Syllabus

TITLE: Survey Research in Natural Resources Management
NUMBER: NRM 366
CREDITS: 3
PREREQUISITES: NRM F101; STAT F200X
LOCATION: Lectures online, lab 359 O'Neill
MEETING TIME: Online; lab W. 2 – 5
COURSE TYPE: Hybrid online asynchronous and in-person lab, and fully online asynchronous
INSTRUCTOR: Dr. Peter J. Fix
OFFICE LOCATION: 323 O'Neill
OFFICE HOURS: Tues. 2 to 5 p.m.
TELEPHONE: (907) 474-6926
EMAIL ADDRESS: pjfix@alaska.edu

COURSE DESCRIPTION

Catalog description

Research methods to support research and planning in recreation and human dimensions of natural resources management. Course topics include quantitative theories and concepts that have been applied to study human dimensions of natural resource management, study design, survey development and administration, sampling and data analysis.

Additional course description

Social science surveys can be a valuable tool for natural resource management. As such, they are extensively applied to assist in management decisions. However, obtaining valid results requires careful attention to the concepts being measured, design of the questionnaire, and methods used. This course will explore concepts from social psychology that can assist in natural resource management and principles of survey design and analysis, with an emphasis on natural resource-related applications.

COURSE GOALS

The course will provide students with knowledge of the following topics:

- How survey research can support management decisions
- Social psychology topics most often applied in natural resource management
- Defining study objectives and identifying and integrating social science concepts most applicable to study concepts
- Developing a quantitative survey to measure research questions/hypotheses
- Assessing the reliability of a survey and validity of results
- Steps to go from raw survey data to data analysis
- Basic statistical analysis in SPSS
- Documenting results in a report

STUDENT LEARNING OUTCOMES

Upon successful completion of this course, the students will have the skills to:

- Evaluate survey-based research projects to determine whether the methods utilized met stated study objectives
- Complete all phases of a survey-based research project, including developing study objectives, selecting the most appropriate survey method and developing the questionnaire, coding data and conducting statistical analysis, and documenting results
- Present results in an appropriate format (e.g., APA, The Chicago Manual of Style)

COURSE READINGS/MATERIALS

Required text: Vaske, J. J. (2008). *Survey research and analysis: Applications in parks, recreation and human dimensions*. State College, PA: Venture Publishing.

Additional readings will be assigned, and are noted in the class schedule. These readings will be posted to Blackboard.

TECHNICAL REQUIREMENTS FOR COURSE

Students must have regular access to a computer and the Internet to access online materials in Blackboard. Students will be expected to download course material as well as upload assignments.

Lab sessions will use the software program SPSS. It is installed on the computers in 359 O'Neill. Distance students will be required to secure their own copy. SPSS can be rented for six months for $42.99 + a $4.99 download fee from http://www.onthehub.com/spss/ ; download the Base GradPack 25.

INSTRUCTIONAL METHODS

The class will consist of online modules and a lab section. The online modules will require you to view videos. These will consist of short videos of me providing information and YouTube videos or other non-UAF sourced videos. When describing tasks I will refer to the former as "lecture" videos and the latter as "external" videos.

The lab will consist of becoming familiar with survey data (level of measurement, coding data, creating data bases, data management), analysis, and creating surveys. For distance students, I will post the lab material online and be available at designated times to answer questions.

COURSE CALENDAR

Dates	Topics Covered
Week 1 1/14 to 1/18	Course introduction
Lab 1	Introduction to SPSS
Week 2 1/21 to 1/25	Common topics in survey-based human dimensions research • Manfredo, M. J., Vaske, J. J., & Decker, D. J. (1995). Human dimensions of wildlife management: basic concepts. In R. L. Knight & K. J. Gutzweiller (eds). *Wildlife and Recreationists: coexistence through Management and Research*. Washington D.C.: Island Press. • Vaske: ch. 2
Lab 2	Level of Measurement and Coding Data • Vaske: ch. 5 (pages 79 to 88), ch. 10
Week 3 1/28 to 2/1	Introduction to Measurement • Vaske: ch. 4
Lab 3	Database creation
Week 4 2/4 to 2/8	More on Attitudes • Whittaker, D., Manfredo, M. J., Fix, P. J., Sinnot, R., Miller, S., & Vaske, J. J. (2001). Understanding Beliefs and Attitudes About an Urban Wildlife Hunt: Moose Hunting Near Anchorage Alaska. Wildlife Society Bulletin, 29(4), 1114-1124.
Lab 4	Data management • Vaske: ch. 12
Week 5 2/11 to 2/15	Values orientations • McFarlane, B. L. & Boxall P. C. (2000). Factors influencing forest values and attitudes of two stakeholder groups: The case of the foothills Model Forest, Alberta, Canada. *Society and Natural Resources, 13*, 649-661. • Teel, T. L., Dayer, A. A., Manfredo, M. J., & Bright, A. D. (2005). *Regional results from the research project entitled "Wildlife Values in the West."* (project report No. 58). Project report for the Western Association of Fish and Wildlife Agencies. Fort Collins, CO: Colorado State University, Human Dimension in Natural Resources Unit. Pgs: 1-21; 168-175.
Lab 5	Reliability analysis and scale construction
Week 6 2/18 to 2/22	Exam 1. Covers material through week 5 Writing and conducting surveys • Vaske: ch. 7
Lab 6	Survey design
Week 7 2/25 to 3/1	Writing and conducting surveys, continued • Example surveys
Lab 7	Survey design

