

***Global Biodiversity and Culture:  
Integrating Conservation and Human Well-being***  
BOT4935/ZOO4926, 4 credits, Spring 2023

**INSTRUCTORS:**

Michele R. Tennant, PhD, MLIS  
Health Science Center Library  
352-273-8426  
[tennantm@ufl.edu](mailto:tennantm@ufl.edu)

Nina Stoyan-Rosenzweig  
Health Science Center Library  
352-273-8406  
[nstoyan@ufl.edu](mailto:nstoyan@ufl.edu)

- All email correspondences must be from your “.ufl” account and have your full name in the body of the email, or through Canvas. Otherwise, your message may not be recognized by our email filters, and thus, may not be answered.

**CLASS MEETINGS:**

Tuesday, period 8 (3:00-3:50 PM)  
Wednesday, period 2 (8:30-9:20 AM)  
Thursday, period 7/8 (1:55-2:45 and 3:00-3:50 PM)

**OFFICE HOURS:**

Dr. Tennant: email ([tennantm@ufl.edu](mailto:tennantm@ufl.edu)) to set a Zoom appointment.  
Nina Stoyan-Rosenzweig: email ([nstoyan@ufl.edu](mailto:nstoyan@ufl.edu)) to set a Zoom appointment.

## **COURSE OBJECTIVES AND GOALS:**

The term biodiversity represents the variety of life on earth. This biodiversity can be described at a number of levels – genetic, species, community, ecosystem – but in any case, this diversity is essential for the successful functioning of the global biosphere. The relationship between biodiversity and human well-being was explicitly studied in the systematic review “Biodiversity loss and its impact on humanity” (*Nature*, 2012). This study highlighted the fact that the “suite of benefits that ecosystems provide to humanity” are weakened by loss of biodiversity. Scientific, economic, and aesthetic tolls accompany an erosion of human well-being.

As such, biodiversity conservation and sustainability efforts throughout the world are essential to humanity’s future, but face many challenges. These challenges are especially difficult in developing countries, which may have high levels of poverty and population density, and lack basic infrastructure and food security. Strategies imposed by outsiders without taking into consideration local culture, customs, and traditions, and the needs (health, food, education, social justice) of the local people are rarely effective. Recent work strives to integrate the biological with the human, developing new strategies and methods for biodiversity conservation. Such approaches to global conservation highlight the need for solutions – without unintended consequences – that respond both to human and environmental concerns.

*Global Biodiversity and Culture: Integrating Conservation and Human Well-being*, introduces these global concerns. Students will learn about biodiversity and conservation (and human dimensions that facilitate or impede conservation progress) in four regions of the world – Madagascar, Ecuador’s Choco and tropical Andes regions, the Himalayas, and the Coastal Plain of the US.

Students in the course will gain experience in engaging with experts at home and abroad, including Madagascar, Ecuador and India, via Skype, Zoom, or other technology to the distant locations. The course has been developed for students in majors related to and/or interest in the life sciences, conservation and sustainability, anthropology and cultural studies, human health and well-being, and the geographical areas of concern (Madagascar, Ecuador, India, the US), as well as those interested in the future of our planet.

After having completed the course and all of the requisite assignments, students will have an understanding of:

- Relationships among biodiversity/conservation and culture, social justice, healthy communities and human well-being;
- Models of conservation, sustainability, conservation education, and ecotourism;
- Finding biological, health science, and anthropological/cultural information, evaluating information, and avoiding plagiarism;
- Biodiversity and conservation challenges in four specific areas – Ecuador, India, Madagascar, the Southeastern US – and how to compare and contrast these challenges and strategies to overcome the challenges;

And students will have gained experience conversing with experts outside the United States.

Students may also reflect on how the lessons learned in the course can inform the decisions we make on a daily basis, both at home and abroad.

## SCHEDULE OF TOPICS AND ASSIGNMENTS:

**Note** – required readings/video viewings may change throughout the semester.

### **Week 1: An Introduction to Biodiversity**

- Tuesday, Jan. 10 Introductions, syllabus, structure of class  
**\*\*DUE - Pre-class self-assessment**
- Wednesday, Jan. 11 Biodiversity and its importance  
**\*\*Reading:** Cardinale et al *"Biodiversity loss and its impact on humanity"*
- Thursday, Jan. 12 (per7) Discussion - biodiversity and biodiversity hotspots  
**\*\*Reading:** Myers et al *"Biodiversity hotspots for conservation priorities"*
- Thursday, Jan, 12 (per8) Biodiversity of Madagascar  
**\*\*Reading:** Jones et al *"Last Chance for Madagascar's Biodiversity"*

