COURSE INFORMATION
Number: BSC 2011
Section: 521
CRN: 93880
Location: A203A
Title: Biological Diversity
Meeting times: Monday & Wednesday: 9:30–10:45 AM in A203A

INSTRUCTOR INFORMATION
Name: Dr. Justin Perrault
Office: MML 2003
Office Hours: Tuesday & Thursday, 12:30–2:30 pm or by appointment
Alternate Office: MML Research Laboratory 224
Email: jperrault@usf.edu (please use this email unless there is an emergency)
Alternate Email: jperrault@mote.org
Phone: 941.388.4441 X 213

COURSE DESCRIPTION
This course is designed to introduce students to the diversity of life. During this semester we will look at the tremendous biodiversity of the different kingdoms. We will review evolutionary theory and then conduct an overview of the major groups of living organisms. We will finish by looking at how organisms interact with each other and their environment and how populations grow and interact with one another.

COURSE OBJECTIVES
Upon completing this course, students should have a better understanding of several major concepts:
1. Mechanisms of evolution and how evolutionary relationships are inferred
2. Development of biological diversity, and relationships among the major taxa
3. Basic aspects of form and function for representative members of the major taxa
4. General interactions between organisms and the environment

REQUIRED CLASS MATERIALS
   • Note: While the bookstore sells only the book packaged with access to our online homework (called Connect), it is possible to purchase the book (used or new) separately from access to Connect
(2) Access to McGraw-Hill Connect website. See Homework section below in Grading.
GRADING: The course will consist of **700 total points**.

There is no curve in this course and students WILL NOT be awarded a higher letter grade simply because they are close to the next highest grade. However, if the exams turn out to be more difficult than anticipated, the individual exam grades may be adjusted upwards.

**Exams (500 points):** There are four regular lecture-period exams as well as a cumulative final exam. The four lecture exams are worth 400 points (100 points each). The cumulative final exam is worth 100 points; everyone must take it and it will not be dropped. Each exam will consist of fill-in-the-blank, short answer, matching and/or multiple choice. With the final exam comes the potential for exam replacement. The final exam will be divided into four sections covering material from exams 1–4. (For example, if you score higher on final exam section 1 than you did on your first exam, your score on your first exam will be replaced with the score of section 1 of your final. In other words, if you correctly answered 92% of the questions on final exam section 1, but received a score of 80% on your first exam, your first exam score will be replaced with a 92%). If you show up late for an exam, and any students have already completed and left the exam, you will not be allowed to take the exam. Regular lecture-period exams missed as a consequence of an unexcused absence or tardiness will be counted as a 0%. You can replace this 0% for the exam that you missed during the final (e.g., if you missed exam two, your section 2 score on the final exam would replace your 0% score for exam 2). Each exam will include bonus questions that will serve as extra credit.

**Homework (100 points):** A weekly homework will be assigned through the Connect website, http://connect.mheducation.com/class/j-perrault-fall-2014-section-521-1. These are in the form on online quizzes on the Connect site. Please access the Connect website regularly to keep up on the dates. There will be a time limit for each quiz (2 minutes/question) and you will have one chance to correctly answer the questions. Assignments are due at 11:59 PM the night before the scheduled lecture (e.g., Chapter 22 quizzes 1–3 are due August 26 at 11:59 PM). These quizzes ensure that you read each chapter and are familiar with the concepts. There are a total of 645 quiz questions for the entire semester. Your grade will be calculated on a percent basis out of 600 total points. Therefore, you can earn extra credit by completing and answering every quiz question correctly. For example, if you got all 645 quiz questions correct, your percent score for this portion of your grade would be 107.5% (645/600).

Accessing Connect: Go to the following website and click “register now” http://connect.mheducation.com/class/j-perrault-fall-2014-section-521-1. If you have purchased the textbook with Connect or Connect Plus, you have an access code which will allow you to access the course webpage. If you do not have an access code, you may purchase access (as well as the ebook if you wish) at this webpage.

