ED/ENV 540: Foundations of Environmental Education

**Syllabus**

**School of Education Conceptual Framework:**

**Theme: Empowerment for Learning- Content, Process, Self-Efficacy**

**EPSB Themes- Diversity, Assessment, Literacy Education, Closing the Achievement Gap**



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| Office Hours | **Tuesday** 12:30 pm -2:30 pm**Thursday** 12:30 pm -2:30 pm**Friday** 9:30 am -2:30 pmOr by appointment |
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**Course Description**

This course is an examination of mankind’s relationship to the environment with an emphasis on current environmental problems. This course is required for an Environmental Education Endorsement at the graduate level.

**Course Objectives**

By the end of this course, students will demonstrate by writing projects, lesson development, oral presentations, and discussions:

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| Objective | North American Association of Environmental Education Standards (NAAEE) | Kentucky Teacher Standards (KTS) | Professional Growth and Effectiveness System Domains (PGES) |
| 1. A better understanding of our world and human interaction with other parts of the ecosystem.
 | 1.1, 1.2, 1.3, 3.3 | 1 | 1A, 4E |
| 1. A more advanced understanding of the sciences, which is critical in making responsible decisions about environmental issues.
 | 1.1, 1.2, 1.3, 3.3, 4.5 | 1 | 1A, 4E |
| 1. The ability to critically evaluate several scenarios relating to selected environmental issues.
 | 3.1, 3.2, 5.1, 5.3 | 1, 6 | 1A |
| 1. How principles of sustainability can be applied to local, regional, and global environmental decisions.
 | 1.2, 1.3, 1.4, 3.3 | 1, 10 | 1A, 4D |
| 1. Correlate NAAEE standards to the Next Generation Science Standards (NGSS), Common Core Standards for Mathematics (CCSM), and Common Core Standards for English and Language Arts (CCSELA)
 | various | 2, 4 | 1C, 1E |
| 1. Compare and contrast styles of leadership, and understand leadership characteristics
 | 5.1, 5.2, 5.3 | 1 |  |
| 1. The ability to create lesson plans/units which meet NAAEE, NGSS, CCSM, and CCSELA.
 | various | 2, 4, 5, 6 | 1C, 1D, 1F, 3C, 4A |

**Students will demonstrate an understanding of diversity- KTS Diversity Proficiencies:**

KTS 1.2: Connects content to life experiences of students.

KTS 2.2: Uses contextual data to design instruction relevant to students.

KTS 2.4: Plans instructional strategies and activities that address learning objectives for all students.

KTS 5.4: Describes, analyzes, and evaluates student performance data to determine progress to individuals and identify differences in progress among student groups.

KTS 6.3: Integrates student use of technology into instruction to enhance learning outcomes and meet diverse student needs.

