the Topic Documents. (5%)
d) Participate in Topic discussions on the appropriate Forum.
e) Discuss the Action Research Paper focus with the Instructor.

**Topic Four: Charting Your Personal Professional Development Plan**
In the vision of the National Science Education Standards, professional development is a more personal and continuous process for teachers as lifelong learners. There are a variety of excellent sources for professional development available to educators. This Topic guides students to research, through which students discover which development plan is right for them.

**Major Ideas:**
A. Always a Learner. Describes what it means to be a lifelong learner, how adults learn best, and how online learning differs from face-to-face classes.

B. The Teaching Treadmill. Provides a diagnostic exercise to determine your comfort level and need to know various science subject areas.

C. Who Are You, the Learner? Deals with the importance of prior experience and knowledge and overcoming misconceptions.

D. Off the Roller Coaster. Examines “A Nation at Risk” through the National Science Education Standards to reflect best practices and up-to-date science content and what it takes to put the vision into practice.

E. Evaluate Your Program. Describes the importance of a coordinated K–12 science program and the necessary support systems; and provides a checklist of criteria to use to rate a school’s science program.

F. Beating the System. Delves into the systems and policies described in the National Science Education Standards and discusses coordination across agencies and organizations; and provides a checklist of criteria to rate personal knowledge of and involvement in the system that influences a personal science education program.

G. Choosing Professional Growth. Lists future JASON Academy offerings in professional development and links to the National Board for Professional Teaching Standards.

Topic Four Assignments:
   a) Read the Course Documents for Topic One.
   b) Prepare a paper analyzing the correlation among local, state, and national science education standards in a specific area of the curriculum
   c) Take a quiz - measure mastery of content in the Topic Documents. (5%)
   d) Participate in Topic discussions on the appropriate Forum.
   e) Submit a list of objectives and goals for the Action Research Paper to the instructor.

Topic Five: Research Action Plans and Professional Development
Option One: Probing Your Curriculum - It’s time for action!
In this option, students prepare an Action Research Project based on a personal choice. The plan is developed in conjunction with and approval of the Instructor. The use of technology and sensors in the classroom allow students to model the procedures used by research scientists.

Major Ideas:
A. Students Doing Science. Describes various approaches to teaching science and delves into the process approach and integrated process skills.

B. Is Touching Believing? Discusses observations, classifications, and reliance on the five senses compared to using technology and sensors to obtain data; and Illustrates ways technology and sensors can enrich a lesson.

C. Delegating the Work. Introduces technology and a temperature sensor and provides the temperature probe activity, "Making Ice."

D. Probeware in Your Curriculum. Emphasizes the importance of an activity stressing the process that leads to the understanding of a concept and not the concept itself; and explores how you can tell if students are using process skills.

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E. Multiple Sensors. Describes how using two or more sensors allows you to see relationships between responding variables; and introduces a probe activity, "Foggy Weather," to collect light, temperature, and humidity data.

Option One Assignments:
   a) Read the Course Documents for this Topic.
   b) Complete a 'podcast' interview - measure mastery of content in the Topic Documents. (5%)
   c) Participate in Topic discussions on the appropriate Forum.
   d) Complete the JASON Course survey.
   e) Complete the investigation on the use of technology and sensors in the science education classroom and summarize the results in a paper.
   f) Complete the Action Research Paper.

**Texts (required readings):** Course Content found in Blackboard
   a) JASON Intro to Online Learning
   c) *(Students will also be responsible to get a copy of their own state and local science standards. Most are available online.)*

**Bibliography (required and optional readings):** Course Content found outside Blackboard

**Student Evaluation Process:**
Students demonstrate achievement of course goals through objective tests, weekly assignments, participation in threaded discussion and a 10-15 page Action Research Paper or project which combines the development of classroom methods and scholarly research.

The final grade for this course is based on

1) Completion of the course assignments (50%)
2) Substantive participation in weekly discussions (25%)
3) Performance on assessments (25%)
4) Students earning 3 graduate credits will submit an Action Research Paper or project which will be averaged with equal weight to the class grade.

Student participation and demonstrated knowledge are evaluated weekly. Postings on the discussion boards should be guided by the following rubric:
• Level 4: High-quality professional discourse that invites inquiry. The message creates an inviting framework by sharing a personal reflection; presenting an interesting and well-articulated dilemma, challenge, or issue; or raising a thought-provoking question. The author creates a context where teachers with different levels of concern, knowledge, and experience feel welcome to join the conversation and to carefully consider their own ideas about the subject matter.

• Level 3: Thoughtful professional discourse. The message shares information, an issue, or a question in a thoughtful way, which might focus on specific details, explore the "why's" as well as the "what's," or explore others' beliefs and practices. Others feel welcome and encouraged to think about their existing teaching beliefs or practices.

• Level 2: Collegial discussion and/or "shop talk." Message could be a response to a previous message; a request; a description of classroom practice; or an issue, dilemma, or challenge that reflects the beliefs or practice of the author but lacks self-reflection and/or an invitation to others to respond. The conversation focuses on disseminating the author’s ideas, questions, or practices rather than encouraging others to examine their beliefs and/or practices.

