EDCI 690.42B: Education and Sustainability

Texas A & M University-Commerce Spring, 2020

INSTRUCTOR INFORMATION

Instructor: Dr. Martha M. Foote

Office: Education South, #227

Office Phone: 903-886-5535

E-Mail: Martha.foote @tamuc.edu 1

Office Hours: 2:00-4:30 PM, Tuesdays/Thursdays or appointment

:

COURSE INFORMATION

Stone, M. K., (2010) *Smart by Nature: Schooling for Sustainability. Center for Ecoliteracy. Healdsburg, CA: Watershed Media.*

ISBN 10: 0-9709500-4-7

Goleman, D., (2012). *EcoLiterate: How Educators are Cultivating Emotional, Social, and Ecological Intelligence. Center for Ecoliteracy, San Francisco, CA: Jossey-Bass.*

ISBN #: 978-1-118-10457-6

School is the most influential institution in modern society.⌞SEP⌟There are many ways to design an organization that promotes learning and the present industrial model of schooling is not one of them. There are some exciting counter examples, but they haven't spread. The community, cultural institutions and business have to be involved. We need a broader base of change. In the eyes of a child, the future is alive. Maybe children need to step forward as leaders.

"Schooling for sustainability, as described in *Smart by Nature*, has never been more important." – *Daniel Goleman, author of* Ecological Intelligence *(Broadway Books, 2009).* ~ Peter Senge, Speech at Shelburne Farms, Vermont, July 17, 2008

The "industrial model of schooling" that Peter Senge refers to is built on frames of constriction, control, and a limited body of knowledge. The new, innovative models of school emerging today are learning communities evolving in environments of openness, flexibility, limitless knowledge, inquiry and invention. Educators in these new models of school understand multiple ways of knowing, learning differences, ever expanding technologies, and child and adolescent psychology. The models evolve in accordance with systems thinking and organizational learning. Overarching the innovations in education is the compelling issue of sustainability: the sustainability of our interconnected economic, environmental and social systems. We must prepare our young people to create a remarkably different way of living, *"one that can restore ecosystems and protect the environment while bringing forth innovation, prosperity, meaningful work, and true security (Hawken, 1993)."*

Course Description

This course presents an opportunity for doctoral students to explore the issues related to sustainability and how educators can design instructional opportunities in order to include these issues within PreK-16 education; and, to investigate through the reading, discussion and critical analysis literature and research pertaining to sustainability issues. The focus of our study will be to investigate the core competencies of sustainability:

The *syllabus/schedule are subject to change.*

Sustainability Education includes the acquisition of particular knowledge and skills, and the values needed to put this knowledge into practice. They include:

☐ Ecological knowledge (

☐ The ability to think systemically (

☐ The ability the think critically and to solve problems creatively (

☐ The ability to assess the impact of human actions and decisions (

☐ The ability to envision long term consequences (

☐ A deeply felt concern for the well-being of the Earth and all living things (

☐ A sense of wonder and a deep appreciation of place (

☐ Empathy and the ability to see and appreciate multiple perspectives (

☐ A commitment to equity, justice, inclusivity, and respect for all people

☐ Skills in building, governing, and sustaining communities (

☐ The ability to assess and adjust the uses of energy and resources (

☐ The capacity to convert convictions into practical, effective action (

(From The Center for Ecoliteracy's Competencies for Sustainability Education)

The *syllabus/schedule are subject to change.*

By the end of the course, students will be able to

☐Identify critical concepts in thinking about teaching and learning within education for sustainability as they relate to an educational setting; (

☐Critically analyze their own values, attitudes and beliefs about learning and teaching as they relate to sustainability issues; (

☐Identify pedagogical approaches in which sustainability can be advanced; (

☐Evaluate the pedagogical intent and impact of an education for sustainability curriculum (resource; (

☐Design a professional learning module for educators on an aspect of sustainability (education (

COURSE REQUIREMENTS

The major requirements for this course will be to:⌊SEP⌋

Attend class session,

come prepared by reading t**he assigned readings and** participate ⌊SEP⌋**in related discussions and collaborative activities in each class session. Worth 20% of overall grade. One excused absence may be made up by the writing of a 1,000 word paper on the topics under study for that session.** ⌊SEP⌋

At the end of each class session, you will be asked to reflect and represent insights and implications for teaching and learning gleaned from that evening's session--- with⌊SEP⌋the idea of connecting to both readings and class discussions/provocation . This will be accomplished through online discussion boards or response papers uploaded to thethe appropriate submission folder. Worth 20 % of overall grade.