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| **Academic Integrity** |
| Campbellsville University’s policy on Academic Integrity states, “Each person has the privilege and responsibility to develop one’s learning abilities, knowledge base, and practical skills. We value behavior that leads a student to take credit for one’s own academic accomplishments and to give credit to others’ contributions to one’s course work. These values can be violated by academic dishonesty and fraud.” (Student Handbook)Plagiarism and cheating are examples of academic dishonesty and fraud and neither will be tolerated in this course. Plagiarism is quoting or paraphrasing a phrase, a sentence, sentences, or significant amounts of text from a web site or printed source without using quotation marks and without a citation. The plagiarist submits the work for credit in a class as part of the requirements for that class. Examples of cheating include cheating on a test (e.g., copying off someone else’s paper) or an assignment (e.g., developing a lesson plan) and submitting the work as your own.If a student commits plagiarism or cheats in this course, the professor will decide on one of two penalties: (a) an F on that assignment or (b) an F in the course. The student’s Dean and the Vice-President for Academic Affairs will be notified of either consequence.**Submission of Assignments**Assignments are to be typed in double space format using 12 point Times New Roman font and saved in .doc, .docx, or .pdf format. PLEASE DO NOT SUBMIT MAC DOCUMENTS AS I CANNOT OPEN THEM. Please save your documents in the following format: ***Last name\_first name\_ assignment*, for example, *Magruder\_Robin\_Philosophy*.** Margins should be no less than one inch on all sides. Please include name, course, assignment title, and date in top right corner of first page and include last name as a header of the following pages. Assignments will be preferably be submitted on TigerNet, but it is acceptable to email assignments to the instructor.**PLEASE DO NOT ASK FOR EXTRA CREDIT OPPORTUNITIES, DO YOUR BEST ON ALL ASSIGNMENTS DURING THE SEMESTER.****Disabilities**Campbellsville University is committed to reasonable accommodations for students who have documented physical and learning disabilities, as well as medical and emotional conditions. If you have a documented disability or condition of this nature, you may be eligible for disability services. Documentation must be from a licensed professional and current in terms of assessment. Please contact the Coordinator of Disability Services at 270-789-5192 to inquire about services.**Notice: Any student with a disability or mental condition that may require special assistance or accommodations should discuss these with the instructor at the beginning of the semester.** |

**Grades**

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| --- | --- |
| **Assignment** |  **Point Value** |
| Weekly class participation | 80 points |
| Weekly class discussion forum  | 80 points |
| Three writing prompts related to contemporary articles about environmental education(Week One, Week Two, Week Three) | 10 points each (30 total) |
| Summarize and evaluate program offerings at a local environmental agency using the *Environmental Education Materials: Guideline for Excellence*(Week Seven) |  10 points |
| Complete and evaluate two lessons on Explore Learning (Gizmos)(Week Three, Week Four) | 10 points each (20 total) |
| Correlate NAAEE guidelines, NGSS standards (Week Five) | 15 points |
| Environmental Education Unit (Week Eight) | 65 points |
| Total\*\*May be revised as needed. | 300 points |

**Grade Calculation**

Assuming punctual, regular attendance and effective participation, grades will be determined using the following scale:

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| --- | --- | --- |
| Percentage | Points | Grade |
| 93 -100% | 279-300 | A |
| 83 - 92 % | 249-278 | B |
| 73 - 82% |  219-248 | C |
| 65 – 72 % | 195-218 | D |
| 64% or below |  <195 | F |

Whole letter grade (A-F) will be earned. Students must earn at least a C grade in all education classes or they will have to be repeated.

**Instructions for Required Assignments**

**Weekly Class Discussion Forums**

The following scoring rubric will apply to all weekly discussion forums:

**Initial posts are due by Thursday at 11:55 pm. Responses to peers due by 11:55 pm Sunday.**

Samples of 4 point initial responses and 3 point responses to peers are available on the course outline. Forum responses will be evaluated using the following criteria:

Initial Response 4points

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| --- | --- | --- | --- | --- |
| **Category**  | **4**  | **3**  | **2**  | **1**  |
| **General Assignment**  | All topics introduced in the prompt are **fully** addressed.  | All topics introduced in the prompt are addressed.  | Some topics introduced in the prompt are addressed.  | The prompt is not addressed in the response.  |
| **Length**  | More than 10 complex sentences. | 7-10 complex sentences  | 4-6 sentences.  | 1-3 sentences  |
|   |  |
| **Support**  | Arguments and/or statements are logical and supported by information from the text and articles.  | Arguments and/or statements are logical but made with little or loose support from the text and articles.  | Arguments and/or statements are logical but not supported.  | Arguments and/or statements are not logical.  |
| **Connections**  | Response makes clear connections to current or past experiences in the classroom, school, or political environment.  | Response makes loose connections to current or past experiences in the classroom, school, or political environment.  | Response makes little real life connection.  | No attempt is made to connect prompt to real life situations.  |
| **Mechanics**  | Response is free from grammatical, spelling, or punctuation errors.  | A few grammar, spelling, or punctuation errors exist, but they do not impact the understanding of the reader.  | Several grammar, spelling, and punctuation errors exist.  | Grammar, spelling, and punctuation errors impede the understanding of the reader. |

