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

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

Office: 1096 Bailey Science Center M W 2:00-2:30 Phone: 219-1337 T R ~3:30-4:00

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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 Collaborate Ultra

ISCI 2001 - Tentative Course Schedule and Plan for Instruction

Dates Lecture Topics Live Lab Activities Assignments_ 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 Link & 42 Thumbnails Open Labs for Links & eJ Help 3. Patterns in Nature 25 - Colors, Shapes, Forms, & Causes Photos & Hundred Sheets Leaves & Cones 27 - Algebraic & Geometric Readings in BV

4. Natural or Not

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Feb

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: **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 (Average of Lab & Lecture Grades) F3 9.96 Tf1 0 0 1 144.02 479.47 Tm0 g0 G[((Averag)-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 **Collaborate**. 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 <u>your responsibility</u> 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 <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 paper with something catchy in the first sentence to interest the reader. Make it perfectly clear, in the introductory statement or section, what your poi/F2 3 Tf(r)F becauO yoPi tapseSto176(r)-2(k)4inteonctop-2(ta)-3(in)edge thhat- the botructure