Course and Contact Information

Instructor: Rainbow DeSilva PhD

Office Location: TBD

Telephone: ENVS main office: (408) 924-2772

Email: rainbow.desilva@sjsu.edu or Canvas Inbox

Office Hours: Tuesday 10:00am – 12:00pm, (location tbd) and by appointment

Class Info: (Section 01) T, TH/12:00-1:15pm/203BBC

Day/Time/Location: (Section 02) T, TH/1:30-2:45pm/205BBC

GE Area Covered: B2

Course Format
This course will be taught in-person, with some assignments, discussions, and quizzes posted and completed on our Canvas website. Thus, the course requires access to a computer with internet connectivity. Course materials will be made available on the Canvas website. You are responsible for checking Canvas regularly for announcements, assignments, and other course information and materials.

Course Overview and Description
This course is designed to provide the basic skills and knowledge necessary to engage in biological and environmental problem solving. We will examine human interactions with the environment and their consequences for living and nonliving systems. Students will obtain knowledge of biological and ecological science as a basis for understanding current threats to biodiversity. My main goal is to provide a basic understanding of living systems, give information on a multitude of ongoing environmental issues, and prepare you to critically examine biological and environmental problems. This a GE/SJSU Studies category B2 course.

Learning Outcomes
General Education Learning Outcomes (GE LOs)
This is a Category B2 General Education course, and as such, students will develop and demonstrate the following objectives:

1) demonstrate knowledge of scientific theories, concepts, and data used in the physical and life sciences
2) apply scientific principles and communicate in ways appropriate to the discipline about the process and results of scientific discovery
3) access, critically evaluate, and represent scientific information in various forms and draw appropriate conclusions
4) use methods derived from current scientific inquiry to form evidence-based opinions about science-related matters of personal, public, and ethical concern.

Information Literacy Learning Outcomes (ILLO)
1. An information literate student determines the nature and extent of the information needed. The information literate student defines and articulates the need for information, as well as identifies a variety of types and formats of potential sources for information.
2. An information literate student evaluates information and its sources critically and incorporates selected information into his/her knowledge base. Students summarize the main ideas to be extracted from the
information gathered, articulates, and applies criteria for evaluating both the information and its sources and synthesize main ideas to construct new concepts.

**Program Learning Outcomes (PLO)**

1. Students are able to write a logical analytical paper using good writing style and construction, supported by appropriate research. Assignments will require students to understand and summarize materials in relevant scholarly/technical articles, and to identify basic solutions from an interdisciplinary standpoint.
2. Students are able to determine, apply, and interpret appropriate basic statistical or other quantitative analyses to environmental data. Students will be able to read and understand graphs and basic statistics.

**Required Texts/Readings**


Additional readings/videos will be provided/accessible on Canvas.

**Other technology requirements / equipment / material**

Although this is an in-person class, many materials will be provided online through Canvas. Canvas will be used for assignment submission, some discussions, short quizzes, course communication, and announcements. Lecture slides will be posted on Canvas. You will need access to a computer with a reliable internet connection, Microsoft Word/Google docs, Power Point/Google slides, and Canvas.

**Academic integrity**

Your commitment, as a student, to learning is evidenced by your enrollment at San Jose State University. The [University Academic Integrity Policy F15-7](#) requires you to be honest in all your academic course work. Faculty members are required to report all infractions to the office of Student Conduct and Ethical Development. The [Student Conduct and Ethical Development website](#) is available for further review. Instances of academic dishonesty will not be tolerated. **Cheating on exams or plagiarism (presenting the work of another as your own, or the use of another person’s ideas without proper credit) will result in a failing grade and sanctions by the University.** For this class, all assignments are to be completed by the individual student unless otherwise specified. If you would like to include in an assignment any material that you have submitted, or plan to submit for another class, please note that SJSU's Academic Policy F06-1 requires approval of both instructors.

**Resources for Students**

There are many resources on campus available to you. Some examples include: SJSU Peer Connections Center, the College of Social Science Access Center, SJSU Writing Center, SJSU Computing Services, SJSU Counseling and Psychological Service, SJSU Student Health Center, the Academic Success Center, and many places to use or get help with technology. For links to some available resources please see the [Syllabus Information web page](#) or reach out to me and I can provide additional information.

**Course Requirements and Assignments**

*Time commitment: Set aside enough time for our class each week* to get through the material. Is expected that for each unit of credit the student will spend approximately three hours per week for instruction, preparation/studying, or course related activities. This is a 3-unit class. As such, please expect to spend ~9 hours per week on class materials, such as reviewing notes, completing assignments, and exam preparation.

**Exams**

Three exams will be given to test your understanding of the material presented in the lectures, readings, and in-class activities. Please do not miss an exam as you will not have the opportunity to make it up. **Exams are taken during our scheduled class time (dates for these exams are listed in the schedule).** The exams will be a combination of multiple choice, fill in the blank and written answer. **Make-up exams may be considered for legitimate and documented circumstances (i.e., medical emergency, death in the family).**

**Quizzes**
Several quizzes will be given throughout the semester. These will be short, timed quizzes to be completed on Canvas by a specified deadline. These quizzes will be based on previous class material as well as the readings/videos assigned for the week. Quizzes are timed but will be available for an extended period prior to the due date. During the quiz open period you may log-in to Canvas and take the timed quiz at a time of your choosing. Be sure to log-in and complete the quiz BEFORE the closing time. Quizzes are individual activities and are not to be taken with other classmates. **During Canvas quizzes do not use ANY other electronic devices (cell phones, tablets, other computers). This is considered cheating and will result in a failing grade. There will be no make-up quizzes available.**

**Assignments**

There will be varying types of assignments throughout the semester. These assignments are designed to aid in your understanding of the course material, as well as develop skills in evaluating, analyzing, and communicating information about environmental issues. All assignments are expected to be typed and submitted through Canvas unless otherwise noted. Cumulatively, the assignments will make up a major portion of your grade for this course.

