



## Technological Advances in STEM

*Spring 2014*

### Interdisciplinary Studies (INTDS) 103

Section # 52840

**Instructors:** Dr. John Heathcote  
Ms. Sharon Wu

**Class Times:** *Lecture:* F, 12:00-12:50 am, PHY-75  
*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](mailto:john.heathcote@reedleycollege.edu)  
**Office Hours:** M,W,Th 11:00-11:50 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](mailto:sharon.wu@reedleycollege.edu)  
**Office Hours:** W,Th,F 11:00-11:50 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.

<b>Add Date:</b>	Friday, January 31 <sup>st</sup>	Last day to add a course
<b>Drop Date:</b>	Friday, March 14 <sup>th</sup>	Last day to drop this course
<b>Holidays:</b>	Friday, February 14 <sup>th</sup>	Lincoln Day
	Friday, April 18 <sup>th</sup>	Spring Holiday

**Course Description:**

This is a course on technological developments in STEM (Science, Technology, Engineering, and Math). Students will learn about new developments in STEM-related fields, such as renewable energy, medicine, transportation, communication, and basic science. Students will prepare presentations and activities on these developments for K-12 and college students.

**Course Objectives:**

- Research recent technological and research advances in STEM.
- Prepare and lead outreach activities related to recent technological and research advances in STEM for K-12 students.
- Host on-campus events based upon emerging developments in STEM, such as the Green Summit and Introduce a Girl Scout to Engineering Day.