**Attendance & Participation (100 points):** Attendance and participation in the lecture are required, and will be assessed using attendance taken by the instructor (once I learn your names). I may also ask a question in class and have you turn in your answer on a piece of paper for additional attendance points. Questions will be asked throughout the lecture and may 1) cover material from the previous lecture and/or reading assignment; 2) aim to assess your comprehension of the material just discussed or 3) make you reflect on concepts before we fully cover them. The attendance for each lecture meeting will be worth 4 points (not including the first day of class or the exam dates). There will therefore not be opportunities to make-up attendance and participation points if you miss class. If you must miss class meetings for a university-accepted reason (see below) and deliver the proper documentation to Dr. Perrault before or immediately after the missed classes, you may receive attendance points for those lectures. We will work out the make-up points on a case by case basis. However, after three unexcused absences, your final grade will be penalized by 10% of your total grade per day (e.g., 4 unexcused absences = 10% off of final grade, 5 unexcused absences = 20% off of final grade, etc.). Occasionally, I may ask questions to get feedback from students on course content/delivery and/or to get students’ opinions on topics and issues that affect everyday life. Some of these questions may require anonymous participation, and will not be graded. In other cases, ALL students that answer the question will get 100% of the available points.

**Final grades:**
- A+: >96.5% (>675.5 points)
- A: 92.5–96.4% (647.5–674.8 points)
- A−: 89.5–92.4% (626.5–646.8 points)
- B+: 86.5–89.4% (605.5–625.8 points)
- B: 82.5–86.4% (577.5–604.8 points)
- B−: 79.5–82.4% (556.5–576.8 points)
- C+: 76.5–79.4% (535.5–555.8 points)
- C: 72.5–76.4% (507.5–534.8 points)
- C−: 69.5–72.4% (486.5–506.8 points)
- D+: 66.5–69.4% (465.5–485.8 points)
- D: 62.5–66.4% (437.5–464.8 points)
- D−: 59.5–62.4% (416.5–436.8 points)
- F: <59.4% (<415.8 points) (* F or FF also assigned for academic misconduct)
**Tentative schedule** (subject to change during the semester; however, your exam dates will not change):

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Topic</th>
<th>Assigned Reading</th>
<th>Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug 25</td>
<td>M</td>
<td>Syllabus</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Aug 27</td>
<td>W</td>
<td>Origin and History of Life</td>
<td>22 (pp 438–458)</td>
<td>22 Quiz 1–3</td>
</tr>
<tr>
<td>Sep 1</td>
<td>M</td>
<td>Labor Day Holiday</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Sep 3</td>
<td>W</td>
<td>Introduction to Evolution</td>
<td>23 (pp 459–477)</td>
<td>23 Quiz 1–3</td>
</tr>
<tr>
<td>Sep 8</td>
<td>M</td>
<td>Population Genetics</td>
<td>24 (pp 478–494)</td>
<td>24 Quiz 1–5</td>
</tr>
<tr>
<td>Sep 10</td>
<td>W</td>
<td>Origin of Species and Macroevolution</td>
<td>25 (pp 495–513)</td>
<td>25 Quiz 1–4</td>
</tr>
<tr>
<td>Sep 15</td>
<td>M</td>
<td>Taxonomy and Systematics</td>
<td>26 (pp 514–531)</td>
<td>26 Quiz 1–5</td>
</tr>
<tr>
<td>Sep 17</td>
<td>W</td>
<td>Exam 1: Evolution, Genetics &amp; Taxonomy</td>
<td>22–26 (pp 438–531)</td>
<td>None</td>
</tr>
<tr>
<td>Sep 22</td>
<td>M</td>
<td>Archaea and Bacteria</td>
<td>27 (pp 533–552)</td>
<td>27 Quiz 1–5</td>
</tr>
<tr>
<td>Sep 24</td>
<td>W</td>
<td>Protists</td>
<td>28 (pp 553–563)</td>
<td>28 Quiz 1 &amp; 2</td>
</tr>
<tr>
<td>Sep 29</td>
<td>M</td>
<td>Protists</td>
<td>28 (pp 563–574)</td>
<td>28 Quiz 3 &amp; 4</td>
</tr>
<tr>
<td>Oct 1</td>
<td>W</td>
<td>Fungi</td>
<td>31 (pp 618–637)</td>
<td>31 Quiz 1–4</td>
</tr>
<tr>
<td>Oct 6</td>
<td>M</td>
<td>Plants and the Conquest of Land</td>
<td>29 (pp 575–596)</td>
<td>29 Quiz 1–4</td>
</tr>
<tr>
<td>Oct 8</td>
<td>W</td>
<td>Evolution and Diversity of Modern Plants</td>
<td>30 (pp 597–617)</td>
<td>30 Quiz 1–4</td>
</tr>
<tr>
<td>Oct 13</td>
<td>M</td>
<td>Test 2: Archaea, Bacteria, Protista, Fungi &amp; Plants</td>
<td>27–31 (pp 533–637)</td>
<td>None</td>
</tr>
<tr>
<td>Nov 5</td>
<td>W</td>
<td>Test 3: Animal Diversity, Invertebrates &amp; Vertebrates</td>
<td>32–34 (pp 688–714)</td>
<td>None</td>
</tr>
<tr>
<td>Nov 10</td>
<td>M</td>
<td>Introduction to Ecology: Scale, Methods &amp; Distribution</td>
<td>54 (pp 1117–1129)</td>
<td>54 Quiz 1–3</td>
</tr>
<tr>
<td>Nov 12</td>
<td>W</td>
<td>Introduction to Ecology: Climate, Biomes and Biogeography</td>
<td>54 (pp 1129–1145)</td>
<td>54 Quiz 4–6</td>
</tr>
<tr>
<td>Nov 17</td>
<td>M</td>
<td>Behavioral Ecology</td>
<td>55 (pp 1146–1167)</td>
<td>55 Quiz 1–7</td>
</tr>
<tr>
<td>Nov 19</td>
<td>W</td>
<td>Population ecology</td>
<td>56 (pp 1168–1186)</td>
<td>56 Quiz 1–4</td>
</tr>
<tr>
<td>Nov 24</td>
<td>M</td>
<td>Species interactions</td>
<td>57 (pp 1187–1206)</td>
<td>57 Quiz 1–4</td>
</tr>
<tr>
<td>Nov 26</td>
<td>W</td>
<td>Community ecology</td>
<td>58 (pp 1207–1224)</td>
<td>58 Quiz 1–6</td>
</tr>
<tr>
<td>Dec 1</td>
<td>M</td>
<td>Ecosystem ecology</td>
<td>59 (pp 1225–1243)</td>
<td>59 Quiz 1–3</td>
</tr>
<tr>
<td>Dec 3</td>
<td>W</td>
<td>Biodiversity and conservation</td>
<td>60 (pp 1244–1263)</td>
<td>60 Quiz 1–4</td>
</tr>
<tr>
<td>Dec 5</td>
<td>M</td>
<td>Test 4: Ecology</td>
<td>54–60 (pp 1117–1263)</td>
<td>None</td>
</tr>
<tr>
<td>Dec 10</td>
<td>W</td>
<td>CUMULATIVE FINAL EXAM 9:30–11:30 AM</td>
<td>All</td>
<td>None</td>
</tr>
</tbody>
</table>

If you miss a class meeting for any reason, you will be held responsible for all material covered and announcements made in your absence. Electronic slides for most (but not necessarily all) lectures will be posted on Canvas. It will be your responsibility to consult with students in the class concerning what you missed. Make-ups are not given; however a make-up can be requested with some **excused absences**. These include acceptable reasons, such as medical (individual or immediate family only; documented), legal (accident or court case; individual only; documented), funeral (immediate family only; documented), military (call to active duty; documented), religious (customarily-observed holidays; absence pre-arranged with instructor), and special requirements of other courses and University-sponsored events (absence pre-arranged with instructor). You must provide documentation for excused absence for all missed lectures or exams in order to be allowed a make-up. The reason for requesting a make-up must relate specifically to the time periods of the missed coursework and must be documented in writing by an involved professional, when documentation is required. The instructor retains the right to make additional inquiries concerning the documentation. If you are sick after you have already missed an exam (or 3 lectures) and need to miss another one, you MUST contact the instructor in advance of the exam or quiz and then you have one week to present a doctor’s note for ALL excused absences and still get your attendance points or be allowed a make-up. The same holds true for other university excused absences. Within reason, Department accommodates students’ religious beliefs. The University compiles a list of established religious days when classes may need to be missed for religious observances, and only these established religious days are addressed by University policy ([http://usfweb2.usf.edu/eco/deo_calendar/default.asp](http://usfweb2.usf.edu/eco/deo_calendar/default.asp)). Students who anticipate the necessity of being absent from class because of the observation of an established religious day must provide notice of the date(s) to the instructor, in writing, by the second class meeting.

**Finally, tardiness is disruptive and unacceptable. Please do not arrive late to lecture. Points may be deducted for tardiness, and the student may be asked to leave.**
USF Sarasota-Manatee Policies and Procedures

Academic Dishonesty
The University considers any form of plagiarism or cheating on exams, projects, or papers to be unacceptable behavior. Please be sure to review the university’s policy in the USFSM Catalog and the USF Student Code of Conduct. Current and archived catalogs may be found at: http://usfsm.edu/academics/ and the USF Student Code of Conduct can be found at http://www.sa.usf.edu/srr/page.asp?id=88.

Academic Disruption
The University does not tolerate behavior that disrupts the learning process. The policy for addressing academic disruption is included with Academic Dishonesty in the USFSM Catalog and the USF Student Code of Conduct. Current and archived catalogs may be found at: http://usfsm.edu/academics/ and the USF Student Code of Conduct can be found at http://www.sa.usf.edu/srr/page.asp?id=88.

Contingency Plans
In the event of an emergency, it may be necessary for USFSM to suspend normal operations. During this time, USFSM may opt to continue delivery of instruction through methods that include but are not limited to: Canvas, Elluminate, Skype, and email messaging and/or an alternate schedule. It’s the responsibility of the student to monitor Canvas site for each class for course specific communication, and the main USFSM and College websites, emails, and MoBull messages for important general information. The USF hotline at 1 (800) 992-4231 is updated with pre-recorded information during an emergency. See the Campus Police Website for further information. The USF hotline at 1 (800) 992-4231 is updated with pre-recorded information during an emergency.

Disabilities Accommodation
Students are responsible for registering with the Office of Students with Disabilities Services (SDS) in order to receive academic accommodations. Reasonable notice must be given to the SDS office (typically 5 working days) for accommodations to be arranged. It is the responsibility of the student to provide each instructor with a copy of the official Memo of Accommodation. Contact Information: Disability Coordinator: 359-4714; email: disabilityservices@sar.usf.edu and website: http://usfsm.edu/disability-services/

Fire Alarm Instructions
At the beginning of each semester please note the emergency exit maps posted in each classroom. These signs are marked with the primary evacuation route (red) and secondary evacuation route (orange) in case the building needs to be evacuated. See information available on the USFSM student and faculty webpages at www.usfsm.edu

Religious Observances
The University recognizes the right of students and faculty to observe major religious holidays. Students who anticipate the necessity of being absent from class for a major religious observance must provide notice of the date(s) to the instructor, in writing, by the second week of classes. http://generalcounsel.usf.edu/policies-and-procedures/pdfs/policy-10-045.pdf

Emergency Preparedness
It is strongly recommended that you become familiar with the USF Sarasota-Manatee Emergency Action Plan on the Safety Preparedness. See information available on the USFSM student and faculty webpages at www.usfsm.edu

Web Portal Information
Every newly enrolled USF student receives an official USF e-mail account. Students receive official USF correspondence and Canvas course information via that address. Therefore it is the student’s responsibility to check their USF email regularly.

Instructor Copyright
Students may not sell notes or other course materials.