FaU
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# **COURSE CHANGE REQUEST Graduate Programs**

Department Teaching and Learning

College Education

UGPC Approval	
UFS Approval	
SCNS Submittal	
Confirmed	
Banner Posted	
Catalog	

Current Co	urse
Prefix and	Number

Current Course Prefix and Number	SCE 6344	Current Course Title Advanced Methods of Environmental Education		
Syllabus must be attached that may be affected by the		o current course details. See <u>Guidelines</u> . Please consult and list departments locumentation.		
Change title to:		Change description to:		
Change prefix	_	Examines multiple contexts for modern environmental education by visiting community providers including parks, nature centers, and wildlife rehabilitators. Requirements: readings, discussions, field trips, interviews, final project.		
From:	To:	Change prerequisites/minimum grades to:		
		Remove prerequisite (SC E6345)		
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From:	To:	Change corequisites to:		
Change credits* From:	To:	Change registration controls to:  Remove graduate standing		
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From: *Review <u>Provost Memorandu</u>	To:	Please list existing and new pre/corequisites, specify AND or OR and include minimum passing grade.		
Effective Term/Year for Changes:				
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Approved by  Department Chair  College Curriculum Chair  College Dean  UGPC Chair  UGC Chair  Graduate College Dean  UFS President  Provost	abaia G	Riderer 1/30/19 2/4/19 2/4/19 GRADUATE COLLECT		
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Email this form and syllabus to <a href="https://uGPC@fau.edu">UGPC@fau.edu</a> one week before the UGPC meeting.

# Advanced Methods of Environmental Education

SCE 6344 Section 001 | CRN 11944 | 3 Credit Hours Spring 2019 | Place: select Saturdays | Time: 10:00am-3:00pm Professor: Bryan Nichols, PhD; nicholsb@fau.edu

Jupiter office EC 207e; extension 6-8558 (561-799-8558)

Office hours: Tue 13:00-16:00



# **Course Description**

Examines multiple contexts for modern environmental education by visiting community providers including parks, nature centers, and wildlife rehabilitators. Requirements: readings, discussions, field trips, interviews, final project.

# Course Objectives

- Experience environmental education as it is being practiced in a range of sub-tropical locations, including school district approved programs in parks, nature centers, and wildlife rehabilitation clinics.
- Learn the basics of good lesson and curriculum planning for environmental education.
- Learn how formal (classroom) and informal education can work together more effectively.
- Become familiar with Institutional Review Board procedures for education research.

# Required Texts

Monroe, M. & Krasny, M. (2016). Across the spectrum: Resources for environmental educators. North American Association for Environmental Educators. Free online https://naaee.org/eepro/resources/acrossspectrum-resources-environmental-educators

National Academies Press. (2009). Learning Science in Informal Environments: People, Places, and Pursuits. Digital version available at: https://www.nap.edu/catalog/12190/learning-science-in-informalenvironments-people-places-and-pursuits

# **Key Readings (provided)**

NAAEE. (2017). Professional development of environmental educators: Guidelines for excellence. ISBN 978-1-884008-78-8.

NAAEE. (2009). Guidelines for excellence: Nonformal EE programs. ISBN 1-884008-89-5.

NAAEE. (2018). Excellence in environmental education: Guidelines for learning (K-12). ISBN 1-884008-75-5.

NAAEE. (2017). Community engagement: Guidelines for excellence. ISBN 978-0-692-87079-2.

NAAEE. (2004). Environmental education materials: Guidelines for excellence. ISBN 1-884008-41-0.

MEERA My Environmental Education Evaluation Resource Assistant (http://meera.snre.umich.edu/)
GRADUATE COLLEGE

# Other Readings

Regents of the University of California (n.d.) Taking FOSS Outdoors. https://www.fossweb.com/taking-foss-outdoors

FEB 1 2 2019

Teaching for Conceptual Understanding in Science, chapter 1 reading

available on Canvas

Received

Philips, D.K. & Carr, K. (2010). Chapter 3: A Guide to Completing an International Review Board Proposal for Preservice Teacher Action Research. In Becoming a Teacher through Action Research: Process, Context, and Self-Study. Routledge.

· available on Canvas.