• Level 1: Factual statements or informational. Message is usually a question, a brief statement of fact or opinion, or an announcement that does not tend to stimulate ongoing professional discussion, thoughtful reflection, or examination of beliefs and/or practice.

**Action Research Paper Guide:**

Students must develop a project which involves at least 15 hours of work. The project should consist of:

1. Review of literature on science education and online learning to select a topic around which to develop a classroom activity or research
2. Correlation of the topic and activity to state and national science content standards.
3. Implementation of the project with students or other teachers.
4. Evaluation of implementation through student assessment and feedback.
5. Analysis of project implementation and assessment results, with recommendations for use of activity and implementation of improvements based upon feedback.

**Option Two: Charting Your Personal Professional Development Plan - Time for action!**

This Option offers students the opportunity to explore the professional resources available for continuing education within a particular learning environment and to prepare a personal development plan. In the light of the National Science Education Standards, educators must commit to the best in lifelong learning.

**Major Ideas:**

A. A Very Personal Voyage. Describes how the nature of professional development has changed with the National Science Education Standards and offers suggestions for new forms of enrichment.

B. Scouting the Route. Discusses using science centers for professional growth and as inspiration for displays and demonstrations in classrooms; and provides a table to use to evaluate science center exhibits.

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C. **Journey of the Mind.** Identifies three essential steps to embarking on a reading program and offers links for exploring digital libraries.

D. **A Lab of Your Own.** Looks at action research as a professional development option; and explores developing an evaluation instrument to measure results.

E. **Techno Trekking.** Encourages the development of real knowledge about the applications of science theory in familiar surroundings; and offers suggestions to become technologically literate.

F. **The Crab Complex.** Emphasizes the importance of sharing personal professional development projects with colleagues; and provides suggestions for keeping up a particular field of science knowledge.

**Option Two Assignments:**

a) Read the Course Documents for this Topic.

b) Complete a 'podcast' interview - measure mastery of content in the Topic Documents. (5%)

c) Participate in Topic discussions on the appropriate Forum.

d) Complete the JASON Course survey.

e) Complete the Action Plan Paper for continued professional development in light of the National Science Education Standards.

Complete the Action Research Paper.

*Students not taking the course for graduate credit do not have to complete the Research Paper and must obtain at least 70 points to pass the course*

*Students taking the course for graduate credit will be graded according to the Plus/Minus Grading Scale:*

- A+ 97-100
- A 94 - 96.99
- A- 90 - 93.99
- B+ 87 - 89.99
- B 84 - 86.99
- B- 80 - 83.99
- C+ 77 - 79.99
- C 74 - 76.99
- C- 70 - 73.99
- D 65 - 69.99
- F 50 >
Juliana Texley, Ph.D.

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J.Texley@att.net
586-405-3641

Experience

2000-Present Technical writer, Educator

Science Education/Science Instructor
- Cambridge College (2002-Present) Science and Science Education
- Instructor, Online Learning, Multimedia, Technology and Assessment, Central Michigan University (1998-Present)
- Facilities consultant, National Science Education Association
- Instructor, Safety, Assessment, Online Instruction, Cell Biology and Ocean Science, Jason Academy (2001-Present)
- Instructor, Biology Palm Beach Community College (2000-Present)
- Science Chair, Michigan SCoPE Online Project (Dept. of Treasury) (2002-2004)
- Web Editor, National Science Teachers Association (2001-2005)

1993-2000 Anchor Bay School District New Baltimore, Mi
Superintendent of Schools
- Brought district from deficit to $5 million in equity
- Negotiated all contracts, including 5 expedited MEA contracts
- Passed and personally coordinated 5 bond issues for 5 schools, $240 mil.
- Raised test scores and led professional development efforts
- Leadership positions in Chamber of Commerce, United Way

1990-93 Anchor Bay School District New Baltimore, Mi
Assistant Superintendent/Curriculum
- Wrote competitive grants totaling over $1 million.
- Raised state test scores for three consecutive years.
- Developed new and innovative professional development programs.
- Wrote and implemented Michigan Systemic Initiative grant for improvement in mathematics and science
- Taught science and science education for 3 universities

1973-90 Richmond Schools Richmond, Mi
- Taught middle and secondary science and mathematics
(1 year leave to lead science department at University Liggett in 1984)

Educational Background

1969 Oakland University Rochester, Michigan
- B.A., Biology, Chemistry/physics.
- Graduated Summa Cum Laude.

1972 Wayne State University Detroit, Michigan
- M.S., Biology.

1980 Wayne State University Detroit, Michigan
- Ph.D., Curriculum Development


Advances in Genetic Technology. (Advisory board member for program that taught genetics and bioethics for secondary students) ESCS 1989

(Over 100 publications from 1980-2006 in biology, technology and education)

References:

(Beyond Central Michigan University)

Marily DeWall, Director (emeritus) JASON Academy [www.jason.org]

David Beacom, Director of Publications, National Science Education Association, [dbeacom@nsta.org]