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## STEM Projects

## *Spring 2014*

#### Interdisciplinary Studies (INTDS) 100

Section # 59805

**Instructors:** Dr. John Heathcote **Class Times:** *Lecture:*F, 8:00-8:50 am, PHY-70

Ms. Sharon Wu  *Lab:* 3 hours per week, arranged

**Instructors / Contact Information / Office Hours:**

Dr. John Heathcote (FEM-1B, in Math Center) 638-3641 x3215 john.heathcote@reedleycollege.edu

 **Office Hours:** M,W 12:00 – 1:50 pm

F 10:00 – 10:50 am

 (feel free to stop by at other times as well)

Ms. Sharon Wu (FEM-1D, in Math Center) 638-3641 x3497 sharon.wu@reedleycollege.edu

 **Office Hours:** T 2:00 – 3:00 pm

Th 1:00 – 1:50 pm

 F 10:00 – 11:00 am

 or by appointment

**Textbook:** None **Prerequisites:** None

**Grading:**

Lab Hour Grade 25%

“Ambassador Hour” Grade 10%

Group Projects 25%

Individual Assignment(s) 25%

Weekly Class Participation Grade 15%

**Lab Hour Grade:**

The lab portion of this course is satisfied by the students’ participation in college outreach activities, including tutoring high school students, giving recruitment presentations at off-campus sites, hosting prospective student groups for on-campus visitations and sponsoring recruitment activities for prospective students. Other activities that involve preparation for these activities or activities that involve learning skills useful as a STEM Ambassador will also be counted for lab time. Over the course of the term, you are expected to participate in a total of 51 hours of these activities (an average of 3 hours per week). Each week, you will be required to submit a list of your STEM activities and the amount of time that you spend on each one.

**“Ambassador Hour” Grade:**

 “Ambassador Hours” are the lab hours that you achieve while attending class visits at schools, doing STEM Ambassador activities on campus or at other locations. For the whole semester, you are expected to participate in a total of 17 hours of these activities. You will be informed of activities that will count as “Ambassador” activities.

**Group Projects**:

In order to develop new activities for the STEM Ambassadors, you will take part in group projects throughout the term. Each of these projects will be graded. In addition to your team grade, you will receive an individual grade based upon your level of participation with your group.

**Weekly Class Participation Grade:**

The weekly class meeting for this class is very important for both the organization of the ambassador activities and for your development as ambassadors. Because of this, you will receive a participation score for each week’s class. In order to receive full credit, you need to show up to class on time, be prepared, and participate in the day’s activities.

**Individual Assignment(s):**

During the semester, you will be expected to complete individual assignments based upon the theme of this course. These assignments will be graded.

**Earned Percentage of Possible Points - Grade:**

90 - 100% A

80 - 89% B

70 - 79% C

60 - 69% D

< 60% F

**Attendance & Participation:** Your attendance and participation are important. Attendance will be taken at the beginning of each class period. **Since this class meets once per week, students missing (2) or more classes can be dropped for non-attendance.**

**Expectations of STEM Ambassadors:**

**When you visit a school or act as a host, you are representing Reedley College**. Therefore, you are expected to dress appropriately and to behave professionally.

**Appropriate Apparel:** When acting as a STEM Ambassador, you are expected to dress appropriately. Typically, this will involve wearing the STEM shirt or another Reedley College shirt. Inappropriate clothing would include items such as low cut clothing, excessively short skirts or shorts, or low riding pants. Please be aware that one role of this class is to prepare you for professional work.

**Professional Behavior**: When acting as a STEM Ambassador, students are expected to avoid profane language and to avoid inappropriate conversations. Keep in mind that you are the face of Reedley College, and the way that you act reflects upon our school.

**Class Communication:**

Communication between students and the instructors teaching the course or leading outreach activities is very important. Because of this, each student must use email and access the course Blackboard site in order to remain up to date with this course.

**\*Accommodations for students with disabilities**: If you have a verified need for an academic accommodation or materials in alternate media (i.e.: Braille, large print, electronic text, etc.) per the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act, please contact me, or the **DSPS office - ext 3332**  as soon as possible

\* Please see the Reedley College catalog for clarification of issues and additional guidelines.

**Add Date:** Friday, August 29th Last day to add a course

**Drop Date:** Friday, October 10th Last day to drop this course

**Holidays:** Friday, November 28th Thanksgivings

**Course Description:**

This is a course in preparing and leading STEM (Science, Technology, Engineering, and Math) outreach projects. Students will learn the principles behind outreach activities that are used with K-12 students to educate and excite them about STEM subjects and opportunities. Students will also lead these activities and work together to design new activities.

**Course Objectives:**

* Research scientific topics related to STEM demonstrations and activities.
* Prepare and lead outreach activities based on STEM topics for K-12 students.
* Host on-campus STEM-related educational events, such as “SciFri” science activities and Upward Bound Saturday Sessions.