
Integrated Natural Resource Management
ABS 475, 3 credits
Spring 2009

Department of Wildlife & Fisheries Sciences
Department of Animal and Range Sciences
College of Agriculture & Biological Sciences
South Dakota State University

Course Meeting Time and Location: **Lecture:** Northern Plains Biostress Laboratory Rm103 (SNP 103),
Tuesday, 12:00-1:50 P.M.
Labs: Northern Plains Biostress Laboratory Rm 103 (SNP 103)
S01 Thursdays 12:00 P.M. – 1:50 P.M.
S02 Thursdays 2:00 P.M. – 3:50 P.M.
S03 Thursdays 4:00 P.M. – 5:50 P.M.

Instructors' Contact Information:

Dr. Katie Bertrand, SNP 142A, Telephone: 688-4777, E-mail: D2L course e-mail
Office Hours: Wednesdays 8:30 – 9:30AM and by appointment

Dr. Alexander Smart, ASC 219, Telephone 688-4017, E-mail: D2L course e-mail
Office Hours: by appointment

Course Description:

A capstone course that requires students to integrate previously-learned natural resource techniques and information into the strategic planning process. Students will be divided into small teams for plan development. Various majors are involved to allow for integrated course material.

Course project background:

The Governor of South Dakota recently signed into law a bill that designates \$10,000,000/yr from lottery revenues to be used for a special grant project (SDNR Grants) to improve natural resources within the state. The state requests applications once a year and rewards individual projects on a competitive basis at a funding rate ranging from \$500,000 to \$3,000,000 for 5 year projects. Universities, state and federal agencies, non-governmental agencies, and non-profit groups are eligible to receive funding.

Proposals must include 1a) a statement of philosophy and 1b) a mission statement regarding the group requesting funds, 2) a complete inventory of natural resources of the target area to be improved, 3) a review of issues targeting the project area, and 4) a management plan which includes operational planning (monitoring and budgeting).

Applications are due April 23, 2009 and representatives must give a presentation of their project proposal before the SDNR Grants Review Panel in Brookings, SD on April 30, 2009.

Prerequisites / Co-requisites:

Prerequisites depend on major. ABS 475L (Integrated Natural Resource Management Lab) is a co-requisite. Students must be enrolled in both ABS 475 and ABS 475L during the same semester. Technology skills related to use of internet resources, primarily browsers (D2L) and Adobe Acrobat Reader, are required for this course. The recommended browser is the most current version of Microsoft Internet Explorer. Basic technology (e.g., computer system, network, and software) requirements and assistance are provided at <http://learn.sdstate.edu/online/require.htm>. Additional information may be obtained by contacting SDSU support services at (605) 688-6776, or SDSU.SupportDesk@sdstate.edu.

Instructional Method:

The primary mode of instruction will be guided teamwork and discussion, supplemented by lecture (accompanied by visual aids), writing assignments, and other exercises. Topic notes and/or material for exercises are provided on D2L in advance. Audiovisual presentations are provided for each lecture to facilitate comprehension of selected topics. The best approach for lectures is to download and print off lecture material (.pdf files of lecture outlines, etc.) before class and bring these materials to class for note taking, etc. **NOTE:**

THE INSTRUCTORS RESERVE THE RIGHT TO INCORPORATE POP QUIZZES, BONUS QUIZZES, OR OTHER UNANNOUNCED ASSIGNMENTS.

Course Goals and Outcomes:

To provide a capstone experience for students that prepares them for careers as natural resource managers.

Supporting goals:

1. Students will synthesize their knowledge of wildlife and fisheries, range science, and environmental management to develop integrated strategic and operational plans.
2. Students will work in teams to solve problems.
3. Students will communicate effectively in small and large group discussions, through individual and team writing assignments, and in group oral presentations.

Advanced Writing Requirement:

Students will build upon the concepts learned in courses covering System General Education Goal # 1 and refine their skills through research and writing in a discipline specific context.