### **Week 2: Paper preparation; Biodiversity Hotspots and Attributes**

- Tuesday, Jan. 17 Biodiversity of Western Ghats
- Wednesday, Jan. 18 Biodiversity of Ecuador
- Thursday, Jan. 19 (per 7) Biodiversity of Florida  
**\*\*Reading:** Noss et al *"How Global Biodiversity Hotspots ... North American Coastal Plain"*
- Thursday, Jan. 19 (per 8) Discussion - biodiversity, culture and challenges in Ecuador, Florida, India, Madagascar  
**\*\*Reading:** Zaitchik *"How conservation became colonialism"*  
**\*\*Reading:** Guayasamin et al *"Biodiversity Conservation: Local and Global Consequences ..."*

### **Week 3: Complete Biodiversity Hotspots and Attributes; Begin Culture**

- Tuesday, Jan. 24 Writing tips for journals, reflective essays, and expectations for final project
- Wednesday, Jan. 25 Introduction to Culture  
**\*\*Reading:** Engelke *"How to think like an anthropologist"* (through p. 15)
- Thursday, Jan. 26 (per 7) Indigenous people and culture  
**\*\*Reading:** Maffi *"Biocultural diversity and sustainability"*
- Thursday, Jan. 26 (per 8) Inclusive archeology  
**\*\*Video:** Douglass *"Diggin' In"* <https://www.youtube.com/watch?v=UfAMyqrSb0s&t=327s>  
**\*\*Reading:** Douglass et al *"Toward a Just and Inclusive ..."*

### **Week 4: Complete Culture; Begin Ecotourism**

- \*\*DUE – Monday, Jan. 31 – Reflective journal upload due for weeks 1 and 2**
- \*\*DUE – Monday, Jan. 31 - Submit final project topic via email to instructors**
- Tuesday, Jan. 31 Discussion - culture, biodiversity, conservation readings and speakers  
**\*\*Reading:** Sodikoff *"Totem and taboo reconsidered"*  
**\*\*Reading:** Holmes et al *"Fantastic beasts and why to conserve them"*
- Wednesday, Feb. 1 Overview ecotourism, conservation, culture  
**\*\*Reading:** Lopez Gutierrez et al *"Ecotourism: the human shield ..."*
- Thursday, Feb. 2 (per 7) Ecotourism in the US  
**\*\*Reading:** Jenkins *"US protected lands mismatch biodiversity priorities"*  
**\*\*Reading:** Jenkins et al. *"Global and regional priorities for marine biodiversity"*
- Thursday, Feb. 2 (per 8) US Ecotourism - Connecting with Birds and Nature, Gullah-Geechee

### **Week 5: Ecotourism**

**\*\*DUE - Monday, Feb. 6 – Reflective journal upload due for weeks 3 and 4**

- Tuesday, Feb. 7 Ecotourism in India
- Wednesday, Feb. 8 Ecotourism in Madagascar
  - \*\*Reading: WTTC “Travel & Tourism: Economic Impact 2018: Madagascar ...”
  - \*\*Reading: World Bank “Mada ... Unlocking the Tourism Potential”
- Thursday, Feb. 9 (per 7) Ecotourism in Ecuador
  - \*\*Reading: WTTC “Travel & Tourism: Economic Impact 2018: Ecuador ...”
- Thursday, Feb. 9 (per 8) Discussion - Ecotourism
  - \*\*Reading: Gezon “Who wins and who loses ...”

### **Week 6: Complete Ecotourism; begin Conservation Education, Strategies, and the Arts**

**\*\*DUE – Monday, Feb. 13 - Reflective essay 1 - American Culture and Biodiversity/Conservation**

- Tuesday, Feb. 14 Foundational lecture on Conservation Education
  - \*\*Reading: Monroe “Co-evolution of ESD and EE”
  - \*\*Reading: Monroe “Practitioner Guide to Assessing Connection to Nature” – this one to get the general idea, read pgs. 14-15
- Wednesday, Feb. 15 Classroom and other conservation strategies
- Thursday, Feb. 16 (per 7) Film and tourism to promote conservation
  - \*\*Video See announcement in Canvas for video link
- Thursday, Feb. 16 (per 8) *Mada A-Z*
  - \*\*Reading: Dolins, et al “Conservation education in Madagascar: three case studies ...”
  - \*\*Reading: Gibson and Nguyen “Madagascar from A to Z”