Week 8 3/4 to 3/8	Writing and conducting surveys, continued • Web surveys
Lab 8	Sampling
Week 9 3/11 to 3/15	Spring Break – **no class!**
Week 10 3/18 to 3/22	Implementation: possible errors, response rate, survey administration • Vaske: ch. 8
Lab 9	Sampling
Week 11 3/25 to 3/29	Implementation: sampling, margin of error • Vaske: ch. 8
Lab 10	T-test: • Vaske: ch. 14
Week 12 4/1 to 4/5	Implementation: weighting • Vaske: ch. 8
Lab 11	Weighting • Vaske: ch. 8
Week 13 4/8 to 4/12	Exam 2. Covers material from week 6 through week 12 Project evaluation • Yale Program on Climate Change Communication: Global Warming's Six Americas: http://climatecommunication.yale.edu/about/projects/global-warmings-six-americas/
Lab 12	Crosstabs • Vaske: ch. 13
Week 14 4/15 to 4/19	Writing up results, IRB and your responsibilities as a researcher
Lab 13	ANOVA • Vaske: ch. 15
Week 15 4/22 to 4/26	Case study • TBA
Lab 14	Linking survey design to analysis
May 4	**Final exam due**

COURSE POLICIES

This course will adhere to the following policies.

- Points, equivalent to one letter grade per day late, will be deducted for late assignments (unless arrangements have been made, see below).
- Missed discussion board assignments cannot be made up and zero points will be awarded.
- Due dates for assignments can be adjusted and exams can be rescheduled/made up for legitimate reasons (illness, family issues, UAF athletic travel, conference travel) if prior arrangements are made. If absolutely unforeseen circumstances occur and prior arrangements have not been made, exceptions might be granted on a case by case basis.
- The "lecture" portion of this class is online; viewing the lecture videos is necessary for successful completion of the lecture-based assignment assignments and exams. It is expected that you will view all videos, complete all lecture-based assignments, attend lab, and participate in all lab assignments.

EVALUATION POLICIES

Students will be evaluated on lecture-based assignments (viewing/reading supplemental material and posting comments to discussion forums, short assignments, and quizzes), lab assignments, and three exams. Exams and assignments will be evaluated in comparison to the correct answer as indicated by the course readings and online lecture material. Discussion forums will be evaluated based on evidence of critical thinking about the topic, contribution to the overall discussion, and respect for other students. Successful participation will require you to complete the discussions in a timely and professional manner. Lecture-based assignments will vary in tasks and expectations. I will provide grading rubrics with the assignments.

Plus and minus grades will be used. Grades will utilize absolute score. The components of the final grade and their contribution to the overall grade are as follows.

<table>
<tr><th colspan="2">Weight for final grade[1]</th><th colspan="3">Requirements for letter grade</th></tr>
<tr><td>Lecture-based assignments[2]</td><td>35%</td><td>A + > 96[5]
A 93 to 96
A- 90 to 92</td><td>C+ 77 to 79
C 73 to 76
C- 70 to 72</td><td>F < 60</td></tr>
<tr><td>Lab assignments[3]</td><td>35%</td><td rowspan="2"></td><td rowspan="2"></td><td rowspan="2"></td></tr>
<tr><td>Exams[4]</td><td>30%</td></tr>
<tr><td colspan="2"></td><td>B+ 87 to 89
B 83 to 86
B- 80 to 82</td><td>D+ 67 to 69
D 63 to 66
D- 60 to 62</td><td></td></tr>
</table>

[1]It is important to note the weights are applied to your average score within each category. Thus, the absolute point value is not the appropriate metric to determine the relative worth of any one assignment. Note, the video had the lecture-based assignments and exam weights reversed.
[2]Includes, but not limited to, discussions, quizzes, written assignments.
[3]Each lab will have an assignment.
[4]There will be two exams during the semester and a final exam.
[5]These numbers represent percentages.