Response to Peer (You must respond to two peer initial responses per discussion forum) 3 points each

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| --- | --- | --- | --- |
| **Category**  | **3**  | **2**  | **1**  |
| **General Assignment**  | Response provides constructive criticism or information.  | Response provides no constructive criticism and demonstrates little understanding of the content. | Student does not respond to the initial response or the response is inappropriate. |
|  |  |
| **Length**  |  More than 5 complex sentences.  |  3-5 complex  sentences.  |  1-2  sentences.  |

**Writing Prompts Related to Contemporary Articles about Environmental Education**

 **10 points each (30 total)**

**(Assignment One: Week One, Assignment Two: Week Two, Assignment Three: Week Three)**

The following scoring rubric will be used for all writing prompts:

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| **Criteria** | **Does Not Meet Criteria** | **Progress Toward Criteria** | **Meets Criteria** |
| Clearly addresses all parts of the writing prompt | Few parts of the prompt are addressed or parts are not addressed clearly (2 points) | The majority of the prompt parts are addressed clearly(3 points) | All parts of the prompt are addressed clearly (4 points) |
| Supports main ideas with details and examples from the reading and personal experiences | Does not include examples or details or the ones provided are not relevant to the reading (1 points) | Includes few examples to support the main idea (2 points) | Includes well-defined examples and details taken from readings and personal experiences to support the main idea (3 points) |
| Contains few, if any errors in the conventions of the English language, and follows the format guidelines* Heading includes student last name, article title, and page number
* 1 page minimum
* 2 page maximum
* 12 point font, double spaced
* 1 inch margins
 | More than five errors in English language conventions; less than one page (1 point) | Two to five errors in English language conventions; 1 page (2 points) | One or less errors in English language conventions (3 points) |

**Explore Learning (Gizmo) 10 points each (20 total)**

**(Assignment Four: Week Three, Assignment Five: Week Four)**

Complete two Explore Learning Gizmos, <http://www.explorelearning.com>, print out and complete the Student Exploration Sheet and write a one page reflection on the benefits/drawbacks of using the virtual manipulative in a classroom.

**Local Environmental Education Agency Evaluation (10 points)**

**Assignment Six: Week Seven**

Visit a local environmental education agency. In the central Kentucky region, examples may include Bernheim Forest, Clay Hill Memorial Forest, or the Salato Wildlife Center and participate in an organized activity/class/event. Visit the organization’s website, learn about the mission, history, and available resources. After becoming familiar with the agency, summarize its benefits related to environmental education and evaluate the effectiveness of its services. Also discuss how the agency could provide resources related to your unit.

**Correlate NAAEE, NGSS, CCSM, CCELA (15 points)**

**Assignment Seven: Week Five**

Choose one education level: elementary, middle, or high school from the NAAEE standards. Create either a list or a chart aligning the NAAEE standards to at least ten NGSS, CCSM, and CCELA standards from their documents. Copy and paste within the documents to make this work easier. After completing the alignment, reflect on the difficulty of the assignment and suggest how to use such an alignment in the classroom. Identify at least three NAAEE guidelines and three NGSS standards that will fit your unit.

**Environmental Education Unit (40 points)**

**Assignment Eight: Week Eight**

Create a unit and assessments related to an environmental education topic to be implemented in your classroom. This unit will also include an Institution Review Board proposal. (See posted handout in week two materials for detailed information).

**The tentative Schedule of Topics, Required Readings, and Assignments follow this page. A summary of the assignment due dates and exams dates are outlined above. Please refer to assignment descriptions, found at the end of this document, for specific assignment details.**

**Tentative Schedule of Topics and Required Reading**

\*The instructor reserves the right to modify this schedule as necessary. Students will receive adequate notice if this occurs.

