ISCI 2001: Exploring Our Ecosphere: Life & Earth Science for Early Childhood Education

Department of Biology, College of Science & Mathematics, Valdosta State University
Spring 2022 Course Syllabus

Dr. Leslie S. Jones Student/Office Hours will be in Room 1043 BSC:

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Phone: 219-1337 Tuesday 3:30-4:30 in 1043 BSC

Email: lesliesj@valdosta.edu

Graduate Teaching Assistant: Emily Bishop (embishop@valdosta.edu)

- 1. Course Format: This is an Inquiry-Oriented course which has 3 Stages of instruction in a science education format known as the 3E. Each day of instruction will start with participation in an Activity-Based lab (Exploration) followed by a lecture (Explanation) on the same subject. There either will be single Daily Assignments or, since the two classes each week address a single topic, these could be followed by a combined Weekly Summary. The completion of these important third stages of instruction (Extensions) will ensure that you understand and keep up with the coursework and are well-prepared for the Unit Tests and Final Exam.
- 2. A Very Important Message to Students: I am making a default assumption that you are in college to get an education. Becoming an educated person, and especially a good teacher, takes work. I expect you to make a sincere effort to learn. In college, you are expected to spend two hours working for every credit or actual hour you spend in class. Earning a good grade in this class will come with the satisfaction of achieving something that took resolve and hard work. I set the bar high in my courses because I know you can learn the science that you will need to be a good elementary school teacher. I want you to learn both the scientific content and possibilities for teaching children in nontraditional and exciting ways.

You should read this entire document because it spells out important information about the course. If you do not try to apply these guidelines, you are putting yourself behind everyone in the class who does review it because they will understand more than you about what to expect within the nontraditional format of the course...

3. Emails: Please Use Our Blazeview Email for All Class Matters!!!

My VSU email: lesliesj@valdosta.edu should only be used if it is urgent

To be safe, you need to **Check Your Blazeview Email OFTEN** (several times per week) for updates Class emails are not text messages and are expected to be written coherently.

My title is **Dr. Jones**, and you should start any email with that included in a greeting.

The first thing you should do is tell me which of my classes you are in because I have several.

The next sentence should contain the **reason for your message**.

After you explain yourself, you should close the message properly.

- 4. Deportment: Since this course is part of the preparation for the Elementary Education program, I will expect everyone to maintain a high level of decorum. Since teachers cannot be late for school, tardiness will not be excused and will also count against your grade. Teachers need to be in the habit of using good grammar, speaking formal or standard English, and refraining from swearing in front of their students, so this is a good place to start. In schools, teachers need to collaborate and be team players, so please help your classmates to be successful.
- **5.** Attendance is mandatory and will seriously impact your grade because these labs can't be repeated. If you miss class, you are expected to send me an email in Blazeview stating the reason. You also have the responsibility of making up the work by speaking to your classmates. Dentist/doctor appointments should not be made during class tell them you can't afford to miss. If you must quarantine for Covid, contact a classmate and try to keep up with the work. Anyone is welcome to tape the classes, especially the lectures.
- **6. Personal Responsibility** You must keep track of all **3E** assignment deadlines, which will usually be one week later, because late work will be penalized without exception. If you miss a deadline, rather than complain, think about how you can get your work in on time. Your grades will be posted in BlazeView all semester so that you will know where you stand. If that is not the grade you want at the end of the semester, make more effort to succeed!

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 nontraditional ways they will eventually be expected to teach in their own classrooms.

Instructional Philosophy: *ISCI 2001* 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 & Participation | 20% |
|---|-----|
| Blazeview Assignments (Weekly and/or Daily) | 30% |
| Unit Tests (10% Each) | 30% |
| Comprehensive Final Exam | 20% |

Statement of Student Support: I support all students regardless of immigration status or country of origin. As a Dreamer Ally, I support Dreamer students and promote their sense of belonging and safety as they pursue their higher education goals. For more information and resources about higher education visit a website from another university until we have something on our VSU site: https://international.uoregon.edu/immigrationfaq. I commit to not sharing your status with anyone if you reveal it to me. I also remind you that when interacting with faculty, staff, and offices around campus you are never required to reveal your immigration status.

Access Statement: Students with disabilities who are experiencing barriers in this course may contact the Access Office for assistance in determining and implementing reasonable accommodations. The Access Office is located in Farbar Hall. The phone numbers are 229-245-2498 (V), 229-375-5871 (VP) and 229-219-1348 (TTY). For more information, please visit VSU's Access Office or email: access@valdosta.edu.

Title IX Statement: Valdosta State University (VSU) is committed to creating a diverse and inclusive work and learning environment free from discrimination and harassment. VSU is dedicated to creating an environment where all campus community members feel valued, respected, and included. Valdosta State University prohibits discrimination on the basis of race, color, ethnicity, national origin, sex (including pregnancy status, sexual harassment and sexual violence), sexual orientation, gender identity, religion, age, national origin, disability, genetic information, or veteran status, in the University's programs and activities as required by applicable laws and regulations such as Title IX. The individual designated with responsibility for coordination of compliance efforts and receipt of inquiries concerning nondiscrimination policies is the University's Title IX Coordinator & Director of the Office of Social Equity titleix@valosta.edu, 1208 N. Patterson St., Valdosta State University, Valdosta, Georgia 31608, 333-5463.

Family Educational Rights & Privacy Act: Grades cannot be posted by Name or Social Security Number. Scores and student work will not be given over the telephone, by email or to another student.

ISCI 2001: Guidelines for Content

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

- I. Assemble & Display course content in Extension assignments showing recognition of 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. Weekly, Short, Extension Assignments -applying the content covered in class
- II. Oral Presentations in Class short reports on various topics
- III. Unit Tests & a Comprehensive Final Exam Covering course content

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** – Connections 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 course, you are expected to attend all class Lab & Lecture meetings. 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 Weekly Summaries for the lessons. 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 a lecture for any reason, you are responsible for obtaining the information from a classmate. 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 at the start of class. If you are late, it is <u>your responsibility</u> to see me after class to be sure the absence (A) is changed to a tardy (T). Three late entrances are equivalent to an unexcused absence.

Writing Requirements

Objectives: You will be required to produce written material on daily lessons in documents addressing each daily or weekly topic. Additionally, a comprehensive essay on the unit topic will be part of each test. These assignments have been designed to help you 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. These lesson summaries are 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 and write in first person.

Focus: Well-crafted writing always has a specific purpose. You can <u>brainstorm ideas</u> 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 <u>introductory & concluding sentences</u>, 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 <u>an original title</u> 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 the 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 <u>single-spaced</u>. 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, <u>single-spacing</u>, 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 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 Daily Assignments and Weekly Summaries will each be worth 10 points. Outstanding papers will receive an additional 2-5 points. Extensions 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 as part of the Dropbox in Blazeview.

Focus on the objective of the assignment and address it clearly in the 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 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 affect 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:

Submit your work on Blazeview in the designated assignment box as a PDF because this will ensure that the formatting will be preserved. Each Daily Assignment is due one week later, and if there is a Weekly Summary, it is due on Sunday of that week. There will be a 24-hour grace period in which late work can be submitted with a 20% grade reduction. After this the assignment box will close. If you fail to submit your work by the time the box closes, it will only be accepted by the GTA under extenuating circumstances.

Please follow the guidelines in order to get the best grades.