

## **CENTRAL MICHIGAN UNIVERSITY COURSE SYLLABUS**

Course: MTH 595AU

Course Title: Exploring Curriculum Development with TI-Npsire™ Technology

Course credit: 3 (3-0)

Terms: Fall I, 2009, Fall II, 2009 & Spring II, 2010

Instructor: Central Michigan University (CMU) Mathematics Faculty (TI Certified)

Meeting Dates: Online and/or by appointment

Objectives: At the end of MTH 595AU you will be able to:

- Use the functionality of the TI-Nspire family of graphing calculators and software to solve problems.
- Use the functionality of TI-Nspire Link software to capture screen images for use in documents and to transfer documents between the computer and calculator.
- Examine, discuss, critique and suggest modifications to improve activities for use in a high school mathematics classroom.
- Provide a solution of a select problem with multiple approaches using a variety of linked dynamic representations.
- Modify your solution into a teaching activity to improve learning or teaching in a high school mathematics classroom.
- Participate in online class discussions.
- Develop video capture documents for instruction.
- Submit assigned documents.

### Required Materials

Successful completion of the 3-day TI-Nspire workshop is required for enrollment in MTH 595AU. You are also required to have either the TI-Nspire or the TI-Nspire CAS handheld, either TI-Nspire or TI-Nspire CAS software and TI-Nspire Link software. Also, you will be required to download and install video capture software on the computer that has your TI-Nspire software. Many of the assignments refer to documents available online and materials, concepts and skills gained from participation in your TI-Nspire workshop.

### Course Policies and Procedures

In order to be a successful in this course you will need to be careful to manage your time to keep on schedule. This requires motivation from within. Fortunately you may complete most of this class at any hour between the start and completion of the course timeframe.

Learning can take place when you communicate with others. Please remember that others will learn from you when you participate fully. Work hard to keep in touch with me and other students taking this course. When you have questions, please feel free to use email or the discussion board to contact your classmates or me.

Syllabus quiz: This quiz will provide feedback to me about your understanding of the syllabus and the class. The Syllabus Quiz is designed to give you an opportunity to familiarize yourself with the course materials and the syllabus. You will be given three attempts to take it; the highest score will be recorded in your grade book. It is located in Week 1 folder and it is available 8:00 Friday morning, **DATE/MONTH** until midnight Sunday, **DATE/MONTH**.

CMU E-mail: It is very important that you access your Central Michigan University (cmich) e-mail often, at least once a week because all the email messages sent from this class go to your cmich.edu account. Visit <http://www.csv.cmich.edu> and click on "My E-mail Login" to read your cmich e-mail.

Responding to email: I will check my email daily. I will respond to course related questions within 24–48 hours. If I find those questions relevant and important to others, I will post them on the Announcement page.

Announcements: I highly recommend you to read Announcements three to five times each week. All of the important information, reminders, updates, questions and answers, etc. are posted there because this is the first page when you log into the class. If you happen to miss any days, please click tabs "View Last 7 days" or "View Last 30 days" to get yourself caught up with what has been going on with the class.

Required discussion responses: There are discussion items posted under the Discussion Board button with 3 points each. You are required to respond to either my posting or your classmate's. Remember, your discussion postings are seen by everyone in the class, so please respect each other and take this opportunity to learn from each other. Discussion postings will be evaluated with the rubric in Week 1 folder.

Assignment file formats: Please refer to every week's assignment instruction on assignment file formats.

Submitting assignments: There are eight weeks for MTH 595AU. Each week includes modules various assignments for you to complete. All assignments should be turned in via the assignment hyperlink in each of the weekly folder. Due dates of each assignment is posted within the assignment and also on the Schedule page under the Syllabus/Schedule link. There will be 20% penalty for submitting assignments after the due date.

Deadlines: Odd things happen in cyberspace—submissions get lost, servers disconnect temporarily, and logins fail. Do not wait for the last minute to do your work. Allow time to meet deadlines. You are responsible for getting the work submitted on time.

