GEOG/NRM 483 W-O – RESEARCH DESIGN, WRITING, AND PRESENTATION METHODS (3 credits)

Fall 2016

TENTATIVE SYLLABUS

INSTRUCTOR	Chris Maio, Assistant Professor
OFFICE	Reichardt 368
OFFICE HOURS	Wednesday 11:00 pm – noon Thursday noon – 1:00 pm And by appointment
CONTACT	907-474-5651 cvmaio@alaska.edu
LECTURES	Murie 105 Tuesday & Thursday Class Time: 2:00 pm -3:30 pm

BOOK

Required: <u>Elements of Style</u> by Strunk and White (4th edition). Other relevant readings will be assigned and distributed via Blackboard or in class.

PREREQUISETS

ENGL F111X; ENGL F211X OR ENGL F213X; at least one writing intensive course designated (w); at least junior standing; or permission of instructor.

COURSE DESCRIPTION

This course is designed as a capstone research and professional development course for Geography, Natural Resources Management, and Geoscience majors. It can also serve as a Research Methods course for undergraduates in other programs, or for beginning graduate students. Students will focus on designing an individual research project and proposal. The course will provide real world active learning assignments that seek to integrate the knowledge and skills gained through undergraduate course work, and will prepare you for graduate and professional level projects. The course is writing intensive and will focus on scientific writing, and the oral, written, and graphical presentation of data and research results.

COURSE GOALS

This course will provide a real-world opportunity to conduct background research, complete a formal proposal, develop job or graduate school application materials, and present work. This course will provide a capstone opportunity for students to integrate their course-based knowledge with practical skills that will help in professional and research settings. Of most importance, this course is writing intensive and emphasizes written and oral communication skills. Students will become better writers and overall better communicators as they prepare to complete their Bachelor's degree.

TEACHING METHODS

This course centers around writing and submitting a research proposal. Student's written and graphical work will go through drafts and receive feedback from peers, instructor, and mentor. There is a heavy emphasis on writing and on the critical review of your own work and other students in the class. Lectures will cover basic principles of scientific research, writing, and presentation. Specific assignments provide practice in important professional skills. This course is meant to mimic a professional/graduate experience, and will require a substantial investment of time, with numerous assignments and deadlines that must be met for success.

LEARNING OUTCOMES

- Students will learn to develop and write a complete research proposal (including an abstract, project narrative, figures, collaborative support, etc.).
- Students will gain practice in the scientific method via the development of sound research questions and a project design.
- Students will learn how to find, evaluate, and use scientific literature for research.
- Students will improve the quality of their writing through assignments of varied length and purpose.
- Students will improve the quality of their writing though the evaluation of the work of peers, and the critical evaluation and revision of their own writing.
- Students will learn how to develop a curriculum vitae (CV) for use in job and graduate school applications.
- Students will learn and practice how to produce publishable figures using Adobe Illustrator and ArcGIS software.
- Students will create and present a scientific poster.

COURSE POLICIES

EXPECTATIONS

Students are expected to come to class prepared and on time. This includes reading the assigned material, having completed all assignments that are due and prepared to discuss the course material. There is also an expectation that students will act with professionalism and be respectful to other students, the instructor, and guests. A failure to meet these expectations will result in a lowering of the final course grade and dismissal from the class in which the expectations were not met.

ATTENDANCE AND PARTICIPATION

Attendance and participation will be worth a total of 20% of the final grade. Attendance will be taken at the start of each class. If there is an emergency or other important obligation which prevents a student from attending class they are expected to email the instructor prior to the absence. If students do not email prior to the absence, points will be deducted from the participation grade and other related course work. Participation points will be based on in-class assignments, discussion, and peer reviews.

STUDENT CONDUCT

UAF students are subject to the Student Code of Conduct. The principles of the student code are designed to encourage communication, foster academic integrity and defend freedoms of inquiry, discussion and expression across the university community. For a complete description of the University's Code of Conduct please go to http://www.uaf.edu/catalog/catalog_14-15/pdf/04_Academics.pdf and see Academics and Regulations.

STUDENT SUPPORT SERVICES

STUDENTS WITH DISABILITIES

UAF is committed to equal opportunity for students with disabilities. Students with disabilities are encouraged to contact the coordinator of Disability Services (Mary Matthews) at the Center for Health & Counseling (x7043). If you need classroom accommodations or other support, please make an appointment with Mary K. Matthews at the Office of Disability Services at (uaf-disabilityservices@alaska.edu), to enlist the appropriate support. I will collaborate to provide accommodations to assist students in meeting course goals.

