

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 have affiliated with a faculty advisor, and developed an idea for a