## BIOL 328 – ISLAND BIOLOGY & EXPERIMENTAL DESIGN SYLLABUS

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Office Hours: TBD

<u>Course Description</u> – This course combines in-class lectures and discussions with field research to expand upon the undergraduate biology experience. In the lecture component of this course, students will synthesize the primary literature on topics in biodiversity and island biology in order to identify unanswered research questions and propose experiments. During our field trip to an uninhabited island in the Bahamas, students will explore the island's lush biodiversity, execute their experiments, and collect data to answer their research questions. Upon returning to campus, students will analyze, graph and present their data.

<u>Trip Details</u> – We depart from Norfolk International Airport *very early* Thursday, March 1 and return *very late* Friday, March 9. It is your responsibility to arrange transportation to and from the Norfolk airport. If you check a bag, be prepared for a checked bag fee (usually \$25 each way). To be allowed back in the US, the expiration date on your passport must be after 9/12/18.

## Grades

**Assignments & Participation** -60% – A variety of assignments will be given throughout the semester. Examples of assignments include reading assigned articles and chapters, answering questions, creating a species catalog, writing papers and annotated bibliographies, analyzing data, graphing data, and giving oral presentations. Listening to your classmates' presentations and providing constructive feedback is also very important.

**Field activities** – 30% – Field activities, which will begin *early* each morning of spring break, include participating in excursions and brainstorming sessions, designing and setting-up experiments, collecting data, giving presentations, identifying species, and contributing to your classmates' experiments. Having a positive attitude and participating in group-chores are also very important.

<u>Grading Scale</u> – A (90 - 100 %), B (80 - 89%), C (70 - 79%), D (60 - 69%), F (below 60%). For final course grades, the plus/minus system will be used with the top/bottom two percentage points (example: 80.0-81.9% = B-, 88.0-89.9 = B+).

<u>Disabilities</u> – Students with documented disabilities are required to notify the instructor on the first day of class and in private if accommodation is needed. The instructor will provide students with disabilities with all reasonable accommodations, but they are not exempted from fulfilling the normal requirements of the course. Work completed before the student notifies the instructor of his/her disability may be counted toward the final grade at the sole discretion of the instructor. If you believe that you have a disability, you should make an appointment to see me to discuss your needs. In order to receive an accommodation, your disability must be on record in the Dean of Students' office, 3<sup>rd</sup> Floor David Student Union/DSU (Telephone: 594-7160).

<u>Tutoring</u> – The Center for Academic Success offers free assistance for CNU students in writing, mathematics, science, languages, and other subjects. The Center is located in room 240 of the Trible Library. For more information please visit <a href="http://tutors.cnu.edu">http://tutors.cnu.edu</a> or phone 594-7684.

<u>Success</u> – If I become concerned about your course performance, attendance, engagement, or well-being, I will speak with you first. I may also submit an Institutional Referral Form that will be received by the Center for Academic Success. Depending upon the nature of my concern, it also may be received by Counseling Services. If you are an athlete then Jenny Nuttycombe will receive notice. Someone will contact you to help determine what will help you succeed. Please remember that this is a means for me to support you and help foster your success at CNU.

## TENTATIVE SCHEDULE

Date	Торіс
Jan 11	Course introduction / Lecture on species & research ideas
Jan 18	Student presentations (12 minutes maximum)
Jan 25	Student presentations (12 minutes maximum)
Feb 1	Student presentations (12 minutes maximum)
Feb 8	Student presentations (12 minutes maximum)
Feb 15	Student presentations (12 minutes maximum)
Feb 22	Student presentations (12 minutes maximum)
Mar 1	Trip preparations & supplies check / Lord of the Ants DVD
Mar 8	Spring Break
Mar 15	Data collection, entry & analyses / Graph data
Mar 22	Graph data
Mar 29	Presenting your results
Apr 5	Presenting your results
Apr 12	Presenting your entire experiment
Apr 19	Presenting your entire experiment
Apr X	Final (Time TBD)

## **Tentative Itinerary in the Bahamas**

- Day 1 Travel to uninhabited island in the Great Exuma island chain of the Bahamas; introduction and safety briefing; explore lagoon; group dinner
- Day 2 Island circumnavigation hike; locate target species; group dinner
- Day 3 Palm grove hike; begin independent research projects; group dinner with presentations
- Day 4 Hike to tower and bromeliad city; continue independent research projects; group dinner
- Day 5 Cave trail to coast hike; continue independent research projects; group dinner with research updates
- Day 6 Wetland hike in *Conocarpus* grove; continue independent research projects; group dinner
- Day 7 Day trip to two nearby uninhabited islands. Spend time examining stromatolites and snorkeling at Duck Cay and spend time observing an endangered iguana at Iguana Cay. Group dinner.
- Day 8 Finish research projects; group dinner
- Day 9 Travel to Virginia