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| **Date** | **Topic Emphasized** | **Required Reading****(Should be complete prior to class)** | **Assignments and Due Dates** |
| **Week One** | Role of an Environmental Educator | Hugg, J. Two HatsDisinger J. & Monroe, M. (1994). Defining environmental education: The essence of environmental education.  | Assignment One: Writing prompt related to Hugg, due Sunday at 11:55 pm(10 points) |
| **Week Two** | Human Interaction with the EcosystemProject Wet, WILD, Project Learning Tree Overview | ED 540 Unit Overview (PDF)American Forest Foundation. (2012). *Project Learning Tree: PreK-8 Environmental Education Activity Guide*. Washington, DC: American Forest Foundation. (Selected Excerpts)Council for Environmental Education (2001). *Project WILD*. Houston, TX: Project WILD. (Selected Excerpts) |  Assignment Two: Writing prompt evaluating Project WET, Project WILD, and Project Learning Tree Materials due Sunday at 11:55 pm(10 points) |
| **Week Three** | Science of Environmental Education(Human population growth, climate change, air quality, and water quality) |  | Assignment Three: Writing Prompt related to Science of Environmental Education due Sunday at 11:55 pm (10 points)Assignment Four: Explore Learning Gizmo due Sunday at 11:55 pm |
| **Week Four** | Education Resources for Environmental Education | Download a free copy of the Environmental Education Materials Guidelines:<https://naaee.org/eepro/publication/environmental-education-materials-guidelines-excellence> | Assignment Five: Explore Learning Gizmo due Sunday at 11:55 pm  |
| **Week Five** | Correlation of North American Association of Environmental Education (NAAEE) Guidelines and Content Standards | Read introduction and elementary, middle, or high school standards from*Excellence in environmental education: Guidelines for learning (K-12)* which can be downloaded for free at <http://eelinked.naaee.net/n/guidelines/> | Assignment Seven: Correlation of NAAEE guidelines and NGSS due Sunday at 11:55 pm |
| **Week Six** | Sustainability and Environmental Decisions | Arvai, J.L., Campbell, V.E.A., Baird, A., & Rivers, L. (2004). Teaching students to make better decisions about the environment: Lessons from the decision sciences. *The Journal of Environmental Education,* 36(1), 33-44.Marcinkowski, T.J. (2010). Contemporary challenges and opportunities in environmental education: Where are we headed and what deserves our attention? *The Journal of Environmental Education,* 41(1), 34-54. |   |
| **Week Seven** |  Leadership in Environmental Education | Magruder, R., & Rosenauer, J. (2016). Understanding human impact: Second graders explore watershed dynamics. *Science and Children*, 53(7), 57-63.Meichtry, Y., & Harrell, L. (2002). An environmental education needs assessment of K-12. *Journal of Environmental Education*, 33 (3), 1-7.McBeth, W., & Volk, T.L. (2010). The National Environmental Literacy Project: A baseline study of middle grades students in the United States. *Journal of Environmental Education*, 41 (1), 55-67.Shu, Z. (2004). An overview of environmental education in middle school natural science courses. *Chinese Education and Society*, 37 (4), 64-67. | Assignment Six: Evaluation of Environmental Agency due Sunday at 11:55 pm |
| **Week Eight** | Evaluation of Environmental Issues | Download the following issue guides:Archie, M., London, S., & Simmons, B. (2016). Climate choices: How should we meet the challenges of a warming planet? National Issues Forum Institute. Retrieved from: <https://www.nifi.org/en/catalog/product/climate-choices-how-should-we-meet-challenges-warming-planet-issue-guide>Mead, A. (2014). America’s energy future: How can we take charge? National Issues Forum Institute. Retrieved from: <https://www.nifi.org/en/issue-guide/americas-energy-future> | Assignment Eight: Environmental Education Unit due Sunday at 11:55 pm  |