**Late Work**

I will accept work up to 24h late for a 20% deduction. After that, you can complete assignments up to 3-days late for half credit. Extensions will only be considered under limited circumstances, as any additional time given for a particular assignment can put you behind on other upcoming assignments. Stay on top of your work, and please reach out to me if you are struggling. I am here to help.

**Class Participation**

Students are expected to attend and participate in course lectures and discussions, ask questions, and engage with the course materials. Part of this participation will be to take good notes, ask questions, turn assignments in on time, and participate in online and in-person discussions and activities. Over the semester, I will hold regular office hours. Coming to these hours is optional, but a highly recommended way to participate in the learning process.

**Formatting**

Please note that all assignments need to be formatted as follows: 12 point font, Times New Roman, 1 inch margins, doubled spaced, include a header with student ID and date, and uses Turabian/Chicago author-year citation style where applicable. A 10% deduction will occur for not following these guidelines.

**Canvas Instructions**

**All assignments are due before 5:00pm on the due date listed in Canvas.** It is your responsibility to check Canvas and for announcements about class activities, assignments, posting of lecture videos, etc..

**University Policies**

Per University Policy S16-9 at [http://www.sjsu.edu/senate/docs/S16-9.pdf](http://www.sjsu.edu/senate/docs/S16-9.pdf), relevant information to all courses, such as academic integrity, accommodations, dropping and adding, consent for recording of class, etc. is available on Office of Graduate and Undergraduate Programs’ Syllabus Information web page [http://www.sjsu.edu/gup/syllabusinfo/”](http://www.sjsu.edu/gup/syllabusinfo/”). Make sure to visit this page, review and be familiar with these university policies and resources.

**Consent for Recording of Class and Public Sharing of Instructor Material**

Common courtesy and professional behavior dictate that you notify someone when you are recording him/her. You must obtain the instructor’s permission to make audio or video recordings in this class. See [University Policy S12-7](http://www.sjsu.edu/senate/docs/S12-7.pdf).

Course material developed by the instructor is the intellectual property of the instructor and cannot be shared publicly without his/her approval. You may NOT publicly share or upload instructor generated material for this course such as exam questions, lecture notes, or homework solutions without instructor consent.

**Grading Overview and Assessment of Learning Objectives**
Course Outline: (All dates are subject to change based on course progress)

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Lecture Topic</th>
<th>Assignments</th>
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<tbody>
<tr>
<td>1</td>
<td>8/22/22 – 8/26/22</td>
<td>The Scientific method and information sources; Intro to Environmental Science and Sustainability</td>
<td>Meet n’ Greet Discussion</td>
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<td>2</td>
<td>8/29/22 – 9/2/22</td>
<td>Biology: Cells and Chemistry; Genetics</td>
<td>Sci. paper assignment</td>
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<td>3</td>
<td>9/6/22 – 9/9/22</td>
<td>Movement of Energy in Ecosystems; Cycling of nutrients and Water in ecosystems</td>
<td>Biomagnification; Quiz 1 Discussion: Patterns in Nature</td>
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<td>4</td>
<td>9/12/22 – 9/16/22</td>
<td>Cycling of nutrients and Water continued... Photosynthesis; Respiration.</td>
<td>Trophic cascades; Quiz 2</td>
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<td>5</td>
<td>9/19/22 – 9/23/22</td>
<td>Review; EXAM 1 (9/22)</td>
<td>Study Guide 1</td>
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<td>6</td>
<td>9/26/22 – 9/30/22</td>
<td>Population and Community Ecology, Niche concepts; Biomes</td>
<td>Evolution questions; Evolution assignments</td>
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<td>7</td>
<td>10/3/22 – 10/7/22</td>
<td>Evolution: Adaptation and Natural Selection</td>
<td>Climate Change Research Paper (Intro); Quiz 3</td>
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<td>8</td>
<td>10/10/22 – 10/14/22</td>
<td>Biodiversity; Threats to biodiversity; Extinction and Conservation</td>
<td>Ecological Footprint; Quiz 4</td>
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<td>9</td>
<td>10/17/22 – 10/21/22</td>
<td>Climate Change</td>
<td>Population Growth Discussion</td>
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<td>11</td>
<td>10/31/22 – 11/4/22</td>
<td>Biodiversity Trends (Terrestrial and Marine systems)</td>
<td>Climate change assignments</td>
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<td>12</td>
<td>11/7/22 – 11/11/22</td>
<td>Energy; Population Growth and Ecological Footprint; Ocean warming and acidification Chasing Coral Q’s</td>
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<td>13</td>
<td>11/14/22 – 11/18/22</td>
<td>Water and Air Pollution; Agriculture and Food systems; Tragedy of the Commons; Quiz 5</td>
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<td>15</td>
<td>11/28/22 – 12/2/22</td>
<td>Environmental Policy, Ethics, and Justice; EXAM REVIEW; Climate Change Research Paper Due (Monday 11/28)</td>
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<td>16</td>
<td>12/5/22 – 12/9/22</td>
<td>EXAM 3 (12/6)</td>
<td>Study Guide 3</td>
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