Publication Manual of the American Psychological Association (6th ed.). (2009). Washington, DC: American

Psychological Association Assignments & Course Requirements

### **Professional Association Conferences**

League of Environmental Educators of Florida (LEEF): <a href="https://www.leef-florida.org/">https://www.leef-florida.org/</a> Florida Marine Science Educators Association (FMSEA): <a href="https://fmsea.org/events/conferences/">https://fmsea.org/events/conferences/</a>

### **NAAEE Professional Development of Environmental Educators Guidelines**

These are referred to by number in the assignments that follow.

- 2.2 How environmental education is implemented 4.7 Curriculum planning
- 3.1 Exemplary environmental education practice 5.2 An inclusive & collaborative learning environment
- 3.2 Emphasis on education, not advocacy 5.3 Flexible and responsive instruction
- 4.1 Knowledge of learners 6.1 Learner outcomes
- 4.2 Knowledge of instructional methodologies 6.2 Assessment that is part of instruction
- 4.3 Planning for instruction 6.3 Improving instruction
- 4.5 Technologies that assist learning 6.4 Evaluating programs 4.6 Settings for instruction

### **Assignments**

Presentations & Participation	* **	Written		
Participation	16	Field Trip Observations	20	
Readings Discussions	6	Environmental Curriculum Review	8	
Project Wild/Aquatic Activities	8	Lesson Plan	8	
Book/Curriculum Share	4	7 Qualities Development & Reflection	8	
Technology Share	4	Conference Review	5	
CITI IRB Training	5	Homeworks	8	

Total Points: 100

There are also several bonus points floating around, so watch out for them...

#### **Participation, Conduct**

16

Attendance, constructive contribution to discussions and trips, engagement with environmental education staff a various sites, note taking, preparation, professional demeanor, questions.

# Readings Discussion

Contribution to discussions of assigned readings each week. Come prepared with points you agreed with, points you would like clarified, and points you found contentious.

#### **Project Wild Certification and Activity**

8

Students will receive training in the nationally recognized Project Wild and Project Wild Aquatic curricula. Students will plan and lead a Project Wild and Project Wild Aquatic activity for the rest of the group, or others at a field site. Try one you've never done. 2.2, 3.1, 3.2, 4.2, 4.5, 6.3

#### **Book / Curriculum share**

4

Choose an environmental education resource book and prepare a summary of it to share with the class (note there is a written component as well, the environmental curriculum review). Sign up for it on the Canvas discussion list (put title/author in subject line). 4.4

#### **Technology Share**

4

Choose two pieces of technology you have encountered or used in environmental education; one electronic, one not. During one of our classes, you will share them with the group, explaining how to use them and why you like

them. 4.2, 4.5

CITI IRB Training 5

Environmental education needs high quality evaluation and research to help it improve, and to provide support and justification for what we do. But what are the ethical and legal ramifications of doing educational research, which can often be classified as "human subjects" research? This training is required by most universities for anyone who wants to take part in and publish research involving people. Instructions will be provided (you are able to take it free as an FAU graduate student) along with a link to upload your certificate after you earn it.

### **Field Trip Observations**

20

Write up a summary of the course field trip sites and their respective EE programs. See Rubric 1. Take notes during visits. Questions that you may want to ask:

- · Who is your current audience? (ages, demographics, income). How diverse is it? How do you know?
- Would you like to expand it? Who are you targeting? Who would you like to target in the future?
- · What do you consider your most effective activities? Why? How do you know?
- · Do you do outreach off site? How, why, and do you have any goals or plans for more?
- What sort of qualities would you like to see in an EE graduate? How could they help you improve your programs?

#### **Environmental Curriculum Review**

8

Review a lesson, unit, or curriculum of your choice (you will share this with the class in a brief presentation as well, see Book / Curriculum share). You may use any EE source, but be sure there is enough material to review adequately (single short lessons are typically not enough). You will be able to sign up for your choice on Canvas; do not pick something another student has chosen.

Environmental education professionals are often tasked with designing, adapting, or choosing curricula that are appropriate for their organization and participants. Using the six key characteristics from NAAEE's *Environmental Education Materials: Guidelines for Excellence* as a guide, write up a critical review of the curriculum you chose to share with the class. Few curricula will successfully or explicitly address each of the NAAEE's materials guidelines for excellence points, but your review should point out notable successes or failures from each of the six key characteristics.