WRITING SUPPORT

Students are encouraged to make use of the Writing Center (8th floor, Gruening Building) where you can take a draft of any writing and be helped with editing. http://www.uaf.edu/english/writing-center/

VETERAN SUPPORT

It is an honor to have veterans attending UAF and every accommodation will be made to support their success. Please let me know if there is anything that can be done to facilitate your transition or continuation of an academic career.

Walter Crary is the Veterans Service Officer at the Veterans Resource Center, 111 Eielson Building. 474-2475.

Email: wecrary@alaska.edu

Fairbanks Vet Center 456-4238. VA Community Based Outpatient Clinic at Ft.

Wainwright is 361-6370.

STUDENT EVALUATION

Assignment	Points	Total Percent Course
Proposal		35%
Topic Summary	25	
Outline/Concept Map	50	
Draft 1	50	
Draft 2	75	
Graphic Figure	50	
Final Draft Submission Ready	100	
In-Class/Public Presentations and Posts	er	
Development		25%
Poster Draft 1	50	
Poster Final	75	
Poster presentation	75	
Elements of Style Rules (2 each)	50	
Peer Reviews (your review of others' work)		10%
Proposal 1	50	
Proposal 2	50	
Curriculum vitae - Resume		10%
CV-Resume Draft 1	50	
CV-Resume Draft 2	50	
Attendance and Participation		20%
Attendance	100	
Participation	100	

NOTE: Late assignments will be penalized up to 10% each day it's late unless previously discussed with the instructor. Upon instructor approval, there will be accommodations made for students who have specific research/academic needs not included in the existing course evaluation criteria.

EVALUATION SCHEDULE

Due Date	Assignment	Course Points
9/15	Proposal: Topic Summary	25
9/27	Proposal: Outline/Concept Map	50
10/6	Proposal: Figure Draft 1	25
10/11	Proposal: Draft 1	50
10/11	Peer Review: Proposal Draft 1	50
10/20	Proposal: Figure Draft 2	25
10/27	Proposal: Draft 2	75
10/27	Peer Review: Proposal 2	50
11/8	CV Draft 1	50
11/15	CV Draft 2	50
11/17	Proposal: Submission Ready	100
11/29	Presentation: Poster Draft 1	50
12/1	Presentation: Poster Final Draft	75
12/6	Presentation: Poster Presentation	75
9/3-12/17	Presentation of <i>Element</i> Rules	50
	(2 each)	
9/3-12/11	Attendance and Participation	200
	TOTAL POINTS	1000

ADDITIONAL ASSIGNMENT INFORMATION

- 1) **Proposal Topic Summary:** The topic summary should consist of a concise 75-125 word statement describing your tentative proposal focus. This should include the research question or topic to be addressed, why it is important for you as a student, and how it would benefit UAF. We will discuss your summary in class and you will be given peer-feedback.
- 2) **Proposal Outline/Concept Map**: This should be a sound outline of the proposal and scope of the individual project. Must include all proposal components and be in standard outline format (I, A, 1).
 - a) Goals
 - b) Background and Significance
 - c) Design and Methodology
 - d) Anticipated Outcomes
 - e) Mentoring
 - f) Budget
- 3) **Proposal Draft 1:** First cut at what your proposal is going to look like. Must include well developed introduction, literature review, methods, and a decent outline of what the Results and Discussion section will look like. Must include list of potential figures, maps, tables (with draft figures where possible).
- 4) **Proposal Draft 2:** Complete with all required components including summary, project description, bibliography, figures, tables, budget and timeline.
- 5) **Proposal Final Submission Ready:** Submission-ready, e.g. quality writing, figures, maps and references. All required components and formatting required.
- 6) **Peer Reviews:** There are a total of 4 Peer Review assignments. Each assignment will require two components including, 1) detailed editing corrections and comments on the document itself (Care should be taken to make these on-page edits legible and concise), and, 2) a 50-100 word paragraph providing detailed constructive feedback on the author's work. This paragraph (typed or written) should summarize the on-page corrections and comments. Upon agreement between peers, students can utilize Microsoft "review" functions to track editing changes and provide comments digitally. Digital reviews should be emailed to the instructor for grading.

