

# FISCHER



## Clemson National Scholars Program 2006 Yellowstone Itinerary

**Day 1:** Arrive in Bozeman around 2 pm, depart immediately for Yellowstone Park. Picnic dinner at Sheepsteer Cliff, with evening bird, bison and bear watching at Swan Lake Flats. Bunk in cabins at Mammoth Hot Springs.

**Day 2:** Up early to look for grizzlies. Take a morning bath in the Boiling River thermal area. Head south to Madison Junction, checking out an eagle nest and looking for trumpeter swans. Continue south to Old Faithful. Bunk in cabins there.

**Day 3:** Explore Old Faithful geyser basin in the morning, then head south to Yellowstone Lake to look for spawning cutthroat trout. Head for LeHardy Rapids to look for harlequin ducks, then on to Hayden Valley for sandhill cranes, coyotes and eagles. Take a hike to the brink of the Lower Falls of the Yellowstone River. Picnic dinner in Lamar Valley, followed by an evening wolf watch. Bed in Cooke City.

**Day 4:** Up early to look for wolves and bears in Lamar Valley. Afternoon tracking seminar with Dr. James Halfpenny; cast wolf and grizz tracks. Look for moose near Silver Gate. Evening talk with biologists from Yellowstone Wolf Project. Bed in Cooke City.

**Day 5:** Morning wolf and grizzly watching in Lamar Valley. Drive to 10,000 feet up the Beartooth Highway (Charles Kuralt's favorite road in the U.S.!) to look for foxes and marmots and to view some of the most spectacular alpine scenery in North America. Bed in Cooke City.

**Day 6:** Check out Barronette Peak for mountain goats. Then head west for morning wolf and grizzly watching in Lamar Valley. Look for badgers and coyotes at Little America. Birdwatching for trumpeter swans and yellow-headed blackbirds at the Blacktail Ponds. Picnic lunch along the Yellowstone River. Dinner and soak in the hot springs at Chico.

**Day 7:** Arrive in Bozeman in am.

## **Educational Experiences**

### Natural resource issues

#### 1. Endangered species management

--restoration of wolves to Yellowstone and management outside the park (compensation and control), proposals for delisting

--restoration of grizzly bears to Yellowstone

#### 2. National park management

--conflicts over snowmobile use in Yellowstone and other national parks

--bison management in Yellowstone National Park and issues associated with disease transmission

--historic controversy over elk management on Yellowstone's Northern Range, National Science Foundation conclusions

--fire ecology. The 1988 fires provide an excellent backdrop for discussing the impact of fires on large landscapes

### Geology

1. Yellowstone thermal features (Yellowstone has the world's greatest concentration of geysers and hot springs)
2. Mountain ecology (Yellowstone has the multiple impacts of volcanism and glaciation)

### Outdoor Recreation

1. Hiking
2. Photography/Wildlife Viewing

**COURSE INFORMATION & SYLLABUS**

**BIOSC 490 - SECTION 006 - SPRING 2006  
2 CREDITS**

**NATIONAL SCHOLARS YELLOWSTONE SEMINAR**

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**COORDINATING  
INSTRUCTOR**

Dr. Jerry A. Waldvogel

Dept. of Biological Sciences  
Clemson University

Office: 330E Long Hall  
Email: [waldvoj@clemson.edu](mailto:waldvoj@clemson.edu)

Tel: 656-3825 (W)  
639-9807 (H)

**CLASS  
MEETINGS**

Mondays 5:00-6:30 pm 224 Long Hall

**COURSE  
DESCRIPTION**

BIOSC 490, Section 6 introduces students to the natural history and socio-political importance of Yellowstone National Park in preparation for a trip to that area in May 2006. Lectures will introduce students to the geology, ecology, and biodiversity of the park, while readings from historical texts as well as popular science descriptions about Yellowstone will connect that natural history with important political and economic issues. Short written assignments related to the readings will be required during the semester, as will a 5-10 page research paper that focuses on a key organism, group of organisms, or significant natural history feature of Yellowstone.

**COURSE  
OBJECTIVES**

The primary objective of this course is to provide students with the necessary scientific, historical, and socio-political background to fully appreciate their visit to Yellowstone National Park. A second objective is to help students see the importance of preserving the world's remaining natural habitats as laboratories for understanding the fundamental processes that organize and lead to change in living systems. A third objective is for students to recognize the critical role that parks and reserves play in the preservation of the natural world, and to reflect on personal and social changes that can help make conservation more effective.

**REQUIRED  
TEXTBOOKS**

Students will read and discuss the following books during this course:

Germic, Stephen A. (2001) *American Green: Class, Crisis, and the Deployment of Nature in Central Park, Yosemite, and Yellowstone*. Lexington Books. ISBN 073910229X

Barker, Rocky (2005) *Scorched Earth: How the Fires of Yellowstone Changed America*. Shearwater Books. ISBN 1559637358

Fischer, Hank (1995) *Wolf Wars*. Falcon Press. ISBN 1560443529

Wuerthner, George (1992) *Yellowstone: A Visitor's Companion*. Stackpole Books. ISBN 0811730786

**ATTENDANCE**

Attendance is expected at all class meetings, unless prior arrangements have been made with me. If I am late for any of the meetings, you are expected to remain for 15 minutes past the official start time before assuming that class has been postponed for that day.