As every curriculum is set up differently, the specific structure and length of your review is up to you. However, it should cover the points above, be easily readable, and organized in a way that would make it useful for someone who was considering using the curricula. Spelling and grammar issues are obvious distractions and should be minimized by careful proof-reading.

Use the rubric scale below to help guide your work, and remember to use the APA tipsheet.

Goal (8)	Exemplary	Satisfactory	Emerging
NAAEE GfE Materials 6 Key Characteristics	Covers each clearly and effectively (6).	Covers each adequately (5.1).	Mentions each but inadequately addresses one or more (4.5).
Organization & Coherence	Excellent organization and coherence (1).	Adequate organization & coherence (.85).	Lacking in either organization or coherence (.75).
Spelling, Grammar, and APA style	0 to 2 spelling, grammar, or serious APA issues (1).	3 to 6 spelling, grammar, or APA issues (per 500 words) (.85).	7 to 10 spelling, grammar or APA issues (per 500 words) (.75).

Lesson Plan

8

You will design a basic environmental education lesson/unit based on a site or organization you would like to be

working at after you graduate. See Rubric 2.

### 7 Qualities Development & Reflection

8

A reflection on your progress and future development as an environmental educator, based on the readings of this course and the 7 Qualities of Great Environmental Educators framework we are using. See Rubric 3.

# Conference Review

Attend the League of Environmental Educators of Florida spring conference, or another education conference with instructor approval, and write a description of your impressions, the sessions you attended, and how it helped you professionally. If you cannot attend, use the program and online materials to describe the sessions and topics you would be most interested in, and explain why. 2.2, 3.1, 3.3, 4.4

Total (5)	Exemplary (1)	Satisfactory (.85)	Emerging (.75)
Overall Impressions	Concise, helpful overview of the conference, including sessions, field trips, and speakers. Critical when appropriate.	Adequate overview of the conference.	Superficial or missing key element.
Sessions Chosen	Describes and justifies sessions that cover the conference.	Adequately describes and justifies sessions.	Superficial or inadequate justification.
Professional Links	Links conference to professional goals concisely and clearly.	Adequately links conference to professional goals.	Superficial or inadequate links.
Organization & Coherence	Excellent organization and coherence.	Adequate organization & coherence.	Lacking in either organization or coherence.
Spelling, Grammar, and APA style	No spelling, grammar, or serious APA issues.	One to four spelling, grammar, or APA issues (per 500 words).	Five to nine spelling, grammar or APA issues (per 500 words).

Homeworks 8

Announced a week or more in advance, 1-3 points each. May include Environmental Concerns, Project Wild walk and Aquatic Wild swim (4.4), & Cultural Tools (5.2, 5.3).

# **Grading**

I want every student to succeed in my courses, but I don't need every student to get an A. That is up to you! See *How to Get an A* below if you want an A in this course.

A 91-100 Excellent work and performance; No more than 1 unexcused absence.

**B+** 86-90 Evidence of good work and performance.

No more than 2 unexcused absences.

**B** 80-85 Evidence of satisfactory work and performance.

**C+** 76-79 Fair or emerging work, or good work with inconsistencies.

**C** 70-75 Fair or emerging work, with considerable room for improvement.

**D** 60-70 Failed to fulfill essential criteria for the course, must retake for education.

<60 Failed to fulfill essential criteria for the course.</p>

F (penalty) You do NOT want this. Punishment for academic dishonesty will depend on the seriousness of the offense, beginning with receipt of an "F" with a numerical value of zero on the assignment and rapidly scaling to a penalty grade of F in the course. Don't cheat, and don't plagiarize. Penalty grades cannot be removed by drop, withdrawal, or forgiveness policy. Students should be aware that, in some Colleges/programs, failure in a course or a finding of dishonesty may result in other penalties, including expulsion or suspension from the College/program. In addition, the following notation will be included on both your official transcript and your internal record: "Violation of Code of Academic Integrity, University Regulations 4.001"

#### How to Get an A

- 1. Try not to miss any classes. Get the perfect attendance bonus point!
- 2. Pay attention and participate in class. This means put away your phone/computer unless you are taking notes with it.
- 3. Take lots of scribbly notes, and review them repeatedly for assignments and the exam.
- 4. Don't get behind. Draft your assignments before they are due. Reread and edit your draft before you submit. Don't wait until the last minute.
- 5. Show off! Use the assignments to show me how you have engaged with the textbook readings, class discussions, and the topics we cover in class.
- 6. Many assignment rubrics are based on the following scheme: C is emerging work, B is satisfactory work, and A is exemplary work. If you want an A in the course, do exemplary work, which is more than the minimum required.

**Late assignments** will lose 1 point per day unless an acceptable reason is provided ON or BEFORE the due date. This is a graduate class, so:

- Don't procrastinate; there aren't many acceptable reasons for late assignments.
- Be responsible for your learning and grade; the professor will generally not track down individuals who do not turn in assignments.
- You will not be given a chance to "make up" work you did not do.
- One missed assignment may be turned in for up to ½ the points.
- Grades and associated feedback will be posted on Canvas, so if you didn't get a grade and others did, ask in class or send me an email.

### The Standard Stuff

**Disability policy statement.** In compliance with the Americans with Disabilities Act Amendments Act (ADA AA), students who require reasonable accommodations due to a disability to properly execute coursework must register with Student Accessibility Services (SAS) and follow all SAS procedures. SAS has offices across three of FAU's campuses – Boca Raton, Davie and Jupiter – however disability services are available for students on all campuses. For more information, please visit the SAS website at <a href="https://www.fau.edu/sas/">www.fau.edu/sas/</a>

Counseling and Psychological Services (CAPS) Center. Life as a university student can be challenging physically, mentally and emotionally. Students who find stress negatively affecting their ability to achieve academic or personal goals may wish to consider utilizing FAU's Counseling and Psychological Services (CAPS) Center. CAPS provides FAU students a range of services – individual counseling, support meetings, and psychiatric services, to name a few – offered to help improve and maintain emotional well-being. For more information, go to <a href="http://www.fau.edu/counseling/">http://www.fau.edu/counseling/</a>

**Code of Academic Integrity policy statement.** Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see University Regulation 4.001.

**Academic Dishonesty.** Plagiarism consists of the unattributed quotation of the exact words of a published text, or the unattributed borrowing of original ideas by paraphrase from a published text. On written papers for which the student employs information gathered from books, articles, or oral sources, each direct quotation, as well as ideas and facts that are not generally know to the public at large must be attributed to its author by means of the appropriate citation procedure. Citations may be made in footnotes or within the body of the text. Plagiarism also consists of passing off as one's own, segments or the total of another person's work. Punishment for Academic Dishonesty will depend on the seriousness of the offense and may include receipt of an "F" with a numerical value of zero on the item submitted, and the "F" shall be used to determine the final course grade. It is the option of the instructor to assign the student a grade of F or FF (the latter indicating dishonesty) in the course.

# **Tips & Reminders**

This course involves co-learning and group work, so **attendance is crucial**. If you are unable to regularly attend, take the course in a semester when you can. Consistently late arrivals or early departures may be counted as an absence at instructor's discretion. Missed classes will count against your participation grade. Please notify me in advance if you are going to miss a class.

All students must have access to a computer and **computer skills** that are sufficient to allow them to participate. This includes a basic familiarity with the Canvas learning management system; written assignments will be submitted to Canvas.

If you send me an important message by **email**, don't assume I got it until you get a response, and feel free to email me once a day until you get one.

For consistency, assignments should adhere to the formatting guidelines of the American Psychological Association (APA). I'm not super-strict about the details, and if you don't have the APA Handbook, don't worry,

there is plenty of information available online. Look under information on Canvas for a cheat sheet that includes minor variations I would like you to follow (e.g., 1.5 line spacing).

Beware of **plagiarism** – your assignments may be put through FAU's plagiarism detection tool(s). Do NOT cut and paste when writing assignments for class, it's a recipe for disaster, even if you think you're going to change some of the words. Write it yourself, in your own words. Check out the plagiarism tutorials at the FAU library site, and **when in doubt**, **give props or ask**.

Using basic **electronics etiquette**. We'll talk about effective note taking, but numerous studies suggest that off-task electronic use can be distracting to both you and the students around you, and that your awesome multitasking is really just doing several things badly. Computers and tablets may be helpful at times, but as this is a participatory class that features active teaching methods, group discussions and potentially messy activities, students will often be asked to close or put away devices. The professor likes to wander, and students observed working on unrelated material (e.g., social networking, shopping, watching the game) during class will lose participation points.