Late Work: Each week's work must be completed by 11:50 PM EST or EDT on Sunday of the following week (You have about two weeks to complete assignments. I do hope this gives you plenty of time.). Late work will receive 20% deduction from the given credit.

Feedback on your assignment submission: Please check feedback on the graded assignments in the grade book by clicking the hyperlinked score. If you have any difficulty finding comments, please read instructions under the Tutorial link.

Check your grades: I will post your grades on discussion responses, chat participation, assignments, etc. as soon as I can. If you find any errors or missing scores in your grade book, please feel free to email me. I will correct my mistakes.

Assignments: In addition to the Discussion Board postings, the syllabus quiz and the End-of-course-survey, there are three assignments for this class. Each assignment is worth 24 points.

Assignment 3 includes group work: I strongly believe that collaboration/team work is very important in any aspects of our job. To work collaboratively in cyberspace is challenging but rewarding. I'd like to give you the opportunity to experience this exciting adventure.

- You will be assigned to a group of 3-4 students with discussion forum, chat, file exchange and email.
- The group will brainstorm and provide help, suggestions and feedback to others in your group.
- You will also exchange your problem solving lesson activity with group members under in your group area and with the rest of the class.
- More information will be discussed later as questions arise.

## Course Outline

### Week 1 – Begin Activity 1

- Complete Reading Assignment 1
- Take Syllabus Quiz
- Examine and use the TMP rubric to critique *The Swimmer Problem Activity*
- Introduce yourself to others using the discussion board

### Week 2 – Continue Activity 1

- Use the TMP rubric to critique *The Open Topped Box Problem*
- Respond to activity discussion postings

Week 3 – Complete Activity 1

- Select and critique an online TI-Nspire activity using the TMP rubric
- Respond to activity discussion postings
- Download and install TI-Link

Week 4 – Begin Activity 2

- Complete Reading Assignment 2
- Select and solve a problem from the set provided\*
- Respond to activity discussion postings

Week 5 – Complete Activity 2

- Submit your solution to the selected problem
- Respond to activity discussion postings

Week 6 – Begin Activity 3

- Complete Reading Assignment 3
- Modify your problem solution into an mathematics class activity
- Respond to activity discussion postings

Week 7 – Continue Activity 3

- Post a draft version of your activity for feedback from select members of the class
- Respond to activity discussion postings

Week 8 – Complete Activity 3

- Modify the draft version of your activity utilizing feedback from class
- Submit Activity 3
- Complete the End-Of-Course Survey

Evaluation and grading

Final Grades for this class will be based on your performance in discussion postings, weekly assignments, group project, final project and extra points. They are listed below.

Grades are based on points accumulated.

Activity 1	24 points
Activity 2	24 points
Activity 3	24 points
Discussion Postings	24 points
Syllabus Quiz	2 points
<u>End of Course Survey</u>	<u>2 points</u>
Total	100 points

## Numerical Grading Scale

95 – 100	A
90 – 94	A-
87 – 89	B+
83 – 86	B
80 – 82	B-
77 – 79	C+
73 – 76	C
70 – 72	C-
67 – 69	D+
63 – 66	D
60 – 62	D-
0 – 60	E

## ADA Statement

CMU provides students with disabilities reasonable accommodations to participate in educational programs, activities, or services. Students with disabilities requiring accommodations to participate in class activities or meet course requirements should contact the instructor as early as possible.

## Academic Integrity Statement

Written or other work submitted by each student in this course, shall be the product of his/her own efforts. Plagiarism, cheating, and all other forms of academic dishonesty are prohibited. Student expected to adhere to the ethical and professional standards associated with their programs and academic courses. Copies of the Policy on Academic Integrity may be accessed at <http://www.cmich.edu>

## Bibliography:

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Syllabus prepared on May 28, 2009 by: Dennis St. John