Outcomes

1. Read extensively and respond critically in the written discourse of a discipline; formulate research questions, refine topics, develop a plan for research and organize what is know about the topic; articulate a position through a thesis statement and advance it using evidence from primary and secondary sources, examples, and counterarguments that are relevant to the audience or issues at hand.
2. Use a style manual and other writing conventions specific to a discipline; avoid plagiarism by adhering to the rules of paraphrasing, summarizing, and the use of quotations, as well as the conventions for incorporating information from Internet-based resources.
3. Evaluate sources critically, both print and electronic, discern the strength of evidence and arguments, determine credibility, and identify potential bias and overall quality.
4. Present the results of research or projects, either collaboratively or individually, to the class, department, faculty, community members, or at a student research or professional conference.

Course Web Site:

Online materials (i.e., syllabus, lecture notes, exam results, and resource links) are available at <http://d2l.sdstate.edu/>. You will utilize D2L extensively, and I suggest you become familiar with this program early in the semester and ask for assistance if you have any questions. The D2L homepage above has very good instructions for first time users.

Course Requirements:

Students are required to complete all assigned readings. Student teams are required to complete the oral presentations and writing assignments. Additional pop quizzes, bonus quizzes, and/or other unannounced assignments may also be offered at the instructor's discretion. Students are strongly encouraged to attend all class meetings and team working sessions; however, attendance will not be monitored.

Required Text:

There is no required text for this course.

Course Schedule: NOTE: shaded cells refer to assignment deadlines.

Date	Theme	Topic	Assignment	
1/20	Introduction	Syllabus; personality/career surveys	read Redwater rapid assessment	
1/22		Discussion: Redwater rapid assessment	read Oakwood 319 report	
1/27	Inventory	Elements of a good inventory; data demonstration	practice finding, graphing, interpreting trend data	
1/29		Oakwood 319 report data	turn in one trend graph and interpretation	
2/3		Elements of good oral/written communication		
2/5		Team working session	develop Inventory	
2/10		Team working session	develop Inventory	
2/12		Practice Oral Inventory Presentations	turn in Inventory outline	
2/17		Discussion: Oakwood Inventory		
2/19		Revised Oral Inventory Presentations	turn in draft Inventory block text	
2/24		Review of Issues	Elements of a good review of issues	write-up & turn in one issue
2/26			Discussion: single issues	turn in revised Inventory
3/3	Discussion: review of all issues			
3/5	Management Plan	Team working session	turn in Review of Issues turn in student evaluations	
3/9 – 3/13		Spring Break		
3/17		Elements of a good Strategic Plan	read strategic plan	
3/19		Discussion: strategic plan	write up one goal set	
3/24		Elements of a good Operational Plan	turn in one goal set	
3/26		Team working session	develop Management Plan	
4/7		Elements of Mission Statement & Statement of Philosophy	practice writing Mission Statement & Statement of Philosophy	
4/9		Practice Oral Final Presentation		
4/14	Final Oral & Written Communications	Team working session		
4/16		Team working session	turn in draft written	
4/21		Team working session		
4/23		Team working session	turn in revised written	
4/28		Course evaluation	turn-in student evaluations	
4/30		Revised Oral Final Presentation		

Grading/assessment:

The final course grade is composed of the following elements:

Title	Due date	Points
Inventory: graph & interpretation	1/29	25
Inventory: practice oral presentation	2/12	25
Inventory: outline	2/12	25
Inventory: revised oral presentation	2/19	50
Inventory: draft written	2/19	50
Review of Issues: 1 issue write-up	2/24	25
Inventory: revised written	2/26	25
Review of Issues: draft written	3/5	50
Management plan: goal set	3/24	25
Final: strategic plan practice oral	4/9	75
Final: strategic plan draft written	4/16	75
Final: strategic plan revised written	4/23	100
Final: strategic plan revised oral	4/30	100

Assessment descriptions:

Strategic plan writing assignments: 400 total points. See syllabus supplement for details. These assignments will be completed in teams, and the same grade will be given to all team members for each part of the assignment. We have assigned a high total point value to these assignments to encourage you to develop sound work. You will have a lot of freedom to develop your ideas in these assignments and will not be graded “right or wrong” in your ideas. However, your papers will be graded for how well you support your ideas and compose your writing (editing and grammar). To earn high grades on the writing assignments, your team must develop an organized paper and spend time editing your assignment before submitting it to the instructors. We will return comments on previous assignments within 2 weeks. You will lose points for late assignments.