If you are going to include a computer presentation for your chapter or news talk, bring it to class on a USB thumb drive and **load it before** the class begins. You may email it to yourself as a backup only.

Presentations will be graded based on what you do in class; there are no **submissions** required for them. Written assignments should be submitted through the appropriate assignment links on Canvas; I don't need or want paper versions.

The length of written assignments will be in **word counts**, not numbers of pages. If you're not accustomed to word counts, it's very easy; you typically just select the section you want a count for and look for the number in the status bar. Please include a word count in your assignments for the body of your writing (not including things like cover pages, references and supplemental materials you pasted in). If you have questions or technical issues, I'll be happy to help.

Good writing can be challenging. No one likes to plow through never-ending blocks of text with no headings or even paragraph breaks, including the person grading your paper, which is me. One of the best ways to organize an unruly assignment is to break it into headings and make sure that what you're writing about belongs under its heading. Review or relearn what a **coherent paragraph** is; you will lose points for overlong, unorganized writing blobs. One of the simplest ways to improve your writing is to first design your headings based on the rubric or your goals, write a rough draft, and then organize your writing into coherent paragraphs. If your paragraphs are more than 150 words, read this to make sure you're writing clearly: <a href="https://owl.english.purdue.edu/owl/resource/606/1/">https://owl.english.purdue.edu/owl/resource/606/1/</a>

#### Resources

### **APA & Other Writing Resources**

Good APA workshop <a href="http://owl.english.purdue.edu/workshops/hypertext/apa/index.html">http://owl.english.purdue.edu/workshops/hypertext/apa/index.html</a>
Official APA site (not as helpful as it should be)
<a href="http://apastyle.apa.org/">http://apastyle.apa.org/</a>

Literature Reviews <a href="http://writing.wisc.edu/Handbook/ReviewofLiterature.html">http://writing.wisc.edu/Handbook/ReviewofLiterature.html</a>

http://www.unc.edu/depts/wcweb/handouts/literature\_review.html

http://libguides.librarv.ncat.edu/content.php?pid=122999&sid=1232021

University Center for Excellence in Writing

http://www.fau.edu/UCEW/WC

http://www.ecoliteracv.org/

http://www.promiseofplace.org/

http://enviroliteracv.org/

And be sure to check out the APA cheat sheet on Canvas.

#### **Environmental Education**

Center for Ecoliteracy

**Environmental Literacy Council** 

Place-Based Education (Promise of Place)

Science, Technology, Society, and Environment Education

North America Association for Environmental Education http://www.naaee.net/ EE Linked Network http://eelinked.naaee.net/ **Earth Smarts** http://earthsmarts.info/ National Environmental Education Foundation http://www.neefusa.org/ Children and Nature Network http://www.childrenandnature.org/ Council for Environmental Education http://www.councilforee.org/ **Environmental Education and Training Partnership** http://www.eetap.org/index.php League of Environmental Educators in Florida http://leef-florida.org/ No Child Left Inside http://www.cbf.org/page.aspx?pid=895 National Council for Science and the Environment http://ncseonline.org/ **Bioneers** http://www.bioneers.org/ EPA Environmental Education http://www.epa.gov/enviroed/eepubsEPA.htm#knowledge Roots and Shoots (Jane Goodall) - Service Learning& Lesson Plans http://www.rootsandshoots.org/ Sierra Club http://www.sierraclub.org/ Eco Library - Free images http://www.ecolibrary.org/ Association for Environmental Studies and Sciences http://www.aess.info/content.aspx Eco America http://ecoamerica.org/press/news-and-events Service Learning http://www.servicelearning.org/what is service-learning/characteristics/index.php One Million Acts of Green http://www.greennexxus.com/omaog/us/education#f1 David Orr http://www.davidworr.com/ Four Years Go http://www.fourvearsgo.org/ **Education for Sustainability** http://www.secondnature.org/ History & Philosophy of EE www.niu.edu/~carter/courses/520/Carter Simmons.pdf

