NRM 469 Syllabus, spring 2023

TITLE: Survey Research in Human Dimensions of Natural Resources
NUMBER: NRM 469
CREDITS: 3
PREREQUISITES: NRM F101; STAT F200X
LOCATION: Lectures 201 O'Neill, lab 359 O'Neill
MEETING TIME: Lecture M 5:30 to 7:30; lab W. 2 – 5
COURSE TYPE: Lecture/lab
INSTRUCTOR: Dr. Peter J. Fix
OFFICE LOCATION: 323 O'Neill
OFFICE HOURS: Tues. & Thurs. 1:15 to 2:45 p.m.
TELEPHONE: (907) 474-6926
EMAIL ADDRESS: pjfix@alaska.edu

COURSE DESCRIPTION

Catalog description
Social science concepts applied to survey-based human dimensions research. Survey research methods including operationalizing research questions into measurable variables, designing survey instruments, assessing reliability and validity, developing a sampling plan, data management, data analysis, and reporting results.

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 instrument to measure research questions/hypotheses
- Assessing the reliability of a survey and validity of results
- Steps to progress from raw survey data to data analysis
- Basic statistical analysis in SPSS
- Documenting results in a report
- Institutional Review Board

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 resulted in study objectives being met.
- 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. (2019). *Survey research and analysis: Applications in parks, recreation and human dimensions, 2nd*. 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 materials in Canvas. 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 $39.99 + a $4.99 download fee from: https://estore.onthehub.com/WebStore/OfferingDetails.aspx?o=9d56569b-2d5f-e911-8115-000d3af41938&pmv=304b1dff-5b5d-e911-8115-000d3af41938

(Google "SPSS onthehub")

INSTRUCTIONAL METHODS

The class will consist of 2 credits of lecture and a 1-credit lab section. The lecture sections will be based on course readings; it is expected you come to class having read the material and are prepared to discuss the material.

The lab will consist of becoming familiar with survey data (level of measurement, coding data, creating data bases, data management), analysis, and creating surveys.

COURSE CALENDAR

Dates	Topics Covered
Week 1 1/16 to 1/20	Course introduction. No lecture (AK Civil Rights Day; videos will be posted). Assignment to introduce yourself in chat.
Lab 1	Introduction to SPSS
Week 2 1/23 to 1/27	.Introduction to key topics • 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 1/30 to 2/3	Introduction to Measurement • Vaske: ch. 4
Lab 3	Database creation
Week 4 2/6 to 2/10	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 2/13 to 2/17	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 2/20 to 2/24	Writing and conducting surveys • Vaske: ch. 7 **Exam 1. Covers material through week 5**
Lab 6	Survey design
Week 7 2/27 to 3/3	Writing and conducting surveys, continued • Example surveys
Lab 7	Survey design

Week 8 3/6 to 3/10	Writing and conducting surveys, continued • Web surveys
Lab 8	Crosstabs • Vaske: ch. 13
Week 9 3/13 to 3/17	Spring Break – **no class!**
Week 10 3/20 to 3/24	Implementation: possible errors, response rate, survey administration • Vaske: ch. 8
Lab 9	Sampling
Week 11 3/27 to 3/31	Implementation: sampling, margin of error • Vaske: ch. 8
Lab 10	Sampling
Week 12 4/3 to 4/7	Implementation: weighting • Vaske: ch. 8
Lab 11	Weighting • Vaske: ch. 8

Week 13
4/10 to 4/14
	Project evaluation
	  • Yale Program on Climate Change Communication: Global Warming's Six Americas:
	  http://climatecommunication.yale.edu/about/projects/global-warmings-six-americas/
	Exam 2. Covers material from week 6 through week 12

Lab 12	T-test: • Vaske: ch. 14
Week 14 4/17to 4/21	Writing up results, IRB and your responsibilities as a researcher
Lab 13	ANOVA • Vaske: ch. 15
Week 15 4/24 to 4/28	Case study • TBA
Lab 14	Linking survey design to analysis
May 5	**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).
- 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.
- It is expected that you attend all lectures, complete all lecture-based assignments, attend lab, and participate in all lab assignments.

EVALUATION POLICIES

Students will be evaluated on weekly lecture-based assignments (viewing/reading supplemental material and posting to discussion forums, written assignments, and quizzes), lab assignments, and three exams. Some discussions and assignments might have a class participation component. 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. A general rubric is on the next page, the ratio of critical thinking to written communication will be posted with each assignment/discussion.

Plus and minus grades will be used. Grades will not be curved. 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		
Weekly 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 discussions, written assignments, and quizzes. While there will be weekly assignments, the assignments on weeks with exams will be less intense than other weeks.
[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.

	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; 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; 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; positions are clearly identified; no extraneous material; cited as appropriate.	Clear language, but may contain some errors; effective organization; positions are clearly identified, might contain some extraneous material; cited as appropriate.	Language contains errors and is difficult to follow; organization limits presentation of positions; contains irrelevant material; inconsistent citations.	Language contains errors and is difficult to follow; positions are not clear; lacks organization; does not cite sources.
Lab assignments	Completed all sections; followed instructions; calculations accurate; write up is concise and error free, and conclusions follow from data/results.	Completed all sections; followed instructions; minor errors in calculations; write up is concise and error free, and conclusions mostly follow from data/results.	Missed some sections, but mostly complete; errors in calculations or following instructions; demonstrates some understanding of procedures; write up lacks connection to data/results.	Few sections completed or responses indicate misapplication of procedures; write up lacks connection to data/results or is not complete.

