Syllabus
Astronomy 578
Writing Across the Space Sciences
Spring 2024

**Lectures:** Mon/Wed 1:00 PM- 2:15 PM

Steward Observatory, Room 208

Instructors: Prof. Erika Hamden, Steward 222

Prof. Walt Harris, Kuiper 221

Office Hours: Prof. Hamden: 12pm on Mondays or as needed by Appointment.

# **Course Objectives:**

Learn about a wide range of scientific writing and be able to distinguish between different types, understanding the purpose and structure of each type. Learn how to write and submit proposals to NASA, the NSF, and other funding agencies.

Learn the structure and differences between writing for journals and several types of proposals: observational, theory, grant, job-related, etc.

Learn how to craft scientific writing of any kind to engage the reader and tell a

compelling story.

Learn how to edit your own writing and the writing of others.

## **Evaluation:**

During this class, students will write and edit three different documents: 1) an introduction to a scientific journal article 2) a scientific proposal for observing time, data analysis support, theory support, etc. and 3) a mock fellowship application. Each document will be evaluated on the final product and on the intermediate drafts as they are developed. Students will also be evaluated on their ability to edit their own writing and the writing of others. For each of documents 2 and 3, we will also hold a TAC/evaluation panel. Each assignment is worth 30% of the total grade, with the remaining 10% for participation in the presentations and TAC/Panel evaluations.

Assignment 1, Journal Article (Total of 30%):

10%: Abstracts and outline for journal article introduction

10%: Draft 1 of 2-page article introduction

10%: Finished Journal Article Intro

Assignment 2, Science Proposal (Total of 30%)

10%: Abstract and outline for science proposal

10%: Edits of science proposal

10%: Finished science proposal

Assignment 3, Fellowship Proposal- FINESST Format (Total of 30%)

10%: Fellowship proposal Draft

10%: Fellowship edits

10%: Final Fellowship Proposal TAC/Panel Evaluation participation (10%)

Final Exam: There will be no final exam.

# **Grading Scale:**

Grades will follow the standard ABCDE grades. Final letter grades will be assigned as follows:

A: 90% or higher

B: 80 - 89%

C: 70 - 79%

D: 60 – 69%

E: Below 60%

**Texts:** Optional: Scientific Writing and Communication: Papers, Proposals and

Presentations. By Angelika Hoffmann. 4th edition

Selections from additional books will be used throughout the class. PDFs of these

will be provided via D2L

## A variety of other policies:

NO smoking, eating, drinking (except water), or pets are allowed in class. Please <u>turn off</u> your cell phones and avoid disrupting the students around you, even if not explicitly described in this section! Be respectful of the other students who want to learn.

## **Absence and Class Participation Policy**

The UA's policy concerning Class Attendance, Participation, and Administrative Drops is available at: http://catalog.arizona.edu/policy/class-attendance-participation-and-administrative-drop

The UA policy regarding absences for any sincerely held religious belief, observance or practice will be accommodated where reasonable, http://policy.arizona.edu/human-resources/religious-accommodation-policy.

Absences pre-approved by the UA Dean of Students (or Dean Designee) will be honored. See: https://deanofstudents.arizona.edu/absences

## **Classroom Behavior Policy:**

To foster a positive learning environment, students and instructors have a shared responsibility. We want a safe, welcoming, and inclusive environment where all of us feel comfortable with each other and where we can challenge ourselves to succeed. To that end, our focus is on the

tasks at hand and not on extraneous activities (e.g., texting, chatting, reading a newspaper, making phone calls, web surfing, etc.).

Students are asked to refrain from disruptive conversations with people sitting around them during lecture. Students observed engaging in disruptive activity will be asked to cease this behavior. Those who continue to disrupt the class will be asked to leave lecture or discussion and may be reported to the Dean of Students.

# **Threatening Behavior Policy**

The UA Threatening Behavior by Students Policy prohibits threats of physical harm to any member of the University community, including to oneself. See <a href="http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students">http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students</a>.