Journal of Environmental Studies and Scienceshttp://www.springerlink.com/content/d45g36w5r0473m05/

http://webspace.oise.utoronto.ca/~benczela//STSEEd.html

# **Course Topical Outline**

Class	Sites	Readings & Discussions	Assignments
1 Jan 12	FAU Jupiter, Juno Dunes Natural Area	Across the Spectrum Ch 2: Strategies (in class)	H EE Concerns 1
Jan 19			
2 Jan 26	TBD	NAAEE Guidelines: Nonformal EE	H Tools
3 Feb 2	TBD	Taking FOSS Outdoors	H Wild Hike H Wild Swim
Feb 9			
4 Feb 16	TBD	LS Informal: conclusions (p.291-306) NAAEE Guidelines: Materials	
5 Feb 23	TBD	NAAEE Guidelines: Community Engagement	Conference Review
6 Mar 2	TBD Oxbox Eco-center	Teachers IRB Guide NAAEE Guidelines: Prof Development (p. 1-22)	Curriculum Review
Mar 9			
7 Mar 16	LEEF Crystal River	LS Informal: recommendations (p.306-314) (conference attendance optional)	Lesson Plan
Mar 23			IRB Training (online)
8 Mar 30	TBD	MEERA	H EE Concerns 2
Apr 6			7 Qualities Reflection
Apr 13			
Apr 20			Field Trip Observations
Apr 27			
May 4	FMSEA St. Augustine	Conference May 2-5 attendance optional	

Site visits arranged based on provider availability, but may include: Busch Wildlife Sanctuary, Daggerwing Nature Center, Grassy Water Preserve (City of West Palm Beach), Green Cay Nature Center, Gumbo Limbo Environmental Complex, Hobe Sound Nation Center, Jonathon Dickinson State Park, Loggerhead Marinelife Center, Loxahatchee National Wildlife Refuge, Loxahatchee River District River Center, MacArthur Beach State Park, Oxbow Eco-center, Smithsonian Marine Station.

Student presentations will be done throughout: Project Wild/Aquatic, Book/Curriculum Share, Tech Shares.

# **Rubric 1: Field Trip Observations**

The initial goal of this assignment is to summarize your visits to environmental education providers. Remember the suggested questions listed on page three. More importantly, you should carefully consider their education programs using using your increasing knowledge and some guidelines (all found under Readings on Canvas) to help focus your thinking.

- 1. Carefully go through the six key characteristics and their associated guidelines in *Nonformal EE Programs: Guidelines for Excellence* (NAAEE 2009).
- 2. Given the different backgrounds and roles of the EE providers we visit, consider the 5 key characteristics from the new *Community Engagement: Guidelines for Excellence* (NAAEE 2017).
- 3. Consider the six themes in the *Professional Development of Environmental Educators: Guidelines for Excellence* (NAAEE 2017). Be sure to specially address the following guidelines: 2.2, 3.1, 4.1, 4.2, 4.3, 4.5, 4.6, 5.2, 5.3, 6.1, 6.4.

You do not need to cover every site with every theme, characteristic, and guideline; choose the matches you find most relevant or illuminating. Remember, in addition to displaying your engagement with the course for a grade, writing also helps you refine and develop your own knowledge. You should integrate other readings from this course (and possibly Perspectives of EE) where appropriate, including proper APA citations. The overall goal is to synthesize and apply your increasing knowledge of environmental education after surveying it in a range of real-world contexts.

Goal (20)	Exemplary	Satisfactory	Emerging
Visit Summaries	Concisely and effectively summarizes each of the visits, including responses to suggested questions (4).	Adequately summarizes each of the visits, including responses to suggested questions (3.4).	Superficial or insufficient coverage of one or two visits (3).
Integration of NAAEE GfE Nonformal	Effectively includes all the guidelines in the synthesis (4).	Adequately includes all the guidelines in the synthesis (3.4).	Superficial or insufficient coverage of one or two guidelines (3).
	Effectively includes all the characteristics in the synthesis (4).	Adequately includes all the characteristics in the synthesis (3.4).	Superficial or insufficient coverage of one or two characteristics (3).
Integration of NAAEE GfE Professional Development	Effectively addresses each of the listed guidelines (4).	Adequately addresses each of the listed guidelines (3.4).	Superficial or insufficient coverage of one or two guidelines (3).
Organization & Coherence	Excellent organization and coherence (2).	Adequate organization & coherence (1.7).	Lacking in either organization or coherence (1.5).
Spelling, Grammar, and APA style	0 to 2 spelling, grammar, or serious APA issues (2).	3 to 6 spelling, grammar, or APA issues (per 500 words) (1.7).	7 to 10 spelling, grammar or APA issues (per 500 words) (1.5).

