HIED 697.03W (82660) STEM in Higher Education  
Web Based Class  
Fall 2012, 2nd 7 week term (10/29 – 12/14)

**Instructor:**  
Denise Pheils Ph.D. - Assistant Professor  
Office: Remote (in Ohio!)  
Phone: Calls will be via Skype, see below  
Fax:  
Email: not working yet: Denise.Pheils@tamuc.edu

### COURSE INFORMATION

**NO REQUIRED TEXT FOR THIS COURSE!**


Relevant and related articles will be listed in the online courseroom for each specific module if necessary for completing the module.

**Course Description:**  
This course provides a detailed overview of the many ways to incorporate STEM concepts in an online course. Key aspects of virtualization, vicarious learning, technology videos and White Papers, and many other tools and concepts are utilized. Students will be introduced to a variety of technologies available and will have the opportunity to create and assess online STEM modules. Students will be required to complete several projects to demonstrate mastery of the course content.

**Student Learning Incomes:**  
Learning outcomes are what you are able to do as a result of the activities, readings, instruction, etc. that have occurred in this course – these are the expectations of you. Assignments/activities related to these outcomes are described in the assignments and assessments portion of the syllabus.

1. Identify the concepts relevant to providing a quality learning experience for a global market.
2. Identify and explain a variety of teaching and technology methods to support the various components of a globally available online higher education course.
3. Recognize the necessary elements to maintain and meet accreditation standards while providing a globally accessible and supportive environment.
4. Develop an ability to evaluate the work of global students without compromising any fundamental aspect of the student or the instructor.
5. Analyze, evaluate and apply the tools and techniques identified to support online learners and faculty in a global environment.
6. Develop sensitivity to global issues in online learning.
7. Develop a plan for reflection to aid in self-assessment, personal improvement, tolerance, and compromise when necessary.

**COURSE REQUIREMENTS**

**Instructional /Methods /Activities / Assessments:**
A wide variety of instructional methods will be utilized to provide meaningful learning experiences, including group problem-solving activities, independent research, and interactive discussion boards.

**Participation, Attendance, and Assignments:**
Demonstration of work ethic, responsibility, and integrity related to course objectives: This area is a holistic score based on demonstrated effort and participation. It includes assignments given for each module. Participation includes reading materials prior to posting to course discussion questions and responding with quality and substance to at least two different learners per module during the appropriate week.

Students will work on their assignments according to the course schedule on the course calendar and submit these in a Word Document to the Dropbox.

Discussion Board (10 points per post x 3 per module x 7 modules = 210 points)

Assignments (150 points per module x 7 modules = 1050 points)

**Module Breakdown:**
1. Science

The first assignment will be to complete a paper or presentation the student has developed to address the various issues, concerns, and opportunities related to globally distanced students in an online higher education course. Many of the key elements will be discussed in the corresponding course module. Students are expected to identify the issues and supply multiple ways to address the issue and provide support for the student.

2. Technology

The second assignment will be to complete a paper or presentation the student has developed to address the various issues, concerns, and opportunities related to students who may not be as fluent in the primary language of the course when in an online higher education course. Many of the key elements will be discussed in the corresponding course module. Students are expected to identify the issues and supply multiple ways to address the issue and provide support for the student.

3. Engineering

The third assignment will be to complete a paper or presentation the student has developed to address the various issues, concerns, and opportunities related to students who may not be as assertive due to cultural issues and how to provide learning opportunities, supports, and the comforts necessary to encourage the necessary assertiveness from every student in an online class and to allow for each student to participate as a member of a group and not as the leader when in an online higher education course. Many of the key elements will be discussed in the
corresponding course module. Students are expected to identify the issues and supply multiple ways to address the issue and provide support for the student.

4. Mathematics

The fourth assignment will be to complete a paper or presentation the student has developed to address the various issues, concerns, and opportunities related to recognizing the value each student brings to the discussion and to the online community. Often, students have real-world experience and different global experiences than others in the course. Providing opportunities for students to share course and content relevant personal experiences from their specific global experiences may greatly enhance the course and provide for vicarious learning of all participants when in an online higher education course. Many of the key elements will be discussed in the corresponding course module. Students are expected to identify the issues and supply multiple ways to address the issue and provide support for the student.

5. Beyond Whiteboarding

The fifth assignment will be to complete a paper or presentation the student has developed to address the various issues, concerns, and opportunities related to challenging students in online discussions (or with other tools in an online environment) to question, disagree with respect, and ask for more information. Great insight and value may be gained when students are comfortable enough to offer a challenge to stated points within the discussion posts of an online higher education course. Many of the key elements will be discussed in the corresponding course module. Students are expected to identify the issues and supply multiple ways to address the issue and provide support for the student.

6. Blogs and Wikis

The sixth assignment will be to complete a paper or presentation the student has developed to address various cultural issues that may be present in a global environment, or even in a local environment. The focus of this module is how to be sensitive to the various differences without amplifying them or using them as an excuse. Many of the key elements will be discussed in the corresponding course module. Students are expected to identify the issues and supply multiple ways to address the issue and provide support for the student.

