

GS21 1152 Scientific Writing
Course Director: Bill Mattox
Tuesday/Thursday 2:00 – 3:30 PM
GSBS Large Classroom S3.8371
Two semester credit hours

Grading System: Pass/Fail

1. Prerequisites: Students should be in their second year of training in their current degree program, have affiliated with a faculty advisor, and developed an idea for a specific thesis project. Registration requires permission of the course director.

This course meets the GSBS Writing Course Requirement for PhD students.

2. Mode of Delivery: We expect all lectures for this class to be offered in-person in the GSBS Large Classroom. Students who are not be able to attend an in-person session due to health reasons should notify the course director prior to class. The course director will consider making any needed and reasonable accommodations to allow virtual participation in otherwise in-person sessions. **Masking is required in the BSRB and students are expected to socially distance in the large classroom. Please wear a mask to enter the building. Use a paper surgical mask provided at the door after entry.**

3. Weekly lectures: Required lectures will begin on August 30th. Time for all lectures is 2:00 – 3:30. See Schedule for details. Slides and updated course materials will be posted on the course site in Canvas <https://uth.instructure.com> prior to the lecture.

4. Small group meetings: These required sessions will be held with a faculty facilitator who is matched to the student's general area of research. Sessions will be held on Thursdays at 2:00 or at a time determined by the facilitator and agreed to by all students in the group. The delivery mode of these sessions will also be determined by the facilitator who will consult with students in the group regarding the most appropriate mode.

5. Course Description

The objectives of the course are to teach critical thinking and the fundamentals of proposal writing that will help students write candidacy exam proposals, fellowship applications, grants, papers, meeting abstracts, and theses/dissertations. Students will develop a research plan and write a "6 +1" page proposal following the format used for NIH fellowships. Students will also learn to edit and critique their fellow students' proposals, which will help prepare the students for writing and editing their candidacy exam proposal. Weekly meetings will consist of lectures from faculty/experts addressing how to compose grant proposal sections, organize ideas and revise/polish writing. In addition, students will meet weekly with faculty in small groups to critique/discuss writing assignments during which they will be given feedback on their proposal content/style by faculty and fellow students.

6. Grading: Pass/Fail. A passing grade requires that the student:

- A. Attend all lectures and small group sessions unless excused by the instructor/moderator.
- B. Complete all assignments to the satisfaction of the course instructor and group facilitator.
- C. Participate satisfactorily in each small group session as determined by the faculty moderator.
- D. Submit a satisfactory and complete research proposal at the end of the course on time as instructed. See “Final Research Proposal Format Guidelines” on Canvas for details of formatting your proposal.

7. Plagiarism and Originality

The goal of this course is to develop your ability to write an original scientific research proposal such as those submitted in fellowship and grant applications. To accomplish this, it is vital that all materials you submit during this course are from your own original writing.

Plagiarism is the act of presenting the ideas or words of others as you own and is a serious form of academic misconduct. Any student determined to have purposely committed plagiarism will be given a failing grade and may be subject to further disciplinary action including dismissal from the GSBS.

Please note that this means no part of the proposal, including specific aims, can be taken from the writing of others. This includes your advisor's grant proposals.

THE PROPOSAL WRITTEN IN THIS CLASS MUST BE THE ORIGINAL WORK OF THE STUDENT.

8. A note on your proposal from this class and the candidacy exam

The proposal written for this course may be used in students' candidacy exam pending approval from your Advisor and Program Director. If your intention is to use your proposal for the candidacy exam, then please obtain this approval prior to when you start your writing in this class.

GS21 1152 GSBS Scientific Writing

Class Schedule - Fall 2022

Tuesday Lectures: 2 – 3:30 PM, Room BSRB S3.8371 All lectures are intended to be 1 to 1.5 hrs in length

Thursday Small Group: Scheduled time is 2:00 – 3:30 Thursdays starting Sept 15. Location to be determined by the faculty facilitator. Groups may decide on a different time to meet if all agree.

Faculty Facilitators for small groups: Cancer Biology – Larry Kwong, Chunru Lin, Mark Titus; Neuroscience – Kartik Venkatachalam; Genetics and Epigenetics- Ashish Kapoor, Marcelo Aldaz; Quantitative Science - Goo Jun, Han Chen

Schedule

- Aug 30 – **Lecture:** Class Organization Session & Why Write a Research Proposal? (**Mattox/Salinas**)
Sept 1 – **no class**
- Sept 6 – **Lecture:** How to Organize What You Are Writing (**Tutt**)
Sept 8 – **no class**
- Sept 13 – **Lecture:** Developing & Clearly Stating your Hypothesis (**Kolonin**)
Sept 15 – **Small Group:** Topics/Hypothesis Presented
- Sept 20 – **Lecture:** Formulating Specific Aims (**Garsin**)
Sept 22 – **Small Group:** Specific Aims Presented
- Sept 27 – **Lecture:** How to write a Specific Aims Page (**Garsin**)
Sept 29 – **Small Group:** Specific Aims Critique
- Oct 4 – **Lecture:** Figures/Graphical Abstracts (**Mattox**)
Oct 6 – **Small Group:** Specific Aims Page Critique 1
- Oct 11 – **Lecture:** How to write a Significance/Innovation Section (**Justice**)
Oct 13 – **Small Group:** Specific Aims Page Critique 2
- Oct 18 – **Lecture:** How to Write a Research Plan I (**Walters**)
Oct 20 – **Small Group:** Significance/Innovation Critique
- Oct 25 – **Lecture:** How to write a Research Plan II (**Walters**)
Oct 27 – **Small Group:** Research Plan Critique 1
- Nov 1 – **Class Discussion:** Faculty Panel Q&A (**Bast, Waxham, Cole**)
Nov 3 – **Small Group:** Research Plan Critique 2
- Nov 8 – **Lecture:** Fine Tuning Your Proposal (**Ninetto**)
Nov 10 – **Small Group:** Final Proposal Critique
- Nov 15 – **Lecture:** Abstract Writing (**Goodoff**)
Nov 17 – **Small Group:** Final Proposal Critique
- Nov 22 – **Thanksgiving Week – no class**
Nov 24 – **Thanksgiving Week – no class**
- Nov 29 – **Small Group:** Presentations/Mock Review Panels/Continued Feedback (Tuesday -optional)
Dec 1 – **Small Group:** Presentations/Mock Review Panels/Continued Feedback
- Dec 6 – **Small Group:** Presentations/Mock Review Panels/Continued Feedback (Tuesday optional)
- Dec 12 **FINAL PROPOSAL DUE (5 PM) – upload as a single PDF file at the Canvas course site.**

Course Director

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Course Coordinator

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Lecturers

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Small Group Facilitators

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Small Group Facilitators (continued)

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Faculty Panelists

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