

## **Communicating Science ~ Fall Semester 2014**

### **Course Syllabus**

**Instructor:** Joan Chadde, Education Program Coordinator  
Center for Science, Mathematics & Environmental Education  
115 Great Lakes Research Center  
Phone: 487-3341 Email: [jchadde@mtu.edu](mailto:jchadde@mtu.edu)  
Office hours: by appointment

**Prerequisites:** Open to all majors & class levels

**Class Location:** 104 Great Lakes Research Center (GLRC) and at schools in Houghton, Baraga, Ontonagon and Gogebic Counties

### **Course Objectives**

This course will prepare students for making both classroom and community presentations as professionals in the work place. Students will make presentations in K-8 classrooms at evening Family Science Nights conducted at area schools for elementary students and their families.

Classroom lectures will highlight the rationale for interacting with schools and communities as a professional, development of age-appropriate lessons, presentation skills, effective teaching techniques, learning styles, classroom management, and demonstrate hands-on learning techniques. Students will have access to the Center's educational resources and activity guides, and presentation supplies will be provided.

### **Course Credit**

ED 3510 is a 2 credit course.

**Follow-up course sequence:** Students can take ED 3511 (one credit) for a maximum of two times. Each term that ED 3511 is taken, students are required to develop two new lesson plans and deliver them at 5-6 family science nights. They do not repeat the first two assignments in ED3510.

### **Meeting Dates/Times:**

ED 3510 will meet on Tuesdays from 7-9 pm on Sept. 9, 16, 23, 30. No class on Oct. 7. Other Tuesdays, we will conduct Family Science & Engineering Nights at schools and other venues:

- 1) Students attend one family science night as a presentation assistant (Sept. 18, optional), and present at 5-6 Family Science & Engineering Night events that are typically held from 6:00-7:30 PM at schools in Houghton, Baraga, Gogebic, and/or Ontonagon Counties. \*\*Transportation to the school (in an MTU van), and dinner are provided for presenters (and their assistants) for each event. **For most Family Science Nights, students should expect to be off-campus from approximately 4:30-9 pm. A few science nights may require up to 2 hours travel time each way.** Family Science Night dates, times, and locations are in the course schedule.
- 2) Students in ED 3511 (1 credit) are required to develop two new lesson plans. Students enrolled in ED 3511 **only attend class to practice their presentations and the last class.**

## **ED 3510 Course Requirements (300 points)**

### **Class Attendance (20 points)**

**Assignment #1:** Read *three* National Science Teachers Association position statements on elementary science education, parental involvement, and informal science. Write a one-page reflection (single space) describing whether your K-8 science education incorporated many of the recommendations made in these 3 position statements. How did your experiences during elementary school, contribute to your attitude, interest, and understanding of science today? (10 points)

**Assignment #2:** Students identify activities to present to each of the following age groups: K-2, 3-4, and 5-6 during a 40-minute family science night. Three ***different*** sources (activity guides, internet, Science & Children journal, faculty, etc.) should be consulted. The activity selected for each grade grouping should be attached (unless taken from a book in the Center office) and the complete reference for the source of each activity listed on the form provided. (10 points)

**Assignment #3:** Select an existing 40-minute family science lesson plan (see notebooks of past lessons) to present at 3 science nights. (20 points)

**Assignment #4:** Present at 6 Family Science Nights (20 points/presentation x 6 = 120 points)

**Assignment #5:** Prepare a one-page self-critique of your presentation following ***each*** Science Night. (10 points/presentation x 6 = 60 points)

**Assignment #6:** Prepare a NEW 40-minute lesson plan to present. (40 points)

**Assignment #7:** Prepare one-page reflection that discusses "how this presentation/teaching experience will contribute to my academic and professional career." (20 points)