### **Week 7: Conservation Education, Strategies, and the Arts (continued)**

**\*\*DUE - Monday, Feb. 20 - Reflective journal upload due for weeks 5 and 6**

- Tuesday, Feb. 21 Conservation education in India (Salazar)
- Wednesday, Feb. 22 Discussion - conservation education and the arts
  - \*\*Reading: Rakotomamonjy et al “The effects of environmental education on children’s ...”
- Thursday, Feb. 23 (per7) Speaker TBD
- Thursday, Feb. 23 (per8) Speaker TBD

### **Week 8: Complete Education, Strategies and the Arts; begin Biodiversity, Health and Human Well-being**

**\*\*DUE – Monday, Feb. 27 – Project Mid-semester Reports**

- Tuesday, Feb. 28                      Hunger and Biodiversity Loss  
\*\*Reading: Borgerson et al *"Food insecurity and the unsustainable hunting of wildlife ..."*
- Wednesday, Mar. 1                    Health and Green Spaces  
\*\*Reading:                                Section 1, *Oxford Textbook of Nature and Public Health*
- Thursday, Mar. 2 (per 7)            Zoonoses and biodiversity  
\*\*Reading:                                Sections 5-7, *Oxford Textbook of Nature and Public Health*
- Thursday, Mar. 2 (per 8)            Biodiversity and psychology  
\*\*Reading:                                Sections 2 and 3, *Oxford Textbook of Nature and Public Health*

**Week 9: Complete Biodiversity, Health, and Human Well-being; begin Ethics, Religion, Policy**

**\*\*DUE - Monday, Mar. 6 - Reflective journal upload due for weeks 7 and 8**

- Tuesday, Mar. 7                        Indigenous people and health
- Wednesday, Mar. 8                    Discussion - biodiversity and health
- Thursday, Mar. 9 (per 7)            Major world religions and conservation
- Thursday, Mar. 9 (per 8)            Indigenous people, religion, biodiversity  
\*\*Video                                    "Aluna" <https://www.youtube.com/watch?v=ftFbCwJfs1I>

**WEEK OF MARCH 13-17 – SPRING BREAK, NO CLASS**

**Week 10: Ethics, Religion and Policy (cont.)**

**\*\*DUE – Monday, Mar. 20 - Reflective essay 2 - Ecotourism and Conservation Education**

- Tuesday, March 21                    Ethics and biodiversity  
\*\*Reading: Leopold                    *"The Land Ethic"*
- Wednesday, March 22                Discussion - Half Earth  
\*\*Reading: Wilson                    *"Half Earth: Our Planet's Fight for Life"*
- Thursday, March 23 (per7)          Biodiversity, Sustainability, Economics and Public Policy
- Thursday, March 23 (per8)          Speaker TBD

**Week 11: Complete Ethics, Religion, Policy**

**\*\*DUE - Monday, Mar. 27 - Reflective journal upload due for weeks 9 and 10**

- Tuesday, March 28                    Communicating Science to the Public  
\*\*Reading: Christiano                *"The Science of What Makes People Care"*
- Wednesday, March 29                Discussion - Ethics, religion, justice, public policy, Karieva paper  
\*\*Reading: Karieva & Marvier *"What is Conservation Science?"*
- Thursday, March 30 (per7)          Discussion - What you can do to preserve biodiversity
- Thursday, March 30 (per 8)          National Parks

**Week 12: Models of Conservation**

**\*\*DUE – Monday – Apr. 3 - Reflective Essay 3 - Biodiversity and Health**

- Tuesday, Apr. 4                        Association Mitsingo and Anja Community Park
- Wednesday, Apr. 5                    Blue Ventures  
\*\*Website:                                Blue Ventures <https://blueventures.org/>  
\*\*Reading: Singleton et al          *"Conservation, contraception, and controversy"*
- Thursday, Apr. 6 (per7)            Little St. Simons
- Thursday, Apr. 6 (per8)            Mashpi Lodge, Napo WLC, Tropical Herping

\*\* Websites: Mashpi Lodge (<https://www.mashpilodge.com/>),  
Napó Wildlife Center (<https://www.napowildlifecenter.com/>), Tropical Herping  
(<https://www.tropicalherping.com/>)

\*\*Reading: Renkert "Community-owned tourism and degrowth ...  
Kichwa"