The *syllabus/schedule are subject to change.*

-

Evaluate the pedagogical intent and impact of an education for sustainability curriculum resource Worth 20 % of overall grade.

Design and present to the class a Professional Learning Module (PLM) for educators on some aspect of sustainability education. Worth 40% of overall grade. In order to do this, students will need to complete the following steps:.

1. Conduct a review of literature and research about your chosen aspect of sustainability and pedagogical approaches for teaching PreK- 16 students (you may choose the level) about this aspect of sustainability. Your literature review must include at least 10 sources cited in APA format.

2. Based on your newfound knowledge of this aspect of sustainability, design a professional learning module that would that could lead to support for this aspect of sustainability and involve at least 5 learning events (sessions, online modules, etc) for educators on this aspect of sustainability. The PLM should also result in in implementation of at least one new ongoing "way of operating" for the class or school that supports this area of sustainability.

3. Additionally, design a presentation about your learning and the PLM you've developed to present to the class on our last class session: determine a way to provide an overview of your PLM and your new understandings or inquiries [what you now understand and/or new inquiries you want to explore as a result of this study]

Learning is the key factor on which a new way of teaching should be based, becoming a complementary resource to the child and offering multiple options, suggestive ideas, and sources of support. Learning and teaching should not stand on opposite banks and just watch the river flow by; instead, they should embark together on a journey down the water. Through an active, reciprocal exchange, teaching can

strengthen learning how to learn.

☐ *Complete a self-evaluation of your learning in this course. [Required for course completion]*

Final grades in this course will be based on the following scale:

A = 90%-100%
B = 80%-89%
C = 70%-79%
D = 60%-69%
F = 59% or Below

Course Evaluation:

Criteria for each requirement will be discussed and will include student participation in the generation of the final rubric. The following scoring and corresponding description of evaluating work will be adapted for the rating on the rubric for each course requirement; and ultimately converted to the appropriate number of points for each assignment:

☐4 = Highly impressive - well above average in thought, organization, and professional choices. Evidences significant control of own decision-making and learning processes. (

☐3 = Commendable - in command of thought, organization, and professional choices. Evidences acceptable control of own decision-making and learning processes. (

☐2 = Developing - probably functional in terms of thought, organization, and professional choices. Responsible, but in need of instruction. Evidences some control of own decision- making and learning processes. (

☐1 = Minimal - somewhat lacking in thought, organization, and

responsibility. Lack of awareness of professional choices. Evidences minimal control of own decision-making and learning processes. (

☐Requirements to be Scored:

☐#1 Attendance, Participation, & Professionalism⌞sᴇᴘ⌟

☐#2 Assigned Readings and Response Activities (Discussion Boards or Reflective (Papers Uploaded to the submission folder in D2L

☐⌞sᴇᴘ⌟#3 Critique of Curriculum Resource (Uploaded to Submission Folder)

☐ (#4 Professional Learning Module (PLM), including 10 sources cited and Presentation to the Class (

☐#5 The Student's Final Written Evaluation (

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.

The syllabus/schedule are subject to change.

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

Browser	Supported Browser Version(s)	Maintenance Browser Version(s)
Microsoft® Edge	Latest	N/A
Microsoft® Internet Explorer®	N/A	11
Mozilla® Firefox®	Latest, ESR	N/A
Google® Chrome™	Latest	N/A
Apple® Safari®	Latest	N/A

Tablet and Mobile Support

Device	Operating System	Browser	Supported Browser Version(s)
Android™	Android 4.4+	Chrome	Latest
Apple	iOS®	Safari, Chrome	The current major version of iOS (the latest minor or **point** release of that major version) and the previous major version of iOS (the latest minor or **point** release of that major version). For example, as of June 7, 2017, D2Lsupports 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

The syllabus/schedule are subject to change.

Device	Operating System	Browser	Supported Browser Version(s)
			iOS browser.
Windows	Windows 10	Edge, Chrome, Firefox	Latest of all browsers, and Firefox ESR.

