

Proposal and Article Writing

Environmental Science and Policy Dept.

EVPP-692-DL2; CRN 24181 (MSc students; 1 credit)
EVPP-991-DL2; CRN24182 (PhD students; 2 credits)

INSTRUCTOR: Agnes Kiss, PhD
email akiss2@gmu.edu

LOCATION: online (synchronous)

CLASS MEETINGS: Thursdays, 7:20 – 9:10 PM (January 26 – May 4, 2023)

OFFICE HOURS: TBD and by appointment

COURSE DESCRIPTION: In this seminar we will explore how to write informative, interesting and publishable scientific articles and effective research grant proposals. This will be achieved through presentations and group discussions on the basic elements of these documents, reading and analyzing examples from published literature, and students' short writing assignments and oral presentations. Assignments emphasize reading and analysis of existing articles, but students have the option to do more original writing if they would prefer to have the practice and feedback. While it is not a course on good scientific methodology or basic writing skills, these aspects will be addressed in the context that underlying rigorous science is a prerequisite for preparing good proposals and articles, and that clarity, conciseness and sound grammar are essential for effective communication of scientific ideas and research. We will also cover topics such as the role of effective statistical analysis and graphics, features of different types of articles and audiences, factors to consider when selecting a journal for submission, and fine-tuning grant proposals to the interests and criteria of granting entities.

COURSE STRUCTURE: Weekly classes will include presentations by the instructor and guest speakers, structured and open-ended discussion of topics and of examples of articles provided by the instructor and by students, student presentations and group discussions on reading and writing assignments. Time is also allocated for additional topics to be proposed by students (see Class Schedule below for details). Each student will select an article and carry out an analysis of its quality and effectiveness based on concepts covered in the class, and make a 15-minute oral presentation on it to the class. EVPP 991 students will also submit a more detailed written version of this analysis.

REQUIRED READINGS: Journal articles to be selected by the instructor.

COURSE GRADING: Grades will be based on the instructor's assessment of students' writing assignments and oral presentations, and on meaningful, informed and proactive class participation, with weighting as follows:

For EVPP 692 (1 Credit)

Short writing assignments: 20%

Oral presentation on analysis of selected article (see Week 10): 40%

Class participation: 40%

For EVPP 991 (2 Credits)

Short writing assignments: 20%

Oral Presentation on analysis of selected article (see Week 10): 20%

Written analysis of selected article (see Week 10): 20%

Class participation: 40%

Final scores will be calculated based on the percentage grade earned on each of the above class activities, multiplied by the respective weighting factors. Letter grades will be assigned as follows:

A: 90-100%

B: 80-89%

C: 70-79%

D: 60-69%

F: 0-59%

Two or more unexcused absences will result in failure of the course unless there are exceptional circumstances.

ACADEMIC INTEGRITY: GMU students, faculty and staff are bound by the GMU Honor Code. Adherence to the GMU Honor Code is expected of all students, specifically: *"Members of the George Mason University community pledge not to cheat, plagiarize, steal, or lie in matters related to academic work."* In all assignments and communications, plagiarism will not be tolerated. This applies equally to oral and written communications in the context of any evaluated (graded) course assignments. As stated in the Honor Code, infractions may result in invalidated credit for dishonorable work and lowered grade, including failure from the class, suspension or dismissal. Inquiries for clarification from the professor are welcome. For more information see the complete Honor Code in the university catalog.

DISABILITY ACCOMMODATIONS: Disability Services at George Mason University is committed to upholding the letter and spirit of the laws that ensure equal treatment of people with disabilities. Under the administration of University Life, Disability Services implements and coordinates reasonable accommodations and disability-related services that afford equal access to university programs and activities. Students can begin the registration process with Disability Services at any time during their enrollment at George Mason University. If you are seeking accommodations, please visit

<http://ds.gmu.edu/> for detailed information about the Disability Services registration process. Disability Services is located in Student Union Building I (SUB I), Suite 2500. Email: ods@gmu.edu | Phone: (703) 993-2474.

DIGITAL COMMUNICATION: Students must use their GMU email account to receive important University information, and for all communications related to this class.

DIVERSITY STATEMENT: George Mason University promotes a living and learning environment for outstanding growth and productivity among its students, faculty and staff. Through its curriculum, programs, policies, procedures, services and resources, Mason strives to maintain a quality environment for work, study and personal growth. An emphasis upon diversity and inclusion throughout the campus community is essential to achieve these goals. Diversity is broadly defined to include such characteristics as, but not limited to, race, ethnicity, gender, religion, age, disability, and sexual orientation. Diversity also entails different viewpoints, philosophies, and perspectives. Attention to these aspects of diversity will help promote a culture of inclusion and belonging, and an environment where diverse opinions, backgrounds and practices have the opportunity to be voiced, heard and respected.

