



Course Syllabus

EDTC 5330	Constructivism and Technology	Spring 2008
Online	Instructor – Mary G. Beckmann Contact phone number: 314-791-6685 Office hours by appointment beckmann@webster.edu or ponotoc2@yahoo.com	2 Credit Hours

1. Course Description: (provide details of student focus, rationale, scope, and prerequisites)

This course will assist a teacher or instructor to use technology to foster learning by examining how certain aspects of technology can enhance thinking skills: we will be examining the World Wide Web, Internet, multimedia, hypermedia, critical thinking, web cams, etc. Participants learn about inquiry-based active learning, and other components of constructivism. Emphasis is on ways to use technology tools for curricular and instructional applications that use this teaching approach.

2. Learning Outcomes: (goals, objectives, course outcomes, etc.) Identify any MOSTEP or professional standards that are met by each learning outcome.

- Students will develop an understanding of the constructivist theory STE NETS 1, 2, 3, 4, 5, 6, SOE 1, 2, 3, 4
- Students will be able to accurately describe the individuals credited with the constructivist theory (including Wiggins, Schon, Piaget, Dewey, Bruner, Scrivens). STE NETS 1, 2, 3, 4, 5, 6, SOE 1, 2, 3, 4
- Students will be able to combine technology with the constructivist theory to create lesson plans that generate higher level thinking and learning from their students. STE NETS 1, 2, 3, 4, 5, 6, SOE 1, 2, 3, 4
- Students will become knowledgeable on adapting various technologies to support and enhance learning and improve teaching strategies along with supporting personal and social growth while combining their knowledge of the constructivism theory. STE NETS 1, 2, 3, 4, 5, 6, SOE 1, 2, 3, 4
- Students will become knowledgeable on assessing and evaluating various forms of technologies to distinguish between those that best foster learning from those that are merely entertaining. STE NETS 1, 2, 3, 4, 5, 6, SOE 1, 2, 3, 4

This course is designed to provide an understanding of constructivist philosophy in a teaching and learning environment in which educational technologies will be used. Fulfills MoStep 1.2.11.1, 1.2.11.2, 1.2.11.3, 1.2.11.4, 1.2.11.5, 1.2.11.6.

3. ASSIGNMENTS AND EXAMS.

The schedule will approximate the following:

- Week 1: Constructivism and constructivism theories and theorists
- Week 2: Meaningful learning, problem solving, and learning styles
- Week 3: The Internet and learning environments
- Week 4: Using the Internet to communicate
- Week 5: Using multimedia equipment, digital cameras and scanners
- Week 6: Presentation software, semantic networking, concept mapping, knowledge presentation, story problems, and problem based learning environments (PBLEs)
- Week 7: Learning by exploring using microworlds, virtual reality, and role playing games
- Week 8: Evaluating and assessing technology: Is it working - how can you tell?

POINT VALUES: (basis of evaluation with explanation regarding the nature of the assignment and the percentage of the grade assigned to each item below)

- a) Attendance / Participation / Posts = 12 points total
- b) Multi projects = of 88 points. Each module entails a different type of learning and each week a project will be assigned applicable to that specific type of learning.
- c) Instructor feedback: The instructor will provide feedback on each assignment within five to seven days of submission. The instructor will maintain the grade book on a weekly basis.
- d) Plagiarism will not be tolerated. Any student involved in plagiarism will be immediately dismissed from the course with a failing grade and will be reported to the department chairperson for further action.

4. Resources and supplements (study guide, sample tests, project outlines may be attached.)

Text:

Suggested: Jonassen, D. H., Howland, J., Moore, J., and Maria, R.; Learning to Solve Problems with Technology: A Constructivist Perspective; Merrill Prentice Hall: 2003; ISBN: 0-13-048403-2

Supplemental Readings:

<http://tip.psychology.org/bruner.html> *Overview and Scope/Application*

<http://www.funderstanding.com/constructivism.cfm> (first paragraph)

http://www.uib.no/People/sinia/CSCL/web_struktur-836.htm A view of types of constructivism.

Critique guidelines, WebQuests, Internet activities, and various online projects will be provided as supplemental material.

5. EVALUATION / GRADING SCALE:

93-100 = A

90-92 = A-

86-89 = B+

83-85 = B
80-82 = B-
76-79 = C+

All academic and professional behavior of students in this course is subject to review for the purposes of student evaluation.

The final project may not be returned to you, so please make a copy prior to submitting it to your instructor.

6. ACADEMIC HONESTY POLICY:

Students at Webster University are expected to practice academic honesty.

In its broadest sense, plagiarism is using someone else's work or ideas, presented or claimed as your own. Any time you refer to another person's work, whether as a direct quotation or paraphrased, you must use a citation. Students should not copy more than two paragraphs from any source as a major component of papers or projects. All citations must be properly documented and references must be provided using APA guidelines (<http://library.webster.edu/citation.html>).

7. ACCESSIBILITY/ACCOMODATIONS POLICY:

If you have a disability, please notify your instructor as soon as possible to discuss your accommodation needs.

8. ATTENDANCE:

Attendance is crucial in all online courses. This means that a student is expected to login to the course several times during each week.

Even though you are not required to be logged in at any precise time or day, you are expected to login several times during each week. It is important to actively participate each week in the course.

Students who do not complete the requirements of the course must contact the instructor prior to the end of the course to complete an Incomplete Course form. Incompletes are not awarded except in emergencies, as defined by the instructor.

NB: An Incomplete may only be awarded to a student who has maintained a passing grade up to the point of the emergency. Incomplete grades will change to a grade of F or NC unless the requirements stipulated on the incomplete form are met by the date listed on the form or one calendar year from the end of the course, whichever comes first.

**9. OTHER
N/A**

10. STANDARDS / GOALS:

International Society for Technology in Education (**ISTE**) - National Educational Technology Standards for Teachers (**NETS**) – http://cnets.iste.org/teachers/t_stands.html

ISTE NET Standards:

- 1. Technology operations and concepts.**
Teachers demonstrate a sound understanding of technology operations and concepts.
- 2. Planning and designing learning environments and experiences.**
Teachers plan and design effective learning environments and experiences supported by technology.
- 3. Teaching, learning, and the curriculum.**
Teachers implement curriculum plans that include methods and strategies for applying technology to maximize student learning.
- 4. Assessment and evaluation.**
Teachers apply technology to facilitate a variety of effective assessment and evaluation strategies.
- 5. Productivity and professional practice.**
Teachers use technology to enhance their productivity and professional practice.
- 6. Social, ethical, legal, and human issues.**
Teachers understand the social, ethical, legal, and human issues surrounding the use of technology in PK-12 schools and apply those principles in practice.

The School of Education (SOE) Goals:

- 1. The knowledgeable learner:**
Education candidates will demonstrate knowledge of the subject matter, knowledge of the learner, and knowledge of pedagogy based on inquiry and scholarship.
- 2. The informed instructor:**
Education candidates will incorporate multiple assessment and instructional strategies to support effective educational practices based on research and theory.
- 3. The reflective collaborator:**
Education candidates will reflect on the roles educators take as leaders of change through collaboration with colleagues, students, and families in schools and communities.
- 4. The responsive educator:**
Education candidates will demonstrate respect for diversity through responsive teaching and learning that values individual differences.

The progress of students in this course toward ISTE Nets or School of Education goals may be recorded for the purpose of program evaluation, not for student assessment. If you have any questions about this, please contact your instructor.

This syllabus is subject to change at the discretion of the instructor.