FORS-4347 – PREDATOR ECO AND CONSERVATION

Instructor: Dr. Reuber Antoniazzi  
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Email: Reuber.Antoniazzi@sfasu.edu  
Office Hours (MTW): 9:00 -11:00 am (or by appointment)

MEETING DETAILS
Office: 203C Forestry
On Tuesdays (Section 001): 3:30 - 6:00 pm, 117 Forestry

Introduction to predator ecology and current research topics and issues related to predator conservation and management. Emphasis is on predation as an ecological process and as a behavior as well.

Prerequisites are BIO 133 or FOR 255, otherwise, please contact the instructor.

COURSE GOALS
Using lectures, readings and class discussions students will be able to immerse in the theoretical background related to predation, a key biological interaction in many ecosystems that occur in all spatial and temporal scales. Also, students will benefit from information regarding predation in the context of interaction with humans and also regarding conservation strategies.

PROGRAM LEARNING OUTCOMES
The course is designed to address the following Program Learning Outcomes, as given in the BSF Program Matrix †:

1. Demonstrate understanding and competency of forest ecology and biology;
2. Demonstrate understanding and competency in the measurement of forest resources;
3. Demonstrate understanding and competency in managing forest resources;
4. Demonstrate understanding and competency of forest resource policy, economics, and administration.
5. Demonstrate understanding and competency in oral and written communication skills.

† Items 1–4 above are required by the Society of American Foresters, the program’s accrediting agency.

B.S. Forestry Program Learning Outcomes
Proficiency Levels

<table>
<thead>
<tr>
<th>Forestry Common Core</th>
<th>PLO 1</th>
<th>PLO2</th>
<th>PLO3</th>
<th>PLO4</th>
<th>PLO5</th>
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<tbody>
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<td>Course</td>
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STUDENT LEARNING OUTCOMES

Upon completion of the course, students will:

a. Foundational knowledge
   - have a clear understanding of the fundamental and current issues in predation theory and predator ecology;
   - have a clear understanding of important concepts related to predator ecology, conservation, and management.

b. Application
   - be able to find information on and analyze current predator ecology and conservation issues.
   - be able to identify current knowledge gaps and needs in predator ecology and conservation/management research.

c. Integration
   - identify the interactions between predation theory and other realms of knowledge such as conservation biology, ecology, economics, and policy design.

d. Human dimension
   - be able to identify ways in which one’s or someone else’s personal life could affect or be affected by addressing issues related to the conservation and management of predators.

e. Future learning
   - be familiar with a number of popular ecology journals and other sources of knowledge about animal behavior and community ecology.
   - have some specific ideas about what other knowledge would be desirable to have about predator behavior, conservation, and management.

TEXTBOOKS AND READINGS

All reading material will be provided by the instructor weekly or according to the necessities, to facilitate student learning.

GRADERS

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<tbody>
<tr>
<td>Exams (100 points each)</td>
<td>200</td>
</tr>
<tr>
<td>Class Presentations (50 points each)</td>
<td>50</td>
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<tr>
<td>Discussion Participation</td>
<td>100</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>350 points</strong></td>
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GRADING

Final grade of students (A–F) will be calculated out of 400 total points. There will be no curve and no individual extra credit. Final grades will be assigned based on the grading scale as follows:
ASSIGNMENT DETAILS

**General course requirements:** Knowing and understanding the material presented and discussed in lectures is the keystone for successfully completing this course; then, it is critical being up to date with the reading assignments. Considering that the class meets once a week and I expect all students to have perfect attendance (please see *Attendance policy* subsection, within *Class policies* section) and be well prepared for class.

**Exams:** The in-class exams will cover lectures, textbook chapters, and any other assigned material (papers, videos, etc.). Tests can be viewed during office hours.

**Class presentation:** Each student will give one 12–15-minute presentations during the semester of a peer-reviewed publication related to that week’s lecture topic. The presentation should focus and discuss the purpose of the article (theoretical background of the study), methodology (briefly), results and major findings, and discussion/conclusions. The presentation should focus on primary research studies (original articles) and not review papers. The articles will be previously provided by the instructor, at least, one week prior to the presentation. If some student wants to change the paper designated by the instructor, she/he will need to contact the instructor proposing a new paper. Importantly, students must have their research papers approved by the instructor before they begin to work on their presentation. The paper proposed by the student should be focused on week’s lecture topic, published within the last 5 years (2016-2021) in some of the following journals: *Nature* (and all *Nature* portfolio journals, e.g., *Scientific Reports* and *Nature Communications*), *Science, Trends in Ecology and Evolution, PNAS, Global Change Biology, Current Biology, Ecology Letters, Science of the Total Environment, Conservation Biology, Journal of Applied Ecology, Elementa - Science of the Anthropocene, Ecography, Biological Conservation, Functional Ecology, Ecology, Journal of Animal Ecology, Ecological Indicators, Perspectives in Ecology and Conservation, Ecological Applications, Ecosystems, American Naturalist, Oikos, Biology Letters, NeoBiota, Biodiversity and Conservation, Basic and Applied Ecology, Restoration Ecology, Global Ecology and Conservation, Zoological Journal of Linnean Society, Oecologia, Biological Invasions, Urban Ecosystems, PeerJ, Behavioral Ecology and Sociobiology, BMC Ecology, Ecology and Evolution, Ecological Processes, Animal Behavior, Behavioral Ecology, Biotropica, Ecological Entomology, Journal of Zoology, Biological Journal of Linnean Society, Austral Ecology, Ecological Research, The Science of Nature, Acta Oecologica, Insectes Sociaux, Aquatic Ecology, Web Ecology, Neotropical Entomology, Journal of Tropical Ecology, Community Ecology, Journal of Natural History."
Discussion participation: Students are expected to participate in weekly discussions on the assigned readings; readings are not optional. Each student will do, at least, one question and will provide one answer for some question each class. The grade will be determined based on the frequency of their participation as well as the thoughtfulness/utility of their contributions to class discussion. The dynamic of article discussions can be structured using different tools and approaches, in order to improve the quality of the interchange of knowledge among all students and the instructor.

Tentative Lecture Schedule

<table>
<thead>
<tr>
<th>Day</th>
<th>Topic</th>
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<tr>
<td>08/24</td>
<td>Introduction to predation. Basic concepts of ecology and evolution.</td>
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<tr>
<td>08/31</td>
<td>Predation theory.</td>
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<tr>
<td>09/07</td>
<td>Studying/detecting predation on past and present.</td>
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<tr>
<td>09/14</td>
<td>Predator morphology, physiology, behavior, and function.</td>
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<td>09/21</td>
<td>Antipredator adaptations.</td>
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<td>09/28</td>
<td>Predator-prey interactions I. Solitary predators.</td>
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<tr>
<td>10/05</td>
<td>Predator-prey interactions II. Social predators.</td>
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<tr>
<td>10/12</td>
<td>Exam I</td>
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<tr>
<td>10/19</td>
<td>Population dynamics.</td>
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<td>10/26</td>
<td>Predators and community ecology.</td>
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<tr>
<td>11/02</td>
<td>Trophic cascades and ecosystem’s consequences.</td>
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<tr>
<td>11/09</td>
<td>Impacts of invasive/introduced predators.</td>
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<tr>
<td>11/16</td>
<td>Influence of environmental/habitat conditions on predation.</td>
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<tr>
<td>11/23</td>
<td>Thanksgiving Break</td>
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<tr>
<td>11/30</td>
<td>Predator conservation and management.</td>
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<tr>
<td>12/07</td>
<td>Exam II</td>
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</table>

‡ Required readings (e.g., research articles and book chapters) will be assigned each week throughout the semester.

Class Policies

Notes: Although lecture slides will be available to students at least before each exam, students are highly recommended to taking their own notes at each lecture. Much information is complemented by the instructor beyond slides, and this will be very helpful to students, in order to obtain maximum success in the exams. The students have to occupy the front rows of the classroom.

Completing assignments: It is the responsibility of students to complete assignments independently and in a timely manner. Deadlines must be accomplished as a premise of the assignments. Any doubt/disagreement/discordance must be talked with the instructor with appropriate anticipation in order to avoid delays or misunderstanding of any nature.

Attendance policy: Punctually attendance at all lectures is a requirement for this course. Justified absences will be accepted with the proper documentation (e.g., documented
medical excuse). Each unexcused absence from a lecture will result in a reduction of 10% in the total number of points accumulated during the entire course. Note that absence from class also results in the inability to earn the points distributed during each class, for example, provided by the discussion participation (please see above on the Assignment details section). In the case of excused absences, the student must contact the instructor to accomplish the lost activities.

