Syllabus

TITLE: Survey Research in Natural Resources Management
NUMBER: NRM 366
CREDITS: 3
PREREQUISITES: NRM F101; STAT F200X
LOCATION: Lecture 201 O'Neill, lab 359 O'Neill
MEETING TIME: Lecture M 5:30 to 7:30 p.m.; lab W 2 – 5
COURSE TYPE: In-person, with Zoom available if needed
INSTRUCTOR: Dr. Peter J. Fix
OFFICE LOCATION: 323 O'Neill
OFFICE HOURS: T & TH 1:30 to 3:00
TELEPHONE: (907) 474-6926
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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 Canvas.

TECHNICAL REQUIREMENTS FOR COURSE

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

Lab sessions will use the software program SPSS. You will be required to download a student version of SPSS. SPSS can be rented for six months for $39.95(there might be a $4.99 download fee) from http://www.onthehub.com/spss/ ; download the 6-month rental of Base GradPack 27.

INSTRUCTIONAL METHODS

The class will consist of face-to-face lectures and labs. Associated with the lectures will be discussions, written assignments, and quizzes; those are referred to as "lecture assignments."

The lab will consist of becoming familiar with survey data (level of measurement, coding data, creating data bases, data management), analysis, and creating surveys. There will be a lab assignment due each week.

COURSE CALENDAR

Dates	Topics Covered
Week 1 1/10 to 1/14	Course introduction
Lab 1	Introduction to SPSS
Week 2 1/17 to 1/21	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 1/24 to 1/28	Introduction to Measurement • Vaske: ch. 4
Lab 3	Database creation
Week 4 1/31 to 2/4	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 2/7 to 2/11	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 2/14 to 2/18	Exam 1. Covers material through week 5 Writing and conducting surveys • Vaske: ch. 7
Lab 6	Survey design
Week 7 2/21 to 2/25	Writing and conducting surveys, continued • Example surveys
Lab 7	Survey design

Week 8 2/28 to 3/4	Writing and conducting surveys, continued • Web surveys
Lab 8	Crosstabs • Vaske: ch. 13
Week 9 3/7 to 3/11	Spring Break – **no class!**
Week 10 3/14 to 3/18	Implementation: possible errors, response rate, survey administration • Vaske: ch. 8
Lab 9	Sampling
Week 11 3/21 to 3/25	Implementation: sampling, margin of error • Vaske: ch. 8
Lab 10	Sampling
Week 12 3/28 to 4/1	Implementation: weighting • Vaske: ch. 8
Lab 11	Weighting • Vaske: ch. 8
Week 13 4/4 to 4/8	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	T-test: • Vaske: ch. 14
Week 14 4/11 to 4/15	Writing up results, IRB and your responsibilities as a researcher
Lab 13	ANOVA • Vaske: ch. 15
Week 15 4/18 to 4/22	Case study • TBA
Lab 14	Linking survey design to analysis
April 27	**Final exam due @ 9 a.m.**

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).
- Unless prior arrangements are made, 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.

EVALUATION POLICIES

Students will be evaluated on lecture-based, lab assignments, and three exams. Exams and assignments will be evaluated in comparison to the correct answer as indicated by the course readings and 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 detail regarding expectations with the assignments. A general rubric for assignments is at the end of the syllabus.

Plus and minus grades will be used. Grades will utilize absolute score (i.e., not graded on a curve). The components of the final grade and their contribution to the overall grade are as follows.

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

[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.
[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 (9 total hours per week).

The lecture will be 2 hours per week. Reading lecture material, lecture-based assignments, and exams will make up the 4 hours of student work outside of the lecture. The lab assignments can be completed within the 3-hour lab time period.

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

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

STUDENT PROTECTIONS STATEMENT

UAF embraces and grows a culture of respect, diversity, inclusion, and caring. Students at this university are protected against sexual harassment and discrimination (Title IX). Faculty members are designated as responsible employees which means they are required to report sexual misconduct. Graduate teaching assistants do not share the same reporting obligations. For more information on your rights as a student and the resources available to you to resolve problems, please go to the following site: https://catalog.uaf.edu/academicsregulations/students-rights-responsibilities/.

SUPPORT SERVICES

I will work with the Office of Disability Services to provide reasonable accommodation to students with disabilities.

See 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

COVID-19 statement: Students should keep up-to-date on the university's policies, practices, and mandates related to COVID-19 by regularly checking this website:
https://sites.google.com/alaska.edu/coronavirus/uaf?authuser=0
Further, students are expected to adhere to the university's policies, practices, and mandates and are subject to disciplinary actions if they do not comply.

	Assignment Rubric and General Letter Grade (specific points will be determined based on the degree meeting the standards for the letter grade)			
	A	B	C	D
Critical thinking - applies to discussions and written assignments	Issue/problem clearly & comprehensively stated; position is soundly supported; problem identified and supporting material correctly follow from lecture materials, and is creative in identifying an application.	Issue/problem statement not seriously impeded by omissions; position is adequately supported; problem identified and supporting material follow from lecture materials with few errors, and application is moderately novel.	Issue/problem statement not fully developed; position has weak support; problem identified and supporting material loosely follow from lecture materials with some errors, and/or application lacks novelty.	Issue/problem statement lacks clarity; position has weak support; problem identified and supporting material loosely follow lecture materials but contain several key errors, and/or application lacks novelty.
Written Comm. for discussion post	Clear, error-free language; language is professional in tone; response to posts is constructive, relevant, respectful, and contributes to the class's understanding of the topic.	Clear language, but may contain some errors; language is professional in tone; response to posts is constructive, relevant, respectful, and moderately contributes to the class's understanding of the topic.	Language contains errors and is difficult to follow; response to posts contains some extraneous material that limits the contribution to the class's understanding of the topic.	Language contains errors and is difficult to follow; response to posts mostly irrelevant with limited contribution to the class's understanding of the topic.
Written Comm. for written assignments	Clear, error-free language; highly effective organization. Arguments are clearly identified. No extraneous material. Cited as appropriate.	Clear language, but may contain some errors; effective organization. Arguments are clearly identified, might contain some extraneous material. Cited as appropriate.	Language contains errors and is difficult to follow; organization limits presentation of arguments, contains irrelevant material. Inconsistent citations.	Language contains errors and is difficult to follow; arguments are not clear; lacks organization and does not cite sources.
Lab assignments	Completed all sections, followed instructions, calculations accurate. Lab write up concise and error free, conclusions follow from data/results.	Completed all sections, followed instructions, minor errors in calculations. Lab write up concise and error free, conclusions mostly follow from data/results.	Missed some sections, but mostly complete, errors in calculations or following instructions, but demonstrates some understanding of procedures. Lab write up lacks connection to data/results and may contain grammatical errors.	Few sections completed or responses indicate misapplication of procedures. Lab write up lacks connection to data/results or is not complete.