### **Week 13: Models of Conservation (cont.)**

**\*\*DUE - Monday, Apr. 10 - Reflective journal upload due for weeks 11 and 12**

- Tuesday, Apr. 11 Centre Val Bio  
\*\*Reading: Wright & Andriamihaja "Making a rain forest national park work ..."  
\*\*Website Centre Val Bio  
(<https://www.stonybrook.edu/commcms/centre-valbio/>)
- Wednesday, Apr. 12 Discussion - *Biggest Little Farm* and *Kiss the Ground* films
- Thursday, Apr. 13 (per7) Importance of zoos in conservation
- Thursday, Apr. 13 (per8) Aquaria, zoos, conservation; children's books

### **Week 14: Complete Models of Conservation; begin student presentations**

- Tuesday, Apr. 18 Ashton Biodiversity Center/Connecting Bird & Nature Tours Videos:  
<https://ashtonbiodiversity.com/home/our-story/> ;  
<https://www.facebook.com/watch/?v=322336822272075>
- Wednesday, Apr. 19 Discussion - Models of conservation
- Thursday, Apr. 20 (per7) Student presentations
- Thursday, Apr. 20 (per8) Student presentations

### **Week 15: Students presentations and class wrap up**

- Tuesday, Apr. 25 Student presentations Thursday; discussion  
of student presentations
- **\*\*DUE – Wednesday, Apr. 26 - Reflective Essay 4, Models of Conservation**
- Wednesday, Apr. 26 Class wrap up and celebration

**\*\*DUE - Post-class self-assessment**

**\*\*DUE – Friday, Apr. 28 - Reflective Journal upload due for weeks 13-15 and final  
journal summary**

**\*\*DUE – Saturday, Apr. 29 – Final Project Report**

### **GRADING:**

**Class participation:** Students are expected to participate in discussions of readings and lectures, and to engage with guest speakers. Because we are a large class, we understand that not every student will be able to provide substantive discussion in every class session. Therefore, credit will be given based on the following breakdown:

Students who discuss during at least 75% of class meetings will receive full credit (155 points);  
Students who discuss during 50-74% of class meetings will receive 90% of full credit (139 points);  
Students who discuss during 40-49% of class meetings will receive 75% of full credit (116 points);  
Students who discuss during 25-39% of class meetings will receive 50% of full credit (78 points);  
Students who discuss during less than 25% of class meetings will receive 0 points for participation.

**Semester long project:** Through this project, students will learn how conservation programs function both locally and globally and how many are moving to ensure people living locally are involved in planning and all aspects of the program implementation – especially programs designed to maintain biodiversity.

Each student will choose one separate organization (each student will have a different organization) or the government organized initiatives of a specific country and follow it throughout the semester. Students will provide a brief mid-semester report and a longer report at the end of the semester, that includes a presentation to the class. In addition to a description of the organization, its mission, programs and areas of focus, organizations will be assessed based on social media presence, website, merchandising, report on Charity Navigator, news presence, research and publication record. The semester long project will be worth a total of 170 points. More detail will be provided in class.

**Reflective journal:** Your reflective journal will concentrate on concepts learned, what surprised you, what confused you, and what questions were generated through your reflections of our class sessions and the readings. It is expected that you will cover **each week of the semester with a minimum 250 word entry**. These should be posted every other week (**so two weeks at a time; 500 words**); the deadlines are listed on canvas and above on this syllabus. Entries will be uploaded through Canvas. At the end of the semester you will also submit a summary of the most impactful things you learned from the course - length and instructions will be provided later in the semester. The reflective journal will be worth a total of 100 points.

**Short reflective writings:** 4 times during the semester you will write short (1500 words) reflection papers on particular prompts, such as comparing points of view on specific strategies among the countries of interest. Reflective writings will be worth 50 points each.

**Pre- and post-class self-assessment:** After the first and last class meetings you will complete a self-assessment of comfort levels and areas of improvement for communicating with those of other cultures. Gaining experience in such communication is an important component of International Scholar Program classes. Completion of the pre- and post-assessment will be worth 5 pts/assessment.

**Library and information assignments:** Short assignments will be assigned related to the library resource/database recordings. Each assignment is worth 5 points.

Your final grade will be based on the percentage of the total points earned as follows:

<u>Point Range (%)</u>	<u>Letter Grade</u>
90% and above	A

87%-89%	A-
83%-86%	B+
80%-82%	B
77%-79%	B-
73%-76%	C+
70%-72%	C
65%-69%	C-
55%-64%	D
54% and below	E

### **UF GRADING POLICIES:**

<https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/> .

### **ATTENDANCE:**

Requirements for class attendance, assignments, and other work in this course are consistent with university policies that can be found at: <https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/> . Attendance at and participation in class sessions are mandatory, with point totals described above.

It is understood that valid absences may occur. If you have a valid documented excuse and notify the instructor by email in advance, you will be able to make up missed class discussions through written means.