Missed Exams: Alternative exams will be given only for students that were absent due to medical issues or under the consent of the Vice President for Academic Affairs, properly documented. A student who wishes to make up an alternative exam will have 7 calendar days after she/he returns; after 7 calendar days, the student will receive a zero for that exam.

Communicating to your professor: Email will be the primary means of communication for the course, so please do not use D2L - Bright space to communicate with the instructor. The student has to check the email often in order to keep up to date with the class instructions and announcements. Grades cannot be discussed via e-mail at any time due to federal law. The instructor will speak to the student in person instead of during office hours (please see above). DO NOT involve a third party who is not affiliated in any official capacity with SFASU (e.g., friend, roommate) in any matters pertaining to your enrollment in this course. Your instructor is legally prohibited from discussing most course/grade-related issues with third parties according to the Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part 99).

Disruptive behavior policy: A student may be asked to leave the classroom for any disruptive behavior that disturbs the good environment of the class. Offenses may be penalized with a reduction of 10% of the student’s final grade. Examples of disruptive behavior are, but not limited to, entering class late, misuse of cellphone and other gadgets, take pictures or recording videos and audio, debauchery, noises, etc.

Academic dishonesty policy: Academic integrity is the responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one’s own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one's paper without giving the author due credit. Please search for University Policies SFA to read the complete policy statements. A first offense will be penalized with a zero that cannot be dropped. A second offense will be penalized with an F and/or the option to drop the course.
Extra credit: There will be NO PERSONAL extra credit or bonus point opportunities under any circumstance or for any reason. However, the instructor reserves the right to assign class bonus points at any time.

OTHER POLICIES

Lab Safety and Conduct Policy: Appropriate clothing, including pants and boots, is required for labs with an outdoor component. It is at the discretion of the instructor what appropriate dress for the field is. You may also require a jacket or rain gear in the winter and drinking water during warm weather, as appropriate. If we are scheduled to go to the field, then we will go, regardless of weather conditions. Come to lab appropriately dressed. Usage of tobacco products is not permitted in lectures or labs.

Academic Integrity (A-9.1): Academic integrity is the responsibility of all University faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism. Definition of Academic Dishonesty: Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one’s own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one’s paper without giving the author due credit. Please read the complete policy at http://www.sfasu.edu/policies/academic_integrity.asp

Withheld Grades Semester Grades Policy (A-54): Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

Students with Disabilities: To obtain disability-related accommodations, alternate formats, and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to http://www.sfasu.edu/disabilityservices/.
Responsible Use of Technology: It is expected that all students will only use cell phones, PDAs, laptop computers, MP3 players, and other technology outside of class time or when appropriate in class. Answering a cell phone, texting, listening to music, or using a laptop computer for matters unrelated to the course may be grounds for dismissal from class or other penalties.

Acceptable Student Behavior: Classroom behavior should not interfere with the instructor’s ability to conduct the class or the ability of other students to learn from the instructional program (see the Student Conduct Code, policy D-34.1). Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic, or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the Early Alert Program. This program provides students with recommendations for resources or other assistance that is available to help SFA students succeed.

Firearms and the concealed carry policy: University Policy 13.9 deals with firearms and the concealed carry policy. Students with concealed carry licenses that choose to carry on campus are required to follow all Texas laws and University policies and it is their responsibility to understand and comply accordingly. See: http://www.sfasu.edu/policies/13.9-Firearms-Explosives-and-Ammunition.pdf

Mental Health Resources: SFASU values students’ mental health and the role it plays in academic and overall student success. SFA provides a variety of resources to support students’ mental health and wellness. Many of these resources are free, and all of them are confidential.

ON-CAMPUS RESOURCES:
SFASU Counseling Services
www.sfasu.edu/counselingservices; 3rd Floor Rusk Building; 936-468-2401

SFASU Human Services Counseling Clinic
www.sfasu.edu/humanservices/139.asp; Human Services Room 202; 936-468-1041

Crisis Resources:
Burke 24-hour crisis line 1(800) 392-8343
Suicide Prevention Lifeline 1(800) 273-TALK (8255)
Crisis Text Line: Text HELLO to 741-741