



**Course Syllabus**

<b>COURSE NUMBER: EDTC 5630. W1</b>	<b>COURSE TITLE:</b> Technology and Thinking Skills	<b>TERM: Fall 2008</b>
<b>SITE: Online</b>	<b>INSTRUCTOR CONTACT INFORMATION:</b> K. Harrick/R. Cifarelli	<b>CREDIT HOURS: 3</b>

**COURSE DESCRIPTION:**

This class will address the use of computer technology to teach higher level thinking skills in the k-12 classroom. Emphasis will be placed on theories of thinking skills (Dimension of Learning model and others), varieties of computer technology projects and activities which develop higher level thinking skills, and practical applications using hardware and software already available in individual classroom settings. Prerequisite: Curriculum Design or consent of instructors

**1. LEARNING OUTCOMES:**

This course will enable participants to:

- a. develop a conceptual model and philosophy for integrating computer technology into the teaching of higher level thinking skills in the classroom
  - i. MOSTEP 4. The pre-service teacher recognizes the importance of long-range planning and curriculum development and develops, implements, and evaluates curriculum based upon student, district, and states performance standards.
  - ii. NETS I.B Teachers demonstrate continual growth in technology knowledge and skills to stay abreast of current and emerging technologies.
- b. develop a readily available personal fund of resources for computer activities
- c. select computer activities appropriate for the individual teacher and classroom
  - i. MOSTEP 9. The pre-service teacher is a reflective practitioner who continually assesses the effects of choices and actions on others. This reflective practitioner actively seeks out opportunities to grow professionally and utilizes the assessment and professional growth to generate more learning for more students.
  - ii. NETS II.A Teachers design developmentally appropriate learning opportunities that apply technology-enhanced instructional strategies to support the diverse needs of learners.
- d. develop activities which relate to the individual teacher's instructional objectives, including subject content and targeted thinking skills
  - i. 5. The pre-service teacher uses a variety of instructional strategies to encourage students' development of critical thinking, problem solving, and performance skills.
  - ii. NETS III.A Teachers facilitate technology-enhanced experiences that address content standards and student technology standards.



## **2. SCHEDULE OF REQUIRED READINGS, CLASS PREPARATIONS AND ASSIGNMENTS, LECTURES, DISCUSSIONS, STUDENT PRESENTATIONS, OUT-OF-CLASS ASSIGNMENTS AND EXAMS.**

- Week 1: Where we are now--introductions, course requirements, literature review
- Week 2: Initial thinking skills theory, organize groups and choose project topic
- Week 3: Group presentation on topic related to thinking skills and technology
- Week 4: Reflection on group presentations and make activity suggestions
- Week 5: Original groups review activity suggestions from week 4
- Week 6: Group construction of technology-related instructional unit; present unit
- Week 7: Debate 1: explicit or discrete instruction of thinking skills
- Week 8: Debate 1 concluded
- Week 9: Marzano Dimension 1; unit planning guidelines
- Week 10: Marzano Dimension 2; unit planning guidelines
- Week 11: Marzano Dimension 3; unit planning guidelines
- Week 12: Marzano Dimension 4; unit planning guidelines
- Week 13: Marzano Dimension 5; unit planning guidelines
- Week 14: Debate 2: traditional or constructivist instruction of thinking skills
- Week 15: Debate 2 concluded
- Week 16: Course reflections and summary

## **3. RESOURCES:**

Marzano, R. J. A Different Kind of Classroom: Teaching with Dimensions of Learning

Supplemental readings (not required but helpful):

Marzano, R. J. and Arredondo, D.E. Tactics for Thinking, Teacher's Manual.

Marzano, R. J. et al, Dimensions of Learning Teacher's Manual

Marzano, R. J. et al, Dimensions of Thinking: A Framework for Curriculum and Instruction

## **5. EVALUATION: (basis of evaluation with explanation regarding the nature of the assignment and the percentage of the grade assigned to each item below)**

- Class participation: Debates, reflective activities, activity suggestions for project groups 30%
- Group presentation: Powerpoint presentation or web presentation on a thinking skills theory, according to instructor directions 15%
- Instructional unit presentations: Supporting group presentations relating to the major project, according to instructor directions. 15%
- Quizzes: Cover text and additional materials as assigned. 30%
- Literature review: Scholarly review of current materials relating to technology and thinking skills 10%

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

### **1. GRADING SCALE :**

- \* A=94-100%
- \* A-=90-93%
- \* B+=87-89
- \* B =83-86
- \* B-=80-82
- \* C+=77-79
- \* C =73-76
- \* C- =70-72
- \* Below 70 = No Credit

**Note: ALL PAPERS/PROJECTS/DISCUSSIONS ARE GRADED AND IT IS YOUR RESPONSIBILITY TO MAINTAIN A COPY OF OUR COMMENTS FOR YOUR ADVANCEMENT TO CANDIDACY PAPERWORK. ONCE THE COURSE HAS CLOSED WE WILL NOT BE ABLE TO ACCESS YOUR WORK OR THE COMMENTS WE MADE ON YOUR WORK. PLEASE PLAN ACCORDINGLY.**

### **7. 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>). C

### **8. ACCESSIBILITY/ACCOMODATIONS POLICY**

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

### **9. OTHER**

Class participation and attendance is mandatory. In the event of an emergency, should a student miss a 3 or 4 hour class session, the final course grade may be reduced.

### **Grade Lobbying**

Students certainly have the right to protest grades, challenge, grades, or ask for reconsideration. Such questioning is encouraged by Webster University. However, in recent years, some students have crossed the line into something excessive that demeans the entire evaluation process. First, there is a proper and professional way to challenge a grade. That is not done in a loud voice in front of the class or with other students in the class. Our policy is only to discuss grading in front of the class on the first day of the course. We will discuss grades via email for online courses or at a pre-arranged time in private for face-to-face classes. That is out of respect for your privacy.

Students who promote a particular grade for themselves before a project is even submitted are crossing the lines of what is acceptable. Likewise, students need to understand that performance is what we are asked to evaluate projects, not effort. Our estimation of your effort is included in your professionalism/particular grade.

Finally, the university has placed your instructor(s) in a position to evaluate performance based upon years of academic experience. That experience by its nature may give the instructor a different perspective on your work. Please be aware that excessive efforts to lobby for higher grades are often counter-productive.

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. Please do not assume that you have a calendar year to complete the work; typically the time frame is less.**

## 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](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.

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