7) **Presentations:**

- a) Poster Detailed instructions will be given on the design and development of a poster in class.
 Scientific posters will follow standard format and be approximately 36 inches by 48 inches.
 Posters will be printed on the Department of Geosciences printer at no charge to students (1 free per semester). Posters will be presented in a public forum at the end of the semester.
- b) <u>Elements of Style</u> On 2 occasions students will present material to the class from <u>The Elements of Style</u>. Each presentation will cover either, 1 Rule from Chapters II or V, 7 misused words/expressions from Chapter IV, or 7 words from the Glossary. Presentations should be 5-10 minutes long and consist of clearly stating the rule/topic, providing examples from the book, and real world student derived examples. Students can use a presentation media of their choice including, but not limited to, PowerPoint, chalk board, paper, etc. Writing Rules and vocabulary should be clearly stated with examples provided for their use and misuse. Students can also present on their own writing tips. Students will receive peer feedback after each presentation.
- 8) *Curriculum vitae Resume*: The purpose of this assignment is that students will leave the class with a professional CV or Resume. A quality CV or Resume will be developed, instructor/peer reviewed, and refined for use and dissemination.

TENTATIVE COURSE SCHEDULE

Week	Date	Lectures	In-Class Activity	Assignments Due
1	30 Aug T	NO CLASS		
	1 Sept Th	Lecture 1: Course introduction and Syllabus	Student introductions and course expectations Syllabus	
2	6 Sept T	Lecture 2: Navigating the post-undergraduate world	Objective statement	
	8 Sept Th	Lecture 3: The mechanics of proposal writing: The funding environment, high stakes writing, and your future What makes a successful proposal	 Elements selection URSA proposal reviews	Objective Paragraph Due
3	13 Sept T	Lecture 4: Discussion on a Research Focus	• Elements 1-3 • Topic summary discussion	
	15 Sept Th	Guest Speaker Dr. Trent Sutton, Co-Director of URSA and Associate Dean of SFOS.	Topic summary discussion	Proposal: Topic Summary
4	20 Sept T	Lecture 5: Peer reviews: The importance of getting and providing critical feedback	 Elements 4-6 Writing Outlines	
	21 Sept W	UAF Career Fair 5pm – 8 pm at the Wood Center		
	22 Sept Th	Individual Outline Discussions and Review of funded URSA proposals	Literature review	
5	27 Sept T	Lecture 6: Developing a bibliography and properly citing sources within text	• Elements 7-9 • Outline peer review	Proposal: Outline/Concept Map
	29 Sept Th	Guest Speaker: Utilizing Library Resources Meet at Rasmuson Library 301	• Elements 10-12	
6	4 Oct T	Lecture 7: The art of producing effective and publishable figures using Adobe Illustrator COMPUTER LAB WRRB 04	Graphic design with Adobe	
	6 Oct Th	COMPUTER LAB WRRB 04	Making figures with Adobe	Proposal: Figure Draft 1
7	11 Oct T	Peer Review Proposal	 Elements 13-15 Peer Review	Proposal: Draft 1 Peer Review: Draft 1
	13 Oct Th	TBA	• TBA	

Week	Date	Lectures	In-Class Activity	Assignments Due
8	18 Oct T	Guest Speaker Jessica Armstrong, CNSM Graduate Student Coordinator – Graduate School chooses and funding opportunities	• Elements 16-18 • Peer reviews	
	20 Oct Th	Lecture 8: Applying to Graduate School and Professional Careers	Cover letter developmentElements 19-21	Proposal: Figure Draft 2
	25 Oct T	Lecture 9: Cover Letters	 Elements 22-24 TBA	
9	27 Oct Th	Peer Review Proposal	 Elements 25-27 TBA	Proposal: Draft 2 Peer Review: Draft 2
	1 Nov T	Lecture 10: CV and Resume development; how to effectively portray yourself on paper	 Elements 28-30 CV Development	
10	3 Nov Th	Guest Speaker Laura Bender, Director of Graduate School and Interdisciplinary Programs		
	8 Nov T	Peer Review CV	• Elements 31-33	CV Draft 1
11	10 Nov Th	Guest Speaker: UAF Career Services	• Elements 34-37	
	15 Nov T	TBA	• Elements 38-40	CV Draft 2
12	17 Nov Th	Lecture 11: Making scientific posters; finding the middle, not too much, not too little	• Elements 41-43 • Peer Review	Proposal: Submission Ready
	22 Nov T	COMPUTER LAB WRRB 04 Posters	Poster development	
13	24 Nov Th	NO CLASS THANKSGIVING HOLIDAY	Poster development	
	29 Nov T	COMPUTER LAB WRRB 04 Posters	Poster developmentPoster feedback	Presentation: Poster Draft 1
14	1 Dec Th	COMPUTER LAB WRRB 04 Posters	Fill out course evaluations	Presentation: Poster final draft
	6 Dec T	Research Presentations		Printed Posters
15	8 Dec Th	Research Presentations PIZZA PARTY!		Presentation: Public Presentation