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

- **For YouSeeU Sync Meeting sessions _8 Mbps_ is required.** Additional system requirements found here: https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements

- You must have a:
    - o Sound card, which is usually integrated into your desktop or laptop computer
    - o Speakers or headphones.
    - o *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/

The _syllabus/schedule are subject to change._

- o   [Apple Quick Time](http://www.apple.com/quicktime/download/)   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.

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

D2L runs monthly updates during the last week of the month, usually on Wednesday. The system should remain up during this time unless otherwise specified in an

The syllabus/schedule are subject to change.

announcement. You may experience minimal impacts to performance and/or look and feel of the environment.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

Grades for a specific assignment will loose one letter grade for each week it is late. Class attendance is critically important and will result in loss of points for the attendance and participation grade.

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

University Specific Procedures

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the Student Guidebook. http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: Netiquette http://www.albion.com/netiquette/corerules.html

TAMUC Attendance

For more information about the attendance policy please visit the Attendance webpage and Procedure 13.99.99.R0.01. http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf

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

The *syllabus/schedule are subject to change.*

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf

Graduate Student Academic Dishonesty 13.99.99.R0.10

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

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
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/

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.

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.

The syllabus/schedule are subject to change.

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.

COURSE OUTLINE / CALENDAR

Seminar Dates and Topics

1ˢᵗ Session, February 11, 2020: Coming Together: Getting acquainted, course overview; Sustainability and Coal

Textbook readings for this class session: Chapter I, "Introduction: Smart by Nature: What can you do?;" and, Chapters 1 & 2 in *Ecoliteracy*.

Assignments for our next class session: Respond to the Discussion Prompt for Session I in e- college; Read Chapter 2: "It's Lunchtime at School: What in Health is Going on Here?" in *Smart by Nature*; and Chapters 7 & 8 in *Ecoliteracy*.

2ⁿᵈ Seminar Session, February 25, 2020: Lessons learned from Food Systems Efforts; and, Nurturing Communities with Food

"I have learned that where we get our food is so important, and how everything is so connected, and just how food itself nurtures your body and how we nurture it." – Priscilla Hernandez

What children learn does not follow as an automatic result from what is taught. Rather, it is in large part due to the children's own doing as a

The *syllabus/schedule are subject to change.*

consequence of their own activities and own resources.

Assignments for our next class session: Respond to the Discussion Prompt for Session 2 in e- college. Read Chapter 3, in *"The Smart by Nature Campus"; and Chapter 3 in Ecoliteracy.* Determine a curriculum resource to critique and begin your review of that resource. Prepare the literature review framework for your PLC and submit this portion of your PLC to Dropbox by our next class session for review and feedback from your instructor.

3rd Seminar Session: March 24, 2020: The Smart by Nature Campus; and, "Where's the Oil?"

"Education is central." Education, in fact, offers the opportunity to build on children's inherent love of nature and, from there, to cultivate a deep capacity for emotional, social, and ecological intelligence." Goleman, D., *Ecoliteracy*, p. 54

Assignments for our next class session: Chapter 4, "Sustainability: A Community Practice" in *Smart by Nature*; and, Chapters 5 & 6 in *Ecoliteracy*. Complete your Curriculum Resource Critique and Bring a Copy to Class. Upload into the submission folder by the date of our next class session, April 7th.

4th Seminar Session: April 7, 2020: Sustainability as a Community Practice; and Sharing the Water; From Restoration to Resilience

Environment as the Third Teacher- Hermeneutic discussion about constructing and organizing spaces that enable children to recognized and appreciate sustainable systems

It has been said that the environment should act as a kind of aquarium which reflects the ideas, ethics, attitudes and life-style of the people

who live in it.⌞SEP⌟*We have been working along these lines.* ------------------- -- -----------

Assignments for our next class session: Chapter 5*, Where Teaching and Learning Come Alive; and, Chapters 9 & 10 in Ecoliteracy*

Complete your Professional Learning Module (PLM) and presentation and bring to class on May 5th. Be prepared to present your PLM to your classmates.

5th Seminar Session: May 5, 2020: Lessons learned from Teaching and Learning about Sustainability

Final Assignment: Complete your written evaluation of your own learning. Upload into the submission folder by May 7th.