

**BIO 261 The Amazon Basin: Natural History, Culture, and Conservation
Spring Accelerated I 2014**

LECTURE: T 5:00-6:00PM, SC 106

Field: 28 February-9 March 2014, Caiman House and Maipaima Ecolodges, Guyana

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Scheduled Office Hours: Tuesdays 1-2pm, or by appointment

Prerequisites: Sophomore standing

LAC: SCI

Credits: 3.0

Course Description: This is an intensive, field-based experience on the natural history, conservation, and culture of the North Rupununi region of the Amazon Basin, Guyana, South America. Students will learn about the natural history of the tropical rainforest and savannah biomes and the conservation issues that affect these areas through readings, discussions, hikes, and boat trips. Students will also learn about the culture of the Makushi indigenous people and the issues that affect them. The Makushi still hunt with bow and arrow, build dugout canoes, and practice small scale shifting agriculture. However, the North Rupununi is undergoing rapid change from an expanding ecotourism industry that is competing with oil interests, gold mining, timber harvesting, and loss of habitat for soybean production.

Learning Outcomes/Assessment: By the end the course, students will be able to discuss:

- important characteristics of the biomes visited and studied, including significant aspects of the biodiversity of each biome (important species and ecological and evolutionary relationships) and the anthropogenic threats that threaten these biomes. Assessment: Reflective journal, paper.
- the important cultural characteristics of the indigenous Makushi people and the issues facing them due to the degradation of their habitat, including how these will affect the long-term persistence of their culture and way of life. Assessment: Reflective journal, paper.

Department and Program Student Learning Outcomes:

Material will be presented such that the following learning outcome is *introduced and reinforced*:

Students can:

1. Discuss the interaction of science and society, including the ethical practice of science, within the local, national and global community.

Material will be presented such that the following learning outcomes are *introduced and reinforced*:

Students can:

1. Explain the causes of biodiversity loss and design appropriate strategies to maintain and restore biodiversity.
2. Explain the value of biodiversity and why it is important to conserve it, from both an ecosystem and human health and welfare perspective.

Required Texts: Kricher, J. 1997. *A neotropical companion: an introduction to the animals, plants, and ecosystems of the New World tropics*. 2nd Ed., Princeton University Press, NJ

Additional readings will be provided.

Other Required Equipment: Most of the course work will be done while hiking or boating so you will need a good pair of boots/sturdy sneakers, binoculars, field notebook and pencil (see packing list for other required and recommended items). Additionally, we will be representing our College and country while in Guyana so a respectful attitude and appropriate dress, including swimsuits, is required.

Class Attendance: Class attendances required. Because most classes will be held in the Amazon rainforest and savanna, this should not be a problem. However, you are expected to show up **on time** to all scheduled meetings and field trips.

Class participation/attitude: We will be at small eco-lodges and will be working in close quarters and as a research team. A good, respectful attitude is essential. Moreover, since we will be functioning as a research team, full and collaborative effort is required; every one must contribute. Remember, this is a field course and not a vacation. Believe me, you will completely enjoy this experience but do not lose sight of why we are going.

Readings/Assignments: It is expected that students will read the assigned material prior to attending class. The grades for assignments turned in late will be lowered by 10% of the original value for each day the assignments are late.

Extra-credit: There will be **NO** extra-credit assignments given. All students are expected to put maximum effort into scheduled assignments. If you are having difficulty, see me and we will schedule one-on-one sessions to help you better understand the material.

Make-up Exam Policy: There are no exams

Assignments & Grading: The following are the course assignments and the percentage that each contributes to the final grade.

- **Class attendance/attitude and participation** in discussion, research and all assigned tasks. (100 pts).
- **Research Abstract:** *1000-1200 word* (double-spaced, 2.5 cm margins) abstract on ONE of the **Directed Research projects** (TBD). This is an extended abstract so you need to be more

complete than you would in a standard abstract. You will not be required to cite references because this is an abstract but you are expected to refer to literature and previous findings in the abstract, as you would for any abstract. But, differently from standard abstracts, this abstract must include a minimum of 2 (two) figures or tables and a maximum of four (4) figures and/or tables (total, not three figures and three tables). The abstract will be due on 23 March as a MS Word email attachment (**100 pts**).

- **Field notebook:** graded for format, clarity, and completeness. It is expected that lecture/discussion notes and notes from readings, as well as the usual entries for fieldwork, will be included. Due on 31 January (**100 pts**).

Evaluation: I use the following rubrics in grading essay questions and writing assignments. The point totals are then calculated. For example, if an essay question is worth 20 pts. and I consider the answer to be worth a B, the student will get 17 points for that essay (i.e., 0.85 x 20). I will assign +/- when appropriate.

"A" work (95%)--students fulfilled the requirement (answered the assigned questions, references, etc.), all concepts are explained correctly and fully, shows depth of knowledge, was able to integrate concepts, developed a coherent and compelling argument, grammar, sentence structure, spelling etc. at level expected for a college student ; voice is appropriate for scientific audience.