7. Wrap-up of all that is Technical

The seventh assignment will be to complete a paper or presentation the student has developed to address any issues not previously discussed. Topics include how to meet the challenges and provide for each of the modules above while still adhering to the necessary rigor determined by the school, program, and accrediting bodies. Personality and Openness issues including the student as instructor and instructor as student will also aid in assessing the type of educator each student presently is and allow for reflection and tips for how to become more open and accepting, if necessary. After all, there is the potential to change the world in an online course – and shouldn’t that change be for the better?

**TECHNOLOGY REQUIREMENTS**

This is an online course and some obvious technological resources will be required. Access to a computer with
- Internet access (high-speed preferred)
- Word processing software (Microsoft Word preferred)
- If a detailed presentation is completed, Microsoft PowerPoint will be needed.
- Microphone for classlive sessions throughout the semester (these run about $10)
- Speakers so you can hear me and others during our classlive sessions and other audio enhanced assignments throughout the semester.

As a student enrolled at Texas A&M University-Commerce, you have access to an email account via myLeo - all my emails sent from eCollege (and all other university emails) will go to this account, so please be sure to check it regularly. Conversely, you are to email me via the eCollege email system or your myLeo email as our spam filters will catch yahoo, hotmail, etc. and I will not check for your email in spam.

**Access and Navigation**

**eCollege Technical Concerns:** Please contact the eCollege HelpDesk, available 24 hours a day, seven days a week. by sending an email directly to helpdesk@online.tamuc.org. You may also reach the HelpDesk by calling (toll-free) 1-866-656-5511, or through the Online Chat by clicking on the "Live Support" tab within your eCollege course.

**Course Concerns:** If you have questions pertaining to the content of this course (e.g., questions about an exam, about course due dates, etc.), please contact your instructor via email, through the "Virtual Office," or during office hours.

**Other Questions/Concerns:** Contact the appropriate TAMU-C department relating to your questions/concern. If you are unable to reach the appropriate department with questions regarding your course enrollment, billing, advising, or financial aid, please call 903-886-5511 between the hours of 8:00 a.m.- 5:00 p.m., Monday through Friday.

**COMMUNICATION AND SUPPORT**

**Interaction with Instructor Statement:**

**Participation & Communication:** I expect each of you to be active and thoughtful participants within the learning environment (eCollege) and your learning community. You are to expect the same of me. This includes completing the extensive readings related to course topics, team and/or individual research proposal topics and participation in proposal revision activities (submission of individual draft sections and evaluation of draft sections from other class members).

1. Email is the best way to reach me as I check it multiple times most days. A reply will be sent within 24 hours depending upon the time your message was received. Please do not send me panicked last minute emails with the word HELP!!!!!!!!! in the subject line. **HOWEVER....in order to avoid duplication of questions and answers I prefer that you post all class related questions in the Virtual Office Course Link. It is likely that your peers will have the same question. Students who know the answer to the posted question are encouraged to respond in assistance of your peers. Providing a correct answer to a peer demonstrates knowledge and understanding of the topic and may earn the responder bonus points. Emails of a personal nature should be sent to my email address via eCollege.**

2. Or if you want to talk via the "phone" download a program called Skype - a free internet calling service that you can use to chat live or place a call to me. I have a video camera and can also transmit my video
via a skype call. To download the program, go to www.skype.com and search for NEED TO ADD MY SKYPE PRESENCE as the contact to add me to your list.)

Course and University Procedures / Policies

Course Specific Procedures:
Citizenship: All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. (See Student 92s Guide Handbook, Policies and Procedures, Conduct).

Late work: Late work is not accepted. You will have plenty of notification and time to complete course assignments. If you know you are going to be out of town and unable to access a computer, plan ahead. See course semester outline at the bottom of this syllabus.

Plagiarism: Plagiarism WILL NOT be tolerated and will result in an automatic F in the course. Various versions of your work and final papers will be run through Turnitin software - this is not meant to "catch" you in the act, but rather assist you in seeing possible areas that may be unintentionally plagiarized and allow for editing your work.

Attendance: This is an online class therefore attendance is up to you! You will be required to work as a team via various activities. The quality of your contributions and regular participation activities, including attendance via ClassLive sessions, will be considered attendance. It is strongly encouraged that you attempt to log into the course everyday and/or check your email for messages in order to not get behind. The synchronous sessions via ClassLive are not required, but it is in your best interest to attend when available during the semester.

Scholarly Expectations: All works submitted for credit must be original works created by the scholar uniquely for the class. It is considered inappropriate and unethical, particularly at the graduate level, to make duplicate submissions of a single work for credit in multiple classes, unless specifically requested by the instructor. Work submitted at the graduate level is expected to demonstrate higher-order thinking skills and be of significantly higher quality than work produced at the undergraduate level.

University Specific Procedures:

ADA Statement
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services
Texas A&M University-Commerce
Gee Library 132
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
StudentDisabilityServices@tamu-commerce.edu

Student Conduct
All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. (See Code of Student Conduct from Student Guide Handbook).