ACADEMIC INTEGRITY

As described by UAF, scholastic dishonesty constitutes a violation of the university rules and regulations and is punishable according to the procedures outlined by UAF. Scholastic dishonesty includes, but is not limited to, cheating on an exam, plagiarism, and collusion. Cheating includes providing answers to or taking answers from another student. Plagiarism includes use of another author's words or arguments without attribution. Collusion includes unauthorized collaboration with another person in preparing written work for fulfillment of any course requirement. Scholastic dishonesty is punishable by removal from the course and a grade of "F." For more information go to Student Code of Conduct.

EXPLANATION OF NB/I/W GRADES

This course adheres to the UAF regarding the granting of NB Grades *The NB grade is for use only in situations in which the instructor has No Basis upon which to assign a grade. In general, the NB grade will not be granted.*

Your instructor follows the University of Alaska Fairbanks Incomplete Grade Policy:
"The letter "I" (Incomplete) is a temporary grade used to indicate that the student has satisfactorily completed (C or better) the majority of work in a course but for personal reasons beyond the student's control, such as sickness, he has not been able to complete the course during the regular semester. Negligence or indifference are not acceptable reasons for an "I" grade."

Successful, timely completion of this course depends on committing yourself early and maintaining your effort. Failure to submit assignments in a timely manner may result in faculty-initiated Withdrawal from the course, which can result in a **W** on your transcript.

INSTRUCTOR RESPONSE TIME

If you email me with a question during weekday daytime hours I will try to reply promptly. However, I have meetings and other constraints that might delay my response time. Although I do check email and respond to students in the evening and over the weekend, occasionally I purposely do not check email during those times. If I know I will have limited contact during the week (travel, other commitments), I will let you know. My goal is to grade assignments and exams within a week.

EFFORT AND STUDENT INVOLVEMENT

This is a 3 credit lab course, with 2 credits associated with lecture and 1 credit for lab. The weekly contact hours and student effort requirements for a traditional face to face class are 2 hours of lecture, 3 hours of lab, and 4 hours of student work outside of the lecture/lab (9 total hours per week).

The lecture videos should average approximately 1 hour per week. Additional videos and lecture assignments will fill the remaining 1 hour associated with lecture and part of the 4 hours of student work outside of the lecture/lab. The course readings and studying for exams will fill the remaining 4 hours of student work outside the lecture/lab.

A rough approximation as to how you will you will allocate the 9 hours per week is as follows.

- "Lecture" material and lecture-based assignments: 44%
- Course readings and studying for exams: 23%
- Lab assignments: 33%

STUDENT PROTECTIONS AND SERVICES STATEMENT

Every qualified student is welcome in my classroom. As needed, I am happy to work with you, disability services, veterans' services, rural student services, etc. to find reasonable accommodations. Students at this university are protected against sexual harassment and discrimination (Title IX), and minors have additional protections. As required, if I notice or am informed of certain types of misconduct, then I am required to report it to the appropriate authorities. For more information on your rights as a student and the resources available to you to resolve problems, please go the following site: www.uaf.edu/handbook

SUPPORT SERVICES

Go to the Student Handbook (www.uaf.edu/handbook) for things like:
academic advising, tutoring, library and academic support, disability services, computing and technology, veteran and military support, academic complaint and appeals, late withdrawals, "classroom" behavior expectations and more.

UAF eCampus Student Services helps students with registration and course schedules, provides information about lessons and student records, assists with the examination process, and answers general questions. Our Academic Advisor can help students communicate with instructors, locate helpful resources, and maximize their distance learning experience. Contact the UAF eCampus Student Services staff at 907.455.2060 or toll free 1.800.277.8060 or contact staff directly with our directory listing.

UAF Help Desk

Go to http://www.alaska.edu/oit/ to see about current network outages and technology news.
For technical questions, contact the Help Desk at:

- e-mail at helpdesk@alaska.edu
- phone: 450.8300 (in the Fairbanks area) or 1.800.478.8226 (outside of Fairbanks)

Effective Communication

Students who have difficulties with oral presentations and/or writing are strongly encouraged to get help from:

- UAF Department of Communication's Speaking Center (907.474.5470, speak@uaf.edu)
- UAF English's Department's Writing Center (907.474.5314, Gruening 8th floor)
- CTC's Learning Center (604 Barnette Street, 907.455.2860).

NOTICE OF NONDISCRIMINATION

UA is an AA/EO employer and educational institution and prohibits illegal discrimination against any individual: www.alaska.edu/titleIXcompliance/nondiscrimination