**EVALUATION  
& GRADING**

Grades in this course will be based on the following:

|   |     |
|---|-----|
| Class attendance & discussion participation       | 20% |
| Writing assignments associated with text readings | 40% |
| Research paper                                    | 40% |

Details regarding the instructor's specific expectations and due dates for each of these assignments will be provided at relevant points throughout the course.

The following table shows how final course averages will relate to letter grades and grade points for BIOSC 490(6):

| <u>Final Average (%)</u> | <u>Letter Grade</u> | <u>Grade Points</u> |
|--------------------------|---------------------|---------------------|
| 90-100                   | A                   | 4.0                 |
| 80-89.9                  | B                   | 3.0                 |
| 70-79.9                  | C                   | 2.0                 |
| 60-69.9                  | D                   | 1.0                 |
| < 60                     | F                   | 0.0                 |

**PROBLEMS**

Problems regarding course material, or those of a personal or special nature, should first be discussed with me. If I cannot answer your question or resolve the problem, I will direct you to the proper departmental or university administrative office for assistance.

**STUDENT  
DISABILITIES**

Students with disabilities who need special accommodations should make an appointment with the Office of Student Disability Services located in G-20 Redfern (656-6848). These accommodations should be taken care of within the first month of classes to be most effective. SDS will provide qualified students with a Faculty Accommodation Letter that should then be delivered to me.

**DROP/ADD/  
WITHDRAWAL**

Students who wish to drop or withdraw from BIOSC 490(6) can do so without my assistance using the University's on-line registration system. You should be aware of the following important dates:

- 25 Jan last day to drop without a record of withdrawal
- 3 Mar last day to drop without receiving a final course grade

Given limitations on how many withdrawal hours a student may use during his/her time at Clemson University, it is generally a good policy to consult with your advisor before dropping a course.

**COMMUNICATIONS  
& COURSE  
MATERIALS**

I will periodically communicate with you outside of class via email. You should get in the habit of checking your university email account for such messages. I will send emails only to your university account, so it is your responsibility to make sure that you monitor that account on a regular basis. I am not responsible for messages that are lost when you transfer emails to and from multiple accounts.

I will also post some course materials via Blackboard, the university's on-line course management system. Blackboard may be accessed from any web browser at <http://bb.clemson.edu>. Details about specific items posted on Blackboard for this course will be discussed as needed throughout the semester.

**CELL PHONES**

Our class time is valuable, and unnecessary interruptions from cell phones detract from that time. Please be sure to turn off your phone before class starts. If you must have your cell phone on during class for an important reason, please advise me in advance and then take the call outside of the classroom.

**ACADEMIC  
INTEGRITY &  
DISHONESTY**

The following is Clemson University's official statement on academic integrity:

*As members of the Clemson University community, we have inherited Thomas Green Clemson's vision of this institution as a "high seminary of learning". Fundamental to this vision is a mutual commitment to truthfulness, honor, and responsibility, without which we cannot earn the trust and respect of others. Furthermore, we recognize that academic dishonesty detracts from the value of a Clemson degree. Therefore, we shall not tolerate lying, cheating, or stealing in any form.*

Academic dishonesty includes giving, receiving, or using unauthorized aid on any academic work. It also includes plagiarism; the copying of language, structure, or ideas of another and passing them off as one's own work. All academic work attempted contains an implicit pledge by the student that no unauthorized aid has been received. The official procedures for handling academic dishonesty are described in the current edition of the student handbook. You should read and become familiar with this information.

A student guilty of first-offense academic dishonesty in this course will receive a grade of zero for the work attempted. Second offenses will result in a grade of "F" for the course, and will raise the possibility of suspension or permanent dismissal from the University.

## BIOSC 490(6) – S'06 LECTURE & DISCUSSION SCHEDULE

| <u>Date</u> | <u>Topic</u>  |
|-------------|---|
| 23 Jan      | Course Themes & Policies – Overview of Topics                   |
| 30 Jan      | <i>NO CLASS</i>   |
| 6 Feb       | Yellowstone National Park: Nature & Politics in Western America |
| 13 Feb      | <i>NO CLASS</i>   |
| 20 Feb      | Class Discussion of <i>American Green</i>                       |
| 27 Feb      | An Introduction to the Natural History of Yellowstone           |
| 6 Mar       | The Role of Fire in Natural Ecosystems                          |
| 13 Mar      | Class Discussion of <i>Scorched Earth</i>                       |
| 20 Mar      | <i>NO CLASS (spring break)</i>                                  |
| 27 Mar      | The Conflict Between Man & Natural Predators                    |
| 3 Apr       | Class Discussion of <i>Wolf Wars</i>                            |
| 10 Apr      | Focus on the Flora of Yellowstone                               |
| 17 Apr      | Focus on the Fauna of Yellowstone                               |
| 24 Apr      | The Importance of Parks in Preserving Biodiversity              |