Course Title: Conservation Genetics  
Course Number: EHI 326  
Course Section: 1  
Classroom: ESS 081  
Time: Tues, Thu: 11:30-12:50  
Course Instructor: Sharon Pochron  
Office Hours: Tue, Thu: 11:30-12:30 or by appointment  
Location: Ward Melville Library WO522  
Instructor Contact: Sharon.pochron@stonybrook.edu  
Assignments Available: blackboard.stonybrook.edu

Course Description: This course is an introduction to genetics taught in the context of conservation. The course will cover a basic introduction to Mendelian, molecular, population, evolutionary and meta-population genetics, and then examine specific applications of these concepts to topics in conservation biology.

DEC E: Natural Science; STEM+ certified

Course Learning Objectives: This course provides basic background in modern genetics, with a focus on applications in conservation biology. Students will gain a fundamental understanding of genetic principles and their application in conservation of natural populations of threatened species.

Prerequisites: BIO201, MAT 125 or Mat 131, BIO 201

Texts:
Required: Spine of the Continent by Mary Ellen Hannibal.
Required: Simbio package of chapters and labs
I'll also assign reading material from primary sources throughout the semester.

Attendance and Make-up Policy: I value class attendance. If you miss class, you miss a quiz since I give a quiz each class. I do not offer make-up quizzes. The average quiz grade counts the same as an exam grade. The quizzes are easy, so if you attend all lectures, you will have a high quiz grade. I drop the two lowest quiz grades. Answer all quizzes in complete sentences unless otherwise indicated. I don't make my lecture notes available on-line. If you miss class, you need to get the notes from a classmate.

Homework is due every Thursday. I will not accept it late, even if you miss class. I will drop one homework grade. All homework must be typed 1.5 spaced or double-spaced. Please turn in hard copies rather than e-mail copies, although I will accept e-mailed versions under duress. Please answer in complete sentences.

The last four classes of the semester are mandatory because we'll be working on a group project. For each class that you miss, you will lose half a letter grade off your final grade. If you are more than 10 minutes late, I will count that as an absent. The final project requires an oral presentation of a well-researched topic.

Exams: I give two exams, as per the calendar below. However, you should pay as much attention to the quizzes, homework, and final project as they weigh just as heavily on your grade. I may change any date. If I do so, I will notify you via Blackboard. I may change the due date of homework or exams. If I do so, I will notify you via Blackboard. You are responsible for checking your e-mail.

Grading:
Approximately 28 in-class quizzes: 20%
Approximately 11 homework assignments: 20%
Exam 1: 20%
Exam 2: 20%
One in-class group project: 20%

**Grade Curve:**

**Meeting Schedule:**

<table>
<thead>
<tr>
<th>Lecture</th>
<th>Lecture</th>
<th>SimBio Assignments</th>
<th>Reading Homework</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>SimUText, Mitosis Explored, Intro, Section 1</td>
<td>Mitosis Explored, Q1-Q7</td>
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<tr>
<td>2</td>
<td>SimUText, Meiosis Explored, Intro, Section 1</td>
<td></td>
<td>week 1 hw due</td>
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<td>3</td>
<td>Section 2</td>
<td>Meiosis Explored, Q1-Q30</td>
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<td>4</td>
<td>Lab: Hardy, Weinberg and Kuru</td>
<td>Hand in completed workbook</td>
<td>week 2 hw due</td>
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<td>5</td>
<td>Lab: Hardy, Weinberg and Kuru</td>
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<td>6</td>
<td>Evolution for Ecology, Section 1</td>
<td></td>
<td>week 3 hw due</td>
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<td>7</td>
<td>Section 2</td>
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<td>8</td>
<td>Section 2</td>
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<td>week 4 hw due</td>
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<td>9</td>
<td>Section 3</td>
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<td>10</td>
<td>Section 3</td>
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<td>week 5 hw due</td>
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<td>11</td>
<td>Section 4</td>
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<tr>
<td>12</td>
<td>Section 4</td>
<td>Evolution for Ecology Q1-Q57</td>
<td>week 6 hw due</td>
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<td>13</td>
<td>Lab: Darwinian Snails</td>
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<td>14</td>
<td>Lab: Darwinian Snails</td>
<td>Hand in completed workbook</td>
<td>week 7 hw due</td>
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<td>15</td>
<td><strong>Spring Break</strong></td>
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<td>16</td>
<td><strong>Spring Break</strong></td>
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<td>17</td>
<td>Mendelian Pigs Intro, Section 1</td>
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<td>18</td>
<td>Section 2</td>
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<td>week 8 hw due</td>
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<td>19</td>
<td>Section 3</td>
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<td>Section 3</td>
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<td>week 9 hw due</td>
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<td>21</td>
<td>Section 4</td>
<td>Mendelian Pigs, Q1-Q60</td>
<td>week 10 hw due</td>
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<td>22</td>
<td>Lab: Genetic Drift &amp; Bottleneck Ferrets</td>
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<td>23</td>
<td>Lab: Genetic Drift &amp; Bottleneck Ferrets</td>
<td>Hand in completed workbook</td>
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<td>24</td>
<td>Lab: Genetic Drift &amp; Bottleneck Ferrets</td>
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<td>25</td>
<td>Lab: Finches and Evolution</td>
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<td>Lab: Finches and Evolution</td>
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<td>27</td>
<td>Lab: Finches and Evolution</td>
<td>Hand in completed workbook</td>
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<td>28</td>
<td>Prepare presentation</td>
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<td>29</td>
<td>Prepare presentation</td>
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**Class Policies:**
1. **Show up.** Attend each class on time, and you will enjoy this class!
2. **Take the tests as scheduled.** A missed test is a zero, and I won't schedule make-ups unless your doctor or your insurance company sends a note with a phone number, which I will call.
3. **Do your homework on time.** I recommend that you back up anything you create for this class. That way, when the
computer crashes, you have something to turn it. Having a back up also helps if the dog eats it or if the printer 
breaks. I hate grading, so talking me into a late grading is nearly impossible.

4. Show up on time for the last four days of class. Your group will be relying on you.

5. Don't cheat. It really pisses me off. I've put the University's actual policy below, but just don't do it. Cheating, 
plagiarism, falsification of records, and other violations of the student code will not be tolerated. (Plagiarism is simply 
the use of others' words and/or ideas without clearly acknowledging their source. When you incorporate those 
words and ideas into your own work, it is of the utmost importance that you give credit where it is due. Plagiarism, 
intentional or unintentional, is considered academic dishonesty and all instances will be reported to the Academic 
Judiciary. To avoid plagiarism, you must give the original author credit whenever you use another person's ideas, 
opinions, drawings, or theories as well as any facts or any other pieces of information that are not common 
knowledge. Additionally quotations of another person's actual spoken or written words; or a close paraphrasing of 
another person's spoken or written words must also be referenced. Accurately citing all sources and putting direct 
quotations – of even a few key words – in quotation marks are required. For further information on plagiarism and 
the policies regarding academic dishonesty go to the Academic Judiciary website at 
http://naples.cc.sunysb.edu/CAS/ajc.nsf)

6. Treat others as you wish to be treated. Observe without judgment. Discuss others' ideas without attacking their 
character or integrity. I will ask you to leave if you cannot comply.

Required Syllabus Information:
Blackboard
You can access class information, documents, and assignments on-line at: 
http://blackboard.stonybrook.edu  If you used Blackboard during the previous semester, your login 
information (NetID and Password) has not changed. If you have never used Stony Brook's Blackboard 
system: for help or more information see: http://it.stonybrook.edu/services/blackboard  For problems 
logging in, go to the helpdesk in the Main Library SINC Site or the Union SINC Site , you can also call: 
631-632-9602 or e-mail: helpme@ic.sunysb.edu

Student’s Responsibility: Students are required to use their Stony Brook University e-mail for all 
official communications. Ensure you have entered a working email account in your Black Board 
account. Access your BB account and make sure that you have access to this class, send yourself a test 
email using the email option within BB. Adhere to deadlines for term paper and other assignments. 
Adhere to the formatting instructions for the term paper. Seek help from instructor when problems 
arise. Should you have a disability follow the regulations spelled out below so that it can be evaluated 
as soon as possible.

