



The Frederick Center for Professional Development Course Syllabus

Course Title:	<i>STEM in the Sticks: Engaging Rural Students in Science Education</i>
Dates:	TBA
Location:	Online – www.thefrederickcenter.com
Credit Hours:	2.4 Continuing Education Units (CEUs)
Participants:	Educators, counselors, social workers
Instructor of Record:	Cory Chan-Frederick, M.Ed.
Contact:	cory@thefrederickcenter.com +1-740-517-6997
Required Media:	“STEM in the Sticks” (2012), “October Sky” (1999), “Addressing the Challenges of Rural Teachers and Students in Science Education” (2013)

The Frederick Center of Professional Development Conceptual Core - The Frederick Center (TFC) was founded in order to address issues of social equality and social justice by delivering courses and imparting knowledge, tools, and resources to people in the ‘helping professions’. Through education, together, we can change the world.

Professional Standards:

Ohio Department of Education – Standard Four - High Quality Professional Development (HQPD)

- 4.1 Professional learning opportunities are based on identified needs.
- 4.2 Professional development includes a variety of learning experiences.

Learning Outcomes: Students attending schools in rural communities often face challenges when it comes accessing adequate, experiential STEM (science, technology, engineering, mathematics) education. Economic hardships, school funding, parental involvement/resources, and teacher preparedness are factors that contribute to the growing STEM achievement gap between affluent urban communities and underserved rural communities. This course will examine the cultural expectations, risk factors, and best practices to engage rural students in the rapidly growing STEM education and industry.

Objectives:

- Define STEM education as it relates to Race to the Top and Common Core standards
- Identify 3 important situations that many rural students experience
- Analyze contributing environmental and educational factors affecting student performance
- Design strategies to provide rural students with experiential STEM education

Course Policies:

Assessment for the Course

The final exam is worth 100 points. It is located in Module 6, and it will be available to you at the beginning of week 6. Once you begin, do not attempt to close and reopen the exam; only the first submission will be graded. You will need to earn at least 80 points to receive credit for this course.



Course Policies:

The Frederick Center

To access this online course, please follow these steps:

- Go to www.thefrederickcenter.com.
- Click the **CATALOG** button at the top of the home page.
- Scroll down until you find the name of your course. Click on it.
- On the course overview page, click the name of your institution.
- On the course access page that opens next, you can access the syllabus, lectures, activities, exam, and my contact information. When you are ready to begin, click **LECTURES**. You will be directed to our online learning platform at Udemy.com.
- If you are new to Udemy, you will need to create an account. If prompted to make a payment, click **REDEEM A COUPON**, and enter the coupon code: **CEU**. Click **CONTINUE TO COURSE**.
- You will now be able to view all the lectures and course materials at The Frederick Center and Udemy.

Communication

The fastest way to contact me is via text or phone: 740-517-6997 (Mon. – Fri. 5 PM – 9PM EST). You can also reach me at cory@thefrederickcenter.com. Please be sure to state your name and the course name in the body of your email, so I can quickly and easily identify your needs.

Course Materials

Materials, lectures, and additional resources will be posted on the course website. Several assignments require viewing films that will help to conceptualize the information. The required films are available online (links provided), and may also be found at your local library, video rental store, or DVD kiosk. *Please remember that it is your responsibility to locate and view these films. Don't wait until the last minute to search for them. If the provided link doesn't work for you, you may need to Google the film title, and/or search for clips on YouTube, or similar sites.*

Course Requirements

Assignments are MANDATORY and must be submitted as stated. All the course materials, lectures, and exams are available on The Frederick Center website, www.thefrederickcenter.com.

Quizzes (0 points.)

Weekly self-quizzes will test your understanding of the topics we've covered. There are no recorded grades, but please consider them as part of your participation points.

Forum Posts

The Forum is a tool on TFC's website that will allow us to ask questions and share opinions about the course materials. Forum posts should reflect your own feelings, thoughts, etc., and you can also post brief responses to your classmates. Information shared in the forum is visible to each member of TFC and should be kept professional and confidential.

Final Exam (100 pts.)

The final exam has multiple-choice and true/false questions. It is comprehensive and covers the lectures, articles, films, and videos. You may use your notes, however collaborating with others is considered cheating.



Do not attempt to close and reopen the exam; only the first submission will be graded. If your Internet connection is poor, you should find a library, or other suitable location to take the exam. After it is made available, you will have two weeks to complete and submit the exam. Please contact technical support at support@thefrederickcenter.com if you have trouble accessing the exam.

Attendance

This is an online course, and you are responsible for accessing and completing assignments by the specified due date.

Dishonesty:

DO NOT SUBMIT COURSEWORK FROM ANOTHER CLASS. DO NOT RESUBMIT PREVIOUSLY SUBMITTED WORK. The Frederick Center for Professional Development Code of Conduct prohibits all forms of academic dishonesty. These include cheating; plagiarism; forgery; furnishing false information to TFC staff, instructor, website, etc.; and alteration or misuse of TFC's intellectual property, intellectual property of instructors, documents, records, identification, and/or websites is strictly prohibited. If a participant engages in course-related academic dishonesty, they will be barred from this and any additional current, or future courses in which they may be, or may attempt to be enrolled.

Late Submissions/Requirements Not Met

Assignments submitted after the posted due date will not be graded. If an assignment cannot be submitted due to a technical problem, you **MUST** notify me *prior to the due date*. "Incomplete" (I) grades will only be recorded in special circumstances.

Intellectual Copyright Policy

The lectures, online activities and all materials associated with this class and developed by the instructor are copyrighted in the name of Cory Chan-Frederick on July 4, 2012 unless otherwise stated.

Special Accommodations

In compliance with the Americans with Disabilities Act (ADA), all students are entitled to "reasonable academic accommodations." If you are a student with special needs, please notify me at the beginning of this class.

Modifications

This syllabus may be modified as required.

Agenda

Week 1

1. Review course materials located in Module 1.
2. If you have a comment or question, post it on the Forums page by the end of week one.

Week 2

1. Review course materials located in Module 2.
2. If you have a comment or question, post it on the Forums page by the end of week two.

Week 3

1. Review course materials located in Module 3.
2. If you have a comment or question, post it on the Forums page by the end of week three.

Week 4

3. Review course materials located in Module 4.
4. If you have a comment or question, post it on the Forums page by the end of week four.

Week 5

3. Review course materials located in Module 5.
4. If you have a comment or question, post it on the Forums page by the end of week five.

Week 6

3. Review course materials located in Module 6.
4. If you have a comment or question, post it on the Forums page by the end of week six.
5. **Submit the FINAL EXAM, which is located on the course page, within two weeks.**