HIED 697: Special Topics: STEM Education in Higher Education
SYLLABUS Spring 2020

*Syllabus is subject to change at any time; most updated copy available online*

Instructor: Sarah Rodriguez, Ph.D.
Office Location: Education North, Room 104E
Office Hours: Tuesday 2-5 (on-campus); Wednesday 2-3 (electronic); Thursday 2-3 (electronic)
Office Phone: (903) 886-5518
University Email Address: Sarah.Rodriguez@tamuc.edu
Preferred Form of Communication: Email
Communication Response Time: Email is the best way to reach me as I check it daily. A reply will be sent within 48 hours, depending upon the time your message was received.

COURSE INFORMATION

Materials – Textbooks, Readings, Supplementary Readings
Textbook(s) Required:

Course Description
STEM Education in Higher Education – A special topics course of best practices and current emerging trends in STEM Education in Higher Education.

Student Learning Outcomes:

At the end of the course students will be able to:

1. The learner will be an active, engaged participant within the learning community through contributions of relevant questions and value-added responses in the Virtual Classroom and threaded discussions.

2. The learner will demonstrate an awareness of the various forms of STEM education in higher education.

3. The learner will be able to identify and describe trends and best practices in STEM education.

4. The learner will demonstrate the ability to articulate ideas and information in a clear and concise manner using advanced modes of communication.

The syllabus/schedule are subject to change.
COURSE REQUIREMENTS

Instructional Methods/Activities/Assessments

Class Participation (20 points): Learning is a process of co-constructing knowledge within a discourse community; as a result, a portion of your grade is tied to your participation in class discussions and activities.

- Professor Check-in #1 (5 points)
- PLUS/DELTA Form (5 points)
- Professor Check-in #2 (5 points)
- Peer Review Activity (5 points)

Reflection Papers (15 points): Throughout the course, you will write three reflections to reflect critically on given topics.

- Reflection Paper #1 (5 points)
- Reflection Paper #2 (5 points)
- Reflection Paper #3 (5 points)

Final Project (65 points — total)

This course requires that students complete a final project that is broken down into smaller sections. You will develop a final project and report on your findings. This assignment provides an opportunity to apply the information and skills learned in this course in a project that can be used for funding, a conference, or other scholarly/practical uses. In the final project, you make the case for your topic, citing relevant literature, theoretical constructs, practical implications, etc.

Research Project Deliverables:

- Part 1: Introduction (10 points)
- Part 2: Literature Review (10 points)
- Part 3: Implications for Policy/Practice (10 points)
- Part 4: Final Research Project Write-Up (20 points) [written as report, be sure to use feedback from #1-3 to revise before submission]
- Part 5: Final Research Presentation (15 points)

PLEASE NOTE—LATE SUBMISSIONS WILL NOT BE ACCEPTED. All papers must be thoroughly edited before submission and must conform to the APA Style Manual for writing style accuracy.

Grading

The syllabus/schedule are subject to change.
Class Participation 20pts
Qualitative Reflection Papers 15pts
Research Project 65pts
  Part 1 10
  Part 2 10
  Part 3 10
  Part 4 20
  Part 5 15
= 100 points

The minimum number of points required for each grade is as follows: A-90; B-80; C-70 (Please remember, no grade below a B may be applied to a doctoral degree.)

COMMUNICATION AND SUPPORT

All communication with the professor should be directed to the professor's university e-mail address.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment (Texas A&M University-Commerce Procedure A12.08 see Student Guidebook, Policies and Procedures, Conduct).

All graduate students are expected to maintain high standards of academic integrity and honesty. Academic dishonesty, as defined in Texas A&M University-Commerce Procedure 13.99.99.R0.10, will incur a penalty commensurate with the severity of the infraction, from failure on the applicable assignment to failure in the course. A report of each infraction also is submitted to the Graduate School for further action.

A&M-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information, or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

ADA Statement
Students with Disabilities
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- Room 162
The syllabus/schedule are subject to change.

Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
Email: studentdisabilityservices@tamuc.edu
Website: Office of Student Disability Resources and Services
http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the Carrying Concealed Handguns On Campus document and/or consult your event organizer.

Web url:
http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

TECHNOLOGY REQUIREMENTS
Browser support
D2L is committed to performing key application testing when new browser versions are released. New and updated functionality is also tested against the latest version of supported browsers. However, due to the frequency of some browser releases, D2L cannot guarantee that each browser version will perform as expected. If you encounter any issues with any of the browser versions listed in the tables below, contact D2L Support, who will determine the best course of action for resolution. Reported issues are prioritized by supported browsers and then maintenance browsers.

Supported browsers are the latest or most recent browser versions that are tested against new versions of D2L products. Customers can report problems and receive support for issues. For an optimal experience, D2L recommends using supported browsers with D2L products.

Maintenance browsers are older browser versions that are not tested extensively against new versions of D2L products. Customers can still report problems and receive support for critical issues; however, D2L does not guarantee all issues will be addressed. A maintenance browser becomes officially unsupported after one year.

Note the following:
- Ensure that your browser has JavaScript and Cookies enabled.
- For desktop systems, you must have Adobe Flash Player 10.1 or greater.
• The Brightspace Support features are now optimized for production environments when using the Google Chrome browser, Apple Safari browser, Microsoft Edge browser, Microsoft Internet Explorer browser, and Mozilla Firefox browsers.

### Desktop Support

<table>
<thead>
<tr>
<th>Browser</th>
<th>Supported Browser Version(s)</th>
<th>Maintenance Browser Version(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft® Edge</td>
<td>Latest</td>
<td>N/A</td>
</tr>
<tr>
<td>Microsoft® Internet Explorer®</td>
<td>N/A</td>
<td>11</td>
</tr>
<tr>
<td>Mozilla® Firefox®</td>
<td>Latest, ESR</td>
<td>N/A</td>
</tr>
<tr>
<td>Google® Chrome™</td>
<td>Latest</td>
<td>N/A</td>
</tr>
<tr>
<td>Apple® Safari®</td>
<td>Latest</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### Tablet and Mobile Support

<table>
<thead>
<tr>
<th>Device</th>
<th>Operating System</th>
<th>Browser</th>
<th>Supported Browser Version(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Android™</td>
<td>Android 4.4+</td>
<td>Chrome</td>
<td>The current major version of iOS (the latest minor or <strong>point</strong> release of that major version) and the previous major version of iOS (the latest minor or <strong>point</strong> release of that major version). For example, as of June 7, 2017, D2L supports iOS 10.3.2 and iOS 9.3.5, but not iOS 10.2.1, 9.0.2, or any other version. Chrome: Latest version for the iOS browser.</td>
</tr>
<tr>
<td>Apple</td>
<td>iOS®</td>
<td>Safari, Chrome</td>
<td></td>
</tr>
<tr>
<td>Windows</td>
<td>Windows 10</td>
<td>Edge, Chrome, Firefox</td>
<td>Latest of all browsers, and Firefox ESR.</td>
</tr>
</tbody>
</table>

• You will need regular access to a computer with a broadband Internet connection. The minimum computer requirements are:
  - 512 MB of RAM, 1 GB or more preferred
  - Broadband connection required courses are heavily video intensive
  - Video display capable of high-color 16-bit display 1024 x 768 or higher resolution

• You must have a:
  - Sound card, which is usually integrated into your desktop or laptop computer
  - Speakers or headphones.
  - *For courses utilizing video-conferencing tools and/or an online proctoring solution, a webcam and microphone are required.
• Both versions of Java (32 bit and 64 bit) must be installed and up to date on your machine. At a minimum Java 7, update 51, is required to support the learning management system. The most current version of Java can be downloaded at: JAVA web site http://www.java.com/en/download/manual.jsp

• Current anti-virus software must be installed and kept up to date.

Running the browser check will ensure your internet browser is supported.
  Pop-ups are allowed.
  JavaScript is enabled.
  Cookies are enabled.

• You will need some additional free software (plug-ins) for enhanced web browsing. Ensure that you download the free versions of the following software:
  o Adobe Reader  https://get.adobe.com/reader/
  o Adobe Flash Player (version 17 or later) https://get.adobe.com/flashplayer/
  o Adobe Shockwave Player  https://get.adobe.com/shockwave/
  o Apple Quick Time  http://www.apple.com/quicktime/download/

• At a minimum, you must have Microsoft Office 2013, 2010, 2007 or Open Office. Microsoft Office is the standard office productivity software utilized by faculty, students, and staff. Microsoft Word is the standard word processing software, Microsoft Excel is the standard spreadsheet software, and Microsoft PowerPoint is the standard presentation software. Copying and pasting, along with attaching/uploading documents for assignment submission, will also be required. If you do not have Microsoft Office, you can check with the bookstore to see if they have any student copies.

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu.

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

Brightspace Support
Need Help?
Student Support

If you have any questions or are having difficulties with the course material, please contact your Instructor.

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Technical Support
If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778 or click on the Live Chat or click on the words “click here” to submit an issue via email.

System Maintenance
Please note that on the 4th Sunday of each month there will be System Maintenance which means the system will not be available 12 pm-6 am CST.

Academic Integrity
Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

Undergraduate Academic Dishonesty 13.99.99.R0.03

Graduate Student Academic Dishonesty 13.99.99.R0.10
http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf

Nondiscrimination Notice
Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.