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. It is expected that students are engaged in 2 hours of independent work outside of the lecture, per lecture credit. Thus, expectations for this 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).

A rough approximation as to how you will you will allocate the 9 hours per week is as follows.
- Attending classes and lecture-based assignments: 44%
- Course readings and studying for exams: 23%
- Lab assignments: 33%

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.

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/academics-regulations/students-rights-responsibilities/.

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

Student Academic Support:
- Speaking Center (907-474-5470, uaf-speakingcenter@alaska.edu, Gruening 507)
- Writing Center (907-474-5314, uaf-writing-center@alaska.edu, Gruening 8th floor)
- UAF Math Services, uafmathstatlab@gmail.com, Chapman Building (for math fee paying students only)
- Developmental Math Lab, Gruening 406
- The Debbie Moses Learning Center at CTC (907-455-2860, 604 Barnette St, Room 120, https://www.ctc.uaf.edu/student-services/student-success-center/)
- For more information and resources, please see the Academic Advising Resource List (https://www.uaf.edu/advising/lr/SKM_364e19011717281.pdf)

Student Resources:
- Disability Services (907-474-5655, uaf-disability-services@alaska.edu, Whitaker 208)
- Student Health & Counseling **[6 free counseling sessions]** (907-474-7043, https://www.uaf.edu/chc/appointments.php, Whitaker 203)
- Center for Student Rights and Responsibilities (907-474-7317, uaf-studentrights@alaska.edu, Eielson 110)
- Associated Students of the University of Alaska Fairbanks (ASUAF) or ASUAF Student Government (907-474-7355, asuaf.office@alaska.edu, Wood Center 119)

Nondiscrimination statement: The University of Alaska is an affirmative action/equal opportunity employer and educational institution. The University of Alaska does not discriminate on the basis of race, religion, color, national origin, citizenship, age, sex, physical or mental disability, status as a protected veteran, marital status, changes in marital status, pregnancy, childbirth or related medical conditions, parenthood, sexual orientation, gender identity, political affiliation or belief, genetic information, or other legally protected status. The University's commitment to nondiscrimination, including against sex discrimination, applies to students, employees, and applicants for admission and employment. Contact information, applicable laws, and complaint procedures are included on UA's statement of nondiscrimination available at www.alaska.edu/nondiscrimination. For more information, contact:
UAF Department of Equity and Compliance
1692 Tok Lane, 3rd floor, Constitution Hall, Fairbanks, AK 99775
907-474-7300
uaf-deo@alaska.edu

Additional syllabi statement for courses including off-campus programs and research activities:
University Sponsored Off-Campus Programs and Research Activities
We want you to know that:

1. UA is an AA/EO employer and educational institution and prohibits illegal discrimination against any individual: www.alaska.edu/nondiscrimination.
2. Incidents can be reported to your university's Equity and Compliance office (listed below) or online reporting portal. University of Alaska takes immediate, effective, and appropriate action to respond to reported acts of discrimination and harassment.
3. There are supportive measures available to individuals that may have experienced discrimination.
4. University of Alaska's Board of Regents' Policy & University Regulations (UA BoR P&R) 01.02.020 Nondiscrimination and 01.04 Sex and Gender-Based Discrimination Under Title IX, go to: http://alaska.edu/bor/policy-regulations/.
5. UA BoR P&R apply at all university owned or operated sites, university sanctioned events, clinical sites and during all academic or research related travel that are university sponsored.

For further information on your rights and resources click here.

start	end	Week	Topics Covered	Discussion	Assignment	Quiz	Exam
16-Jan	20-Jan	Week 1	Course introduction	Find complex issue / respond			
23-Jan	27-Jan	Week 2	Common topics in survey-based human dimensions research	Build on complex issue / respond	Bears in Anchorage - ID topics		
30-Jan	3-Feb	Week 3	Introduction to Measurement		Diagram a theory	Basic concepts	
6-Feb	10-Feb	Week 4	More on Attitudes		Potential beliefs & specificity, duck hunting TLRA		
13-Feb	17-Feb	Week 5	Values orientations	What is the utility/mgt. application of the case studies we've looked at?		Id components from case study	
20-Feb	24-Feb	Week 6	Writing and conducting surveys: intro	Find and critque a survey			Exam 1
27-Feb	3-Mar	Week 7	Writing and conducting surveys: examples		Survey evaluation	Pros and cons of different survey methods	
6-Mar	10-Mar	Week 8	Writing and conducting surveys: web		Transfer lab survey to web		
13-Mar	17-Mar	Week 9	Spring Break – **no class!**		Have fun :)		
20-Mar	24-Mar	Week 10	Implementation: possible errors, response rate, survey administration	How do these errors compare to other science disciplines? Discussion thread		Errors	
27-Mar	31-Mar	Week 11	Implementation: Sampling, margin of error		Sampling situations	Margin of error	
3-Apr	7-Apr	Week 12	Implementation: Weighting	Thoughts on the use of the weights		Concepts of weighting	
10-Apr	14-Apr	Week 13	Project evaluation: Yale Climate change	Strengths / weaknesses, discussion thread			Exam 2
17-Apr	21-Apr	Week 14	Writing up results, IRB	Discussion about SPE & research ethics	IRB certification		
24-Apr	28-Apr	Week 15	Case study: TBA	Strengths / weaknesses, discussion thread			
			Points assigned				
			9 Discussions @ 40 pts ea.	360			
			7 assignments @ 50 pts ea.	350			
			6 quizzes @ 30 pts ea.	180			
			Total	890			