

ISCI 2001: Exploring Our Ecosphere:
Life & Earth Science for Early Childhood Education
Department of Biology, College of Science & Mathematics, Valdosta State University
Spring 2021 Course Syllabus

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Student Hours will be in Room 1043 BSC:

M W 2:00-2:30

T R ~3:30-4:00

1. Course Format: Attendance is Mandatory, and absences will seriously impact your grade.
This is a Face to Face course. The entire class is required to attend lecture on both Monday & Wednesday in the 1011 auditorium of the BSC unless you are under quarantine. These lectures will be projected synchronously and recorded on

ISCI 2001 - Tentative Course Schedule and Plan for Instruction

<u>Dates</u>	<u>Lecture Topics</u>	<u>Live Lab Activities</u>	<u>Assignments</u>
1. The Natural World			
Jan 11 -	Opening Class	Card Sorting	Student Info Sheet
13 -	Levels of Organization		Alphabetical Lists
2. Exploring Our Ecosphere			
18 -	HOLIDAY in Honor of MLK		Readings in BV
20 -	Electronic Journals & Petals	Open Labs for Links & eJ Help	Link & 42 Thumbnails
3. Patterns in Nature			
25 -	Colors, Shapes, Forms, & Causes	Leaves & Cones	Photos & Hundred Sheets
27 -	Algebraic & Geometric		Readings in BV
4. Natural or Not			
Feb 1 -			

ISCI 2001: Official Course Information

Course Objectives: This science content course provides an integrated overview of Life & Earth Science content in preparation for teaching science at the elementary school grade levels. Topics covered in both the K-5 Georgia Science Standards of Excellence and the Next Generation Science Standards will be addressed in lessons that allow Early Childhood Education majors to learn science in the non-traditional ways they will eventually be expected to teach in their own classrooms.

Instructional Philosophy: This course will bridge the gulf between scientific and educational disciplinary training by allowing future teachers to learn new scientific information through a variety of instructional innovations. The course employs methods that enact the rhetoric of science education reform. By teaching for constructivist learning, emphasis will be placed on the acquisition of conceptual understanding of scientific information rather than mere memorization. An alternative assessment strategy will be used this semester. This nontraditional approach to college science helps prospective elementary school teachers make connections between methods of teaching and learning science.

Grade Distribution:

Attendance (Average of Lab & Lecture Grades) F3 9.96 Tf1 0 0 1 144.02 479.47 Tm0 g0 G[((Average)-8(e of La)-140 047

ISCI 2001: Guidelines for Content

Learning Outcomes - Students in ISCI 2001 will be expected to:

- I. Assemble & Display course content in an E-Journal showing recognition of the basic aspects of Life & Earth Science
- II. Characterize the earth's Lithosphere, Hydrosphere, & Atmosphere & the place of our planet within the Solar System
- III. Recognize how the abiotic factors influence the biotic features of representative global ecosystems
- IV. Document recognition of select sections of the K-5 Georgia Performance Science Standards & NGSS
- V. Indicate the possession of conceptual understanding of GPS K-5 content knowledge for Life & Earth Science

Proof of mastery for each will be demonstrated by the knowledge & skill shown in:

- I. Short Assignments and Unit Summaries - applying the content covered in class
- II. Oral Presentations in Class - short reports on various topics
- III. Electronic Journal- Course work assembled into a single electronic presentation

The following facets of understanding will be built into the course assessments:

Explanation - Description of subject matter and pedagogical practices

Interpretation - Demonstration of astute reasoning and ability to make meaningful connections between concepts

Application - Explanation of the links between subject matter and science instruction

Perspective - Identification of the scientific concepts involved in understanding the science for Elementary Education

Empathy - Discussion of appropriate interventions for underserved children

Self-Knowledge - Illustration of personal reflection on the process of learning and teaching science

*Attendance:

In this Face-to-Face course, you are expected to attend all class Lab & Lecture meetings in person. Being tardy or leaving early is counted as an unexcused absence unless you speak to me and have a very good reason. If you miss Lab or Lecture for illness, you should email me on Blazeview within 24 hours. I do not want the gory details, just say that you were sick. You will still be required to complete the Weekly Slide Set. Doctors and advising appointments should not be made during class. Tell them you can't make it because you have class! If you do miss lecture for any reason, you are responsible for viewing the recording on [Blazeview](#). Anyone who misses more than 20% of the class sessions for either lab or lecture will receive a failing grade for the course. Here is how your grade will be calculated:

No Absences at ALL	125%
1 Absence	100%
2 Absences	75%
3 Absences	50%
4 Absences	25%
More than 4	0%
More than 6	Course Failure

I will be taking attendance just before Lab or Lecture. If you are late, it is your responsibility to see me after class to be sure the absence (A) is changed to a tardy (T). Two tardy marks are equivalent to an unexcused absence.