"B" work (85%)-- similar to A work but lacks depth and integration of knowledge, writing is good but some minor errors, concepts are not fully explained

"C" work (75%)--work is merely adequate; followed assignment, information accurate but information is regurgitated, there is a lack of development of concepts and arguments, answer is not complete, problems with writing

"D" work (65%)-- is not adequate in one major area (information, writing, etc.) but demonstrates adequacy in other areas

"F" work (55%)-- is unacceptable--does not follow assignment, information is incorrect or incomplete, writing is substandard, etc.

Grades: The final course grade is based on percentage of points earned:

≥ 93% = A	≥ 90% = A-	≥ 87% = B+	≥ 83% = B	≥ 80% = B-
≥ 77% = C+	≥ 73% = C	≥ 70% = C-	≥ 67% = D+	≥ 60% = D

The following are official College policies and statements.

Classroom Behavior: Disruptive behavior will not be tolerated. Any incidences will be noted and you will be penalized 1/3 of your final letter grade for each incidence (e.g., B to a B-). Generally, disruptive behavior in the classroom is any behavior that interferes with the process of learning. At Cedar Crest College, it is the right of every student and faculty member to engage in a classroom experience free from disruptive behavior. What is disruptive to one person might

not be disruptive to another, so the final authority on disruptive behavior is the faculty member. Faculty members have the authority to address disruptive behavior in the manner they see fit under the guidelines set forth in the College Catalog (please see the section on “Classroom Protocol”).

Disruptive behavior may be viewed on a continuum ranging from the isolated incidents of mildly annoying or irritating behavior to more clearly disruptive, dangerous, and/or violent behavior. Examples of disruptive behavior may include the following:

- Persistent speaking without permission
- Use of electronic devices, cell phones, or pagers during class
- Threats or harassment of any kind
- Poor personal hygiene
- Revealing dress
- Working on homework for other classes
- Inappropriate personal disclosures during class (sharing too much information)
- Sleeping in class
- Entering class late or leaving early (without permission)
- Eating/drinking in class without permission
- Disputing authority and arguing with faculty and other students
- Physical disruptions or physical altercations

Verbal & Written Communication: Faculty members are not part of your social circle or peer group and should not be addressed as such. On the first day of class, faculty members will introduce themselves and express how you should address them. Addressing a faculty member by his or her first name is not acceptable unless the faculty member invites you to do so.

When addressing a faculty member in person, use a positive, respectful approach. Ideally, you should meet with faculty members during their scheduled office hours and not at the beginning or end of class unless the interaction will be brief.

When using the telephone, be sure to identify yourself at the beginning of the conversation. Be brief and concise, particularly when leaving a voice mail message. Remember that it is your responsibility to make sure that you communicate with your professor. When leaving a message, leave a time when you will call back. Do not expect your professor to return phone calls or to be the one to ensure contact. It is always better to visit or call your professor during office hours.

When sending email, remember that your writing conveys an image of you and demonstrates respect for the recipient. Treat email as you would any other **formal** written correspondence: Begin with the appropriate greeting (“Dear Dr. Smith”), use complete sentences (it is not an online chat) with good grammar and spelling, use a friendly and polite tone, and expect that faculty members will return your correspondence when they are able. Expecting an “instant response” is not realistic.

Honor Code: I fully support the Cedar Crest College Honor Code as stated in the Student’s Guide Book. All assignments, including exams are governed by the honor code.

Plagiarism: Plagiarism is a serious offense. In academia, few, if any, offenses are considered more serious. As such, I fully support the College's policy on plagiarism. Please see the Student's Guide for a definition of plagiarism and the College's policy on plagiarism. Students who are found to have committed plagiarism will either be required to redo the assignment, receive an F for that assignment, or fail the course, depending on the severity of the offense. Under certain situations, those who have committed plagiarism may be suspended or expelled from the College. All cases will be reported to the Provost. **Please be aware that accidental plagiarism carries the same weight and penalty as deliberate plagiarism.**

College Accommodations Policy: Students with documented disabilities who may need academic accommodations should discuss these needs with their professors during the first two weeks of class. Students with disabilities who wish to request accommodations should contact the Advising Center.

Readings

Date	Chapter
21-Jan	Ch. 1 Tropical Climates & Ecosystems
28-Jan	Ch. 2. Rainforest Structure & Diversity / Ch. 3 How a Rainforest Functions
4-Feb	Ch. 6 The Neotropical Pharmacy/ Ch. 7 Living off the Land in the Tropics
11-Feb	Ch. 8 Rivers through the Rainforest/ Ch. 10 Savannas and Dry Forests
18-Feb	Ch. 14 Deforestation and Conservation of Biodiversity / Readings on the Makushi and Rupununi (TBD)
25-Feb	Last minute stuff
On site	We will continue our readings and discussions on site. TBD.