Strategic plan oral presentations: 250 total points. See syllabus supplement for details. These assignments will be completed in teams, and the same grade will be given to all team members for each part of the assignment. To earn high grades on the oral presentation assignments, your team must develop an organized, concise presentation and spend time practicing the delivery for teammates before the in-class presentations.

Evaluation Procedures:

Students will be assessed by instructors with writing and oral presentation assignments. Students will also assess their teammates at midterm and at the conclusion of the course. Each student team will consist of six students. Each team member will have 5 points that he/she can award to his/her teammates (not his-/herself) as appropriate. If every team member was participating equally in the work assignments, then each team member should receive 1 point. If one team member was not contributing sufficiently to the work assignments, then that individual will not receive a point, and a different team member who exceeded expectations to compensate for the non-contributing member should receive 2 points. The instructors will compile the student points. If everyone was participating equally within the team, then all students will have 5 total points (one point from each of their 5 teammates), and their course grade will remain unchanged. If a student receives 6 total points (one point from each of 4 teammates and 2 points from one teammate), then that student’s overall course grade will increase at least **5 percentage points**. If a student receives 4 total points (one point from each of 4 teammates and no points from 1 teammate), then that student’s overall grade will decrease **5 percentage points**. Thus, teams that are working together effectively will earn good grades on their assignments, and students on teams that are not working together might not earn good grades on their assignments, but individuals will be rewarded or punished in accordance with their responsibility for the team grade. At midterm, students will alert one another regarding their progress, and students will have the opportunity to modify their team interaction during the second half of the semester.

All teammates must attend all oral presentations. **Because of the large class size make-ups will not be allowed.** If you are unable to attend an oral presentation you must notify the instructors **BEFORE** the

presentation or leave a message with the department secretary. If the instructor agrees that a student's absence should be excused, then that student will still receive full group credit for the oral presentation.

Grades will be assigned according to the standard scoring system. **Only** by attaining the following points/percentages can you be assured of receiving a desired grade. **NOTE: the points below will change if additional assignments/quizzes are utilized during the semester.**

Grade	Percentage	Points
A	90–100%	585
B	80–89%	520-584
C	70-79%	455-519
D	60-69%	390-454
F	<60%	<390

ADA and Academic Dishonesty Policies

Students are entitled to 'reasonable accommodations' under the provisions of the *Americans with Disabilities Act*. Those in need of such accommodation should notify the instructor and make appropriate arrangements with the SDSU Office of Disabilities Services (110 West Hall, 688-4504 or 688-4032 TTD).

Any form of academic dishonesty will not be tolerated. You are subject to the academic dishonesty policy in the following section.

Department of Wildlife and Fisheries Sciences Academic Dishonesty Policy (Revised Nov. 2000)

The Department and the University have taken a strong and clear stand regarding academic dishonesty. We believe that it is unethical and unprofessional to present work done by others in a manner indicating that the student/s is/are presenting material as his/her original ideas or work; such activity is academic dishonesty. Plagiarizing or knowingly assisting others in plagiarizing on tests, quizzes, problems, assignments, research papers, theses, dissertations, or other academic activities is unacceptable behavior. All academic work completed by students is expected to be the original work of that individual student, unless permission is specifically granted beforehand by the faculty member for some form of team effort or other format. If students are unsure if a particular activity may be regarded as a form of academic dishonesty they should consult the faculty member before undertaking such an activity.