### Rubric 2: Environmental Education Lesson Plan

For this assignment, design an environmental education lesson/unit based at a site or organization you would like to be working at after you graduate. As you develop it, write a developmental summary that describes your thought process as it relates to guidelines for best practices (see below). In addition to the location and organization, you may choose the audience and topic, though of course they must be compatible with the site. You don't need to do this lesson in real life, so this is a chance to stretch your creative muscles and design something interesting as you learn how to make great environmental education lessons.

Your lesson plan and accompanying developmental summary do not need to have a specific format or minimum length, but they do need to include and address some specific things.

- 1. For the basics, be sure that your lesson plan addresses everything covered in the *Components of* Environmental Education Lesson Plans handout.
- 2. Your lesson plans as an environmental education professional should be thoughtfully designed. Use your developmental summary to show that you have considered the following NAAEE Professional Development of Educators guidelines: 2.1, 2.2, 3.1, 3.2, 4.1, 4.2, 4.3, 4.6, 4.7, 5.1, 5.2, 5.3
- 3. As you are designing the plan, you should also carefully consider the six key characteristics of the NAAEE Guidelines for Excellence: Environmental Education Materials. Describe how you addressed each in your developmental summary.

Goal (8)	Exemplary	Satisfactory	Emerging
EE Lesson Plan Components	Addresses all critical components effectively (2).	Adequately addresses all critical components (1.7).	Mentions all but inadequately addresses one or two (1.5).
NAAEE GfE Professional Development	Addresses each of the listed guidelines effectively. (2)	Addresses each of the listed guidelines adequately. (1.7)	1-3 missing or inadequate guideline. (1.5)
NAAEE GfE Materials 6 Key Characteristics	Addresses all critical components effectively (2).	Adequately addresses all critical components (1.7).	Mentions all but inadequately addresses one or two (1.5).
Organization & Coherence	Excellent organization and coherence (1).	Adequate organization & coherence (.85).	Lacking in either organization or coherence (.75).
Spelling, Grammar, and APA style	0 to 2 spelling, grammar, or serious APA issues (1).	3 to 6 spelling, grammar, or APA issues (per 500 words) (.85).	7 to 10 spelling, grammar or APA issues (per 500 words) (.75).

# Rubric 3: Seven Qualities Development and Reflection Rubric

A reflection on your progress and future development as an environmental educator, based on the readings of this course and the 7 Qualities of Great Environmental Educators framework we are using.

Examine the outline for the 7QEE framework on Canvas. Consider each of the domains (blue) and primary (green) components. For each domain, briefly describe how comfortable you are with your mastery of the components. For those you are concerned about (and there may be quite a few), specify why and what sort of experience or education you feel would help you.

Aim for at least 500 words (less will lose points), and an honest, reflective, and thoughtful discussion of your progress and status in each of the domains. You will be graded on the quality of your writing and thinking, not on how many of the components you say you are awesome at. You may not have encountered many of these components at this point in your career or education, that's okay.

It may take you significantly more than 500 words to cover each component adequately, but be sure not to abuse of any of the teRRible R's: Rambling, Repetitive, iRrelevant, disoRganized.

8 Total	Exemplary	Satisfactory	Emerging
Covers each domain and primary component.	Addresses each honestly and effectively (5).	Addresses each adequately (4.3).	Mentions each but inadequately addresses one to three (3.8).
Sufficient Length	Significantly exceeds minimum word count (1).	Meets minimum word count (.85).	Within 50 words under minimum word count (.75).
Organization & Coherence	Excellent organization and coherence (1).	Adequate organization & coherence (.85).	Lacking in either organization or coherence (.75).
Spelling, Grammar, and APA style	0 to 2 spelling, grammar, or serious APA issues (1).	3 to 6 spelling, grammar, or APA issues (per 500 words) (.85).	7 to 10 spelling, grammar or APA issues (per 500 words) (.75).