# **Accessibility and Accommodations**

Our goal in this classroom is that learning experiences be as accessible as possible. If you anticipate or experience physical or academic barriers based on disability, please let me know immediately so that we can discuss options. You are also welcome to contact the Disability Resource Center (520-621-3268) to establish reasonable accommodations. For additional information on the Disability Resource Center and reasonable accommodations, please visit <a href="http://drc.arizona.edu">http://drc.arizona.edu</a>.

If you have reasonable accommodations, please plan to meet with me by appointment or during office hours to discuss accommodations and how my course requirements and activities may impact your ability to fully participate.

Please be aware that the accessible table and chairs in this room should remain available for students who find that standard classroom seating is not usable.

## **Code of Academic Integrity**

Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, graded work/exercises must be the product of independent effort unless otherwise instructed. Students are expected to adhere to the UA Code of Academic Integrity as described in the UA General Catalog. See:

 $\underline{\text{http://deanofstudents.arizona.edu/academic-integrity/students/academic-integrity}}.$ 

The University Libraries have some excellent tips for avoiding plagiarism, available at <a href="http://www.library.arizona.edu/help/tutorials/plagiarism/index.html">http://www.library.arizona.edu/help/tutorials/plagiarism/index.html</a>.

Selling class notes and/or other course materials to other students or to a third party for resale is not permitted without the instructor's express written consent. Violations to this and other course rules are subject to the Code of Academic Integrity and may result in course sanctions. Additionally, students who use D2L or UA e-mail to sell or buy these copyrighted materials are subject to Code of Conduct Violations for misuse of student e-mail addresses. This conduct may also constitute copyright infringement.

## **UA Nondiscrimination and Anti-harassment Policy**

The University is committed to creating and maintaining an environment free of discrimination; see <a href="http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy">http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy</a>

Our classroom is a place where everyone is encouraged to express well-formed opinions and their reasons for those opinions. We also want to create a tolerant and open environment where such opinions can be expressed without resorting to bullying or discrimination of others.

#### **Additional Resources for Students**

UA Academic policies and procedures are available at <a href="http://catalog.arizona.edu/policies">http://catalog.arizona.edu/policies</a>

Student Assistance and Advocacy information is available at

http://deanofstudents.arizona.edu/student-assistance/students/student-assistance

# **Confidentiality of Student Records**

http://www.registrar.arizona.edu/personal-information/family-educational-rights-and-privacy-act-1974-ferpa?topic=ferpa

# **Subject to Change Statement**

Information contained in the course syllabus, other than the grade and absence policy, may be subject to change with advance notice, as deemed appropriate by the instructor.

#### **Assistance:**

If you anticipate barriers related to the format or requirements of this course, please meet with me so that we can discuss ways to ensure your full participation in the course. If you determine that disability-related accommodations are necessary, please register with **Disability Resources** (621-3268; <a href="dr.arizona.edu">drc.arizona.edu</a>) and notify me of your eligibility for reasonable accommodations. We can then plan how best to coordinate your accommodations.

The University of Arizona provides a wide variety of resources to help you feel more at home in the UA environment. Examples of student resource/cultural centers include:

African-American Student Affairs Center. https://aasa.arizona.edu/

Asian & Pacific American Student Affairs Center https://apasa.arizona.edu/

Guerrero Student Center <a href="https://chsa.arizona.edu/">https://chsa.arizona.edu/</a>

Immigrant Student Resource Center https://eao.arizona.edu/isrc

LGBTQ+ Student Affairs Center https://lgbtq.arizona.edu/

Native American Student Affairs Center https://nasa.arizona.edu/

Transfer Student Center https://transfer.arizona.edu/

Veterans Education and Transition Services Center https://vets.arizona.edu/

Women & Gender Resource Center https://wrc.arizona.edu/

We encourage you to take advantage of the community, support, and learning opportunities afforded by these centers, and to encourage your friends and colleagues to do the same.