The University has a policy on academic honesty, procedures for academic grade and dishonesty appeals, and sanctions for such activities (see Student Code). The Student Code has **different** procedures for undergraduate and graduate students.

The Department policy described in this handout is intended to attempt to address perceived academic dishonesty violations between the faculty member/s and student/s **before** Student Code procedures are implemented. This is done because under Student Code procedures the **minimum** penalty for academic dishonesty is Disciplinary Probation. These added Department steps (Steps 1, 2, and 3 of the Undergraduate Student and Graduate Student Procedures) should not be construed as an attempt to circumvent the Student Code system; both students and/or the faculty member have the option to go directly into that system. The Department procedures portion of this policy are only available to a student one time; any second perceived offense will immediately follow the Student Code procedures.

Undergraduate Student Procedure

1. When a student/s is/are determined to have broken the Academic Dishonesty Policy, he/she will be notified **verbally** by the faculty member involved as to the problem and sanction selected. This is similar to procedures 02:02:01:03 and 02:02:01:04 in the Student Code. The faculty member will do

this immediately after the perceived violation occurs. Sanction options available to the faculty member are as follows:

- a. provide the student/s a grade of zero or some other score on the test, quiz, problem, assignment, or other academic endeavor involved;
- b. provide the student/s a grade of "F" in the course;
- c. request that the student/s withdraw from the course;
- d. request that the student/s change the grading for the course to an "audit"; or
- e. immediately refer the case to the Student Code procedures.

The sanction selected is at the discretion of the faculty member, based on the seriousness of the situation.

2. If the student/s agrees to the sanction proposed by the faculty member the process is completed.
3. If the student/s does not agree to the sanction proposed by the faculty member, he/she has the right to appeal the faculty member's decision. This **Informal Phase Appeal** should be made directly (**both verbally and in writing**) to the faculty member involved within 5 class days of notification or within 7 calendar days of notification, if the incident is at the end of the semester.

The faculty member may then modify or leave unchanged the sanction proposed in step 1. A copy of the student's **written appeal** and the faculty member's **written response** will be sent to the Department Head so that a confidential record to protect the student/s and the faculty member is established. The student/s written appeal and faculty member written response will be secured in the student's file until graduation or he/she leaves the program; if no further perceived violations have occurred these materials will be purged from the student's file.

4. If the student/s is/are still dissatisfied with the decision he/she can appeal to the Department Head. This **Informal Phase Appeal** should be made **verbally**. The Department Head will utilize this verbal appeal and the written student appeal and faculty written response described in step 3 to reach a decision. (These are steps 02:02:01:05, 02:02:01:06, and 02:02:01:07 in the **Informal Phase Appeal** process described in the Student Code).
5. If the student/s and faculty member agree with the Department Head's decision, the process is completed. Up to this point, no one other than the student/s, faculty member, and Department Head has been made aware of the situation.
6. If the student/s or faculty member is/are dissatisfied with the Department Head's decision they can enter the **Formal Phase** of the Student Code process (Student Code 02:02:02). It is the responsibility of the faculty member and student/s to be aware of the procedures and penalties involved.

¹The student's advisor **may** be included because items other than class work could be involved.

Freedom in learning

Under Board of Regents and University policy student academic performance may be evaluated solely on an academic basis, not on opinions or conduct in matters unrelated to academic standards. Students should be free to take reasoned exception to the data or views offered in any course of study and to reserve judgment about matters of opinion, but they are responsible for learning the content of any course of study for which they are enrolled. Student who believe that an academic evaluation reflects prejudiced or capricious consideration of student opinions or conduct unrelated to academic standards should first contact the instructor of the course to initiate a review of the evaluation. If the student remains unsatisfied, the student may contact the department head and/ or dean of the college which offers the class to initiate a review of the evaluation.



Figure 1. Integrated Natural Resource Management (ABS 475) case study area for spring semester 2009. Targeted area of interest is the Oakwood Lakes watershed, approximately 55,040 acres (Source: EDWDD 2005).