SCHEDULE, SPRING SEMESTER 2023

| DATE | Class # | TOPIC | Notes and Assignments |
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| Jan 26 | 1 | Introduction, Course Overview, Context (If time permits, we may cover discussion of article titles in Class 1 rather than Class 2) | Personal self-introductions Course objectives Course description/overview: Some basic context: <ul style="list-style-type: none"> • Reasons for publishing scientific articles • Types of published articles • Overview of basic structure of scientific articles • Types of journals • Steps in publishing an article • Tips Q&A/Parking Lot Assignment: 2 volunteers for recap next week |
| Feb 2 | 2 | Structure and style of scientific articles, Part 1 | Student recap of previous class Presentation/discussion on Title, Abstract and Introduction sections ASSIGNMENT FOR NEXT WEEK (including a written submission): <ol style="list-style-type: none"> 1) For a scientific article of your choosing, evaluate the Title and Abstract in light of today's discussion (for discussion: no written submission required). 2) Based on the information in the abstract, prepare and submit in writing |

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| | | | <p>the original title of the article and a proposed alternative title which would either:</p> <ol style="list-style-type: none"> a. address problems that you identified in the existing title, or b. (if you identified no problems in the existing title) would be more appropriate for reaching a different target audience |
| Feb 9 | 3 | Structure and style of scientific articles Part 2 | <p>Student presentation and discussion on Title and Abstract exercise</p> <p>Instructor presentation and group discussion on Methods, Results, Discussion/Conclusion and References sections,</p> <p>ASSIGNMENT FOR NEXT WEEK: For an article of your choosing:</p> <ol style="list-style-type: none"> (1) Select one main result from Results section and evaluate the part of the Discussion section relating to that result, based on today's discussion; or (2) (if you feel the discussion of that result was not well done) prepare 1-2 proposed paragraphs on it for the Discussion section) |
| Feb 16 | 4 | Selection and use of tables, figures and graphics | <p>Student recap of previous class</p> <p>Student presentations and group discussion on Results/Discussion exercise</p> <p>Instructor presentation and group on effective use of tables/figures/graphics</p> <p>ASSIGNMENT FOR NEXT WEEK: Students will prepare and submit an appropriate graphic presentation on data tables provided by the instructor</p> |
| Feb 23 | 5 | Selection, use and presentation of statistical analysis | <p>Brief review of graphics assignment results</p> <p>Guest lecture (Prof. Joshua Davis)</p> |
| March 2 | 6 | <p>Selecting journal for submitting a paper</p> <p>Publication of negative results; false results</p> <p>Preparing and delivering oral presentations</p> | <p>Student Recap of Previous Class</p> <p>Instructor presentation and group discussion on :</p> <ol style="list-style-type: none"> 1) different publishing options and related resources, including: <ul style="list-style-type: none"> • General vs. narrow vs. highly specific scope • Peer-reviewed vs. gray literature |

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| | | | <ul style="list-style-type: none"> • Subscription-based journals • Open access online journals • Prestige and credibility metrics and indices <p>2) the importance of publishing negative results (also covering detection and retraction of false results)</p> <p>3) Effective Oral presentations</p> |
| March 9 | 7 | Tips for writing research grant proposals – Part 1 | Student Recap of Previous Class Guest speaker (Dr. Judy Arroyo) |
| March 16 | 8 | Spring Break | No class |
| March 23 | 9 | Tips for writing research grant proposals Part 2 | Guest Speaker (Prof. Heather Eves) ASSIGNMENT: students select and read/analyze one of 3 articles provided by the instructor, in for discussion the next class (no written submission, but students should take their notes while reading, to facilitate discussion) |
| March 30 | 10 | Group “peer review” of Assigned Articles | Group discussion of the 3 selected articles, in context of previous class material ASSIGNMENT: students select an article of interest to themselves, to be subject of their review/critique to be presented to the class (and submitted in writing, for EVPP 991 students) |
| April 6 | 11 | Addressing peer review comments; Student-proposed topics | Instructor presentation and group discussion on responding to peer review comments on draft manuscripts Group discussion of additional topics identified by students in previous weeks Q&A on the article review assignment |
| April 13 | 12 | Student Oral Presentations | |
| April 20 | 13 | Student Oral Presentations | |
| April 27 | 14 | Student Oral Presentations | |
| May 4 | 15 | Recap, conclusions, general Q&A | Students recap of the course, group discussion of main conclusions/take-home messages; topics relegated to “parking lot” in earlier sessions |