Cell Phone and Electronic Devices: Use of cell phones, blackberries, laptop computers, iPods, MP3 
players, and other audio and telecommunications devices is strictly prohibited during class. The only 
exceptions are through permission granted by the instructor for special purposes. Clickers are excluded 
from this prohibition, if required for the class. During regular class sessions, cell phones must be either 
in ‘vibrate mode’ or turned off. Calls cannot be answered. Text messaging is not allowed during class. 
Cell phones must be turned off and enclosed in a case, book bag, briefcase, or the like during tests and 
exams. YOU are responsible for ensuring this policy is followed. Students MAY NOT have cell 
phones, electronic dictionaries, calculators, pagers or other “information rich” devices (anything that can 
receive and/or store many pages of text) in their possession during tests and exams.

Academic Dishonesty Policy: Academic dishonesty is a serious offense and a breach of academic 
integrity that may result in failure of the course or failure for the individual paper or assignment. The 
“Code of Student Conduct” states that all forms of academic dishonesty, including the following are 
prohibited (see student handbook):

● Plagiarism – the intentional use of ideas or words of another as one’s own paper or other 
academic assignments. If you are unsure of what constitutes Plagiarism visit this document
http://www.wpacouncil.org/positions/WPAplagiarism.pdf or ask the instructor.

- Cheating during examinations, whether by copying from a fellow student or by using information in the form of unauthorized aids brought to the examination.
- The submission of work for any assignment that has been prepared by another student.

**Academic Integrity Statement:**
Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty are required to report any suspected instances of academic dishonesty to the Academic Judiciary. Faculty in the Health Sciences Center (School of Health Technology & Management, Nursing, Social Welfare, Dental Medicine) and School of Medicine are required to follow their school-specific procedures. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary website at http://www.stonybrook.edu/uaa/academicjudiciary/

**Classroom Policy:** Students are expected to follow the Stony Brook Code of Conduct while in the classroom. If you are not familiar with the Code you can find it at:
http://studentaffairs.stonybrook.edu/sites/handbook/Code_1-22-03.pdf

Behavior that is disruptive to the function of the class, other students, or the instructor will not be tolerated. Poor class behavior or violations to the Code of Conduct will lead to removal from the class, possible withdrawal, or suspension. Food is not permitted in class. Beverages are OK, but please bring a container that can be closed to reduce spills. If a spill occurs please clean it up immediately.

**Instructional Responsibilities:** The University's statement of Minimal Instructional Responsibilities and Minimal Undergraduate Student Responsibilities are protocols with which you may already be familiar. They were established by the University Senate in 1996. If you have not already done so, please review them carefully. Both statements may be found beginning on page 81 of the Academic Policies and Regulations section of the on-line Undergraduate Bulletin:
http://www.stonybrook.edu/ugrbulletin/current/index.shtml

**DISABILITY SUPPORT SERVICES (DSS) STATEMENT**
If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Disability Support Services, ECC (Educational Communications Center) Building, room128, (631) 632-6748. They will determine with you what accommodations, if any, are necessary and appropriate. All information and documentation is confidential.

Students who require assistance during emergency evacuation are encouraged to discuss their needs with their professors and Disability Support Services. For procedures and information go to the following website: http://www.stonybrook.edu/ehs/fire/disabilities

**CRITICAL INCIDENT MANAGEMENT:**
Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Judicial Affairs any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn.

**Course Content:**
Course material accessed from Blackboard, SB Connect, SB Capture or a Stony Brook Course website is for the exclusive use of students who are currently enrolled in the course. Content from these
Electronic Communication Statement
Email and especially email sent via Blackboard (http://blackboard.stonybrook.edu) is one of the ways the faculty officially communicates with you for this course. It is your responsibility to make sure that you read your email in your official University email account. For most students that is Google Apps for Education (http://www.stonybrook.edu/mycloud), but you may verify your official Electronic Post Office (EPO) address at http://it.stonybrook.edu/help/kb/checking-or-changing-your-mail-forwarding-address-in-the-epo.

If you choose to forward your official University email to another off-campus account, faculty are not responsible for any undeliverable messages to your alternative personal accounts. You can set up Google Mail forwarding using these DoIT-provided instructions found at http://it.stonybrook.edu/help/kb/setting-up-mail-forwarding-in-google-mail.

If you need technical assistance, please contact Client Support at (631) 632-9800 or supportteam@stonybrook.edu.