### **MAKEUP HOMEWORK DUE TO ILLNESS OR FAMILY EMERGENCY:**

No homework will be accepted late without formal documentation of illness or family emergency. Specifically, the student will need to have the Dean of Students Office (P202 Peabody Hall) send a formal accommodation document to course faculty stating that the student was unable to complete the homework on the scheduled date due to illness or family emergency. These notes from the Dean's Office must be received by course faculty within 3 business days after the homework is due. (see below for COVID-related information).

### **ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES:**

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, <https://disability.ufl.edu/>) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

### **REQUIRED TEXTBOOKS:**

- *Oxford Textbook of Nature and Public Health: The Role of Nature in Improving the Health of a Population*, 2018, edited by Matilda van den Bosch and William Bird.
- *Half Earth: Our Planet's Fight for Life*, 2016, Edward O. Wilson.

- *Connecting Global Priorities: Biodiversity and Human Health. A State of Knowledge Review*, 2015, World Health Organization. Available free of charge at:  
[https://apps.who.int/iris/bitstream/handle/10665/174012/9789241508537\\_eng.pdf;jsessionid=A36ED91A319F13169D8153971326A223?sequence=1](https://apps.who.int/iris/bitstream/handle/10665/174012/9789241508537_eng.pdf;jsessionid=A36ED91A319F13169D8153971326A223?sequence=1)

### **COURSE WEBSITE:**

Course website: E-Learning (Canvas) website, <http://lss.at.ufl.edu>

The E-Learning (Canvas) website is where the class syllabus, handouts, notes and assignments will be posted, along with any announcements. This site is also where you will find basic course-related information. Please remember that you are responsible for all announcements made in lecture and/or posted on the course website for this class.

### **MATERIALS AND SUPPLIES FEES:**

There are no materials and supplies fees assessed for this class.

### **STUDENT DEMEANOR:**

Students are expected to arrive to class on time and to remain in class until the class has been dismissed. Students are expected to come to class prepared, having completed any required readings and performed any preparatory work that is assigned. While in class, students are expected to participate in class discussion, and to treat the other students and the instructor with respect and attention. While in class, students should not participate in texting, information seeking or viewing outside of that related to the course task at hand, talking on the phone, or other activities not related to classroom engagement and participation.

### **DIVERSITY AND INCLUSION STATEMENT:**

We are committed for this course to be helpful and engaging for students of all diverse backgrounds and perspectives and that your learning needs are served in and out of class. We will present materials and activities that are respectful of diversity: age, culture, disability, ethnicity, gender identity, nationality, race, religion, sexuality, socioeconomic status, and more.

It is our goal to make all class materials and assignments accessible to everyone, using the principles of universal design for learning.

If you require specific academic accommodations, please discuss this with us as soon as possible in the semester and additionally check out the resources of the Disability Resource Center (<https://disability.ufl.edu/>, 352-392-8565).

### **ONLINE COURSE EVALUATION PROCESS:**

Please provide feedback on the quality of instruction in this course by completing the online evaluation at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but you will be informed about specific times when they are open. Summary results of these assessments are available to you at any time at <https://evaluations.ufl.edu/results/>.

### **UNIVERSITY HONESTY POLICY:**

UF students are bound by The Honor Pledge which states,

“We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code.”

On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied:

“On my honor, I have neither given nor received unauthorized aid in doing this assignment.”

The Honor Code (<https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please let us know.

### **RESOURCES FOR ADDITIONAL HELP:**

#### Health and Wellness

- U Matter, We Care: If you or a friend is in distress, please contact [umatter@ufl.edu](mailto:umatter@ufl.edu) or 352 392-1575 so that a team member can reach out to the student.
- Counseling and Wellness Center: <https://counseling.ufl.edu/> , 392-1575
- UF Title IX: [inform@titleix.ufl.edu](mailto:inform@titleix.ufl.edu) , 352-273-1094
- University Police Department, 392-1111 (or 9-1-1 for emergencies), <http://www.police.ufl.edu/>

#### Academic Resources

- E-learning technical support, <https://lss.at.ufl.edu/help.shtml> , 352-392-4357 (select option 2), [Learning-support@ufl.edu](mailto:Learning-support@ufl.edu)
- Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. <http://writing.ufl.edu/writing-studio/>
- Student Complaints On-Campus: <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>

UF Student Success: For improving study skills to connecting with a peer tutor, peer mentor, success coach, academic advisor, and wellness resources, go to <http://studentsuccess.ufl.edu>