Personal E

Writing Requirements

Objectives: You will be required to produce at least one summary paragraph on each daily lesson, a composite paragraph for each weekly topic, and a comprehensive essay on the unit topic as part of each test. These assignments also have been designed to help you to learn, outside the classroom, through your own writing. Writing is an important way to learn because if you can construct sentences about something, it will organize your understanding in your mind or let you know that you need to seek more information about a subject. Notebook entries are also an opportunity to display your knowledge through more than just exams. These assignments also allow you to pursue the connections between your own personal interests and what we cover in class, so you should take pride in them.

FOCUS: Well-crafted writing always has a specific purpose. You can brainstorm ideas by writing down any of the terminology you can think of, or using the key words in your notes. Decide on a specific point or argument you want to make - before you start writing. Every composition should have a central idea that is contained in a thesis that should directly address the nature of the writing assignment. Write the thesis down, include it in your introductory & concluding sentences, and check throughout the writing process to be certain that the body of your work supports it. Starting a paper can be the hardest step, so if you feel blocked, try expanding your brainstorming with Google searches on the subject. Take a blank sheet of paper without lines, and just write down any ideas you have or do some reading in the text to get ideas. Then, create an original title for your eNotebook entry or test essay.

Organization: Before you begin to write, think through how you plan to develop your thesis and use an outline to structure your thoughts with a sequence that makes sense. An Introduction and Conclusion will be the first and last sentences or paragraphs, but they can actually be written last. Start paper with something catchy in the first sentence to interest the reader. Make it perfectly clear, in the introductory statement or section, what your point or central idea will be. Support that concept throughout the body of your paper. Paragraphs in the middle will be the Body of your text. Quotations & Subheadings are not to be used in these short assignments; let the topic sentences of the paragraphs serve that purpose. Avoid using phrases such as "In this paper I will discuss..." since it is much more sophisticated to avoid this type of "crutch statement."

Paragraphs: These assignments will be single-spaced. The first sentence of each paragraph is a topic sentence that shows what the paragraph covers. ONE SENTENCE IS NEVER AN ENTIRE PARAGRAPH because there should be at least 3 sentences elaborating any idea that is significant enough to be separated from the rest.

Format: Always have an original title on your paper, centered at the top of the page. Think of something that summarizes the unique slant you are taking because we have to read many of these. It should catch our interest. Your papers are to be typed using something comparable to 12-point Times New Roman type, single-spacing, and 1 inch margins. Other professors often expect double-spacing, but I prefer to read single-spacing and require your papers to be single-spaced. After a draft, if the paper is too long, go back through and shorten it up by taking out the less important aspects. If it is too short, go back and incorporate more support or add more detail to what you are saying. When I say 1-page that means substantial text or no less than 800 words.

Grading: These short papers and test essays will each be worth 10 points. Outstanding papers will receive an additional 2-5 points. Assignments will be described in class, so listen carefully and be sure that you know what is expected or ask about anything that is unclear. There will also be a description on the Dropbox in Blazeview. Focus on the objective of the assignment and address it clearly in thesis of your paper. You can dramatically improve your work if you critique your own rough draft and revise it at least once. Outside feedback by other people who write well or even a visit to the Academic Success Center (ASC) in the library can also make a difference. You do not need a science tutor to read these papers. Ask for an English or Writing tutor at the ASC. Proofread your own work to avoid careless errors. Spelling, Punctuation, and Grammar do effect the quality of your work and your grade. These papers will be graded on Effort, Quality, Organization, Content, and whether or not you followed these directions. We will look specifically at your coverage of the topic and the clarity and thoughtfulness of your presentation. Do not complain about your grade because it is very unlikely that it will be changed. Instead, learn from the feedback and improve your next paper.

Automatic Grade Reductions:

- Failure to single-space & Missing a clear thesis or title
- Lack of Organization (Equal Introduction & Conclusion) Solid Body with logical flow
- Poor paragraph structure - no topic sentences, uneven lengths, no transitions
- Lack of focus, failure to compile a convincing argument, or make a good case
- Inaccurate or deficient scientific content
- Typographical Errors & Grammar, Spelling, & Punctuation (GSP) Mistakes
- Not the assigned length which will be from ½ to 2 pages, but is usually limited to 1 page (which is no less than 3/4)
- Failure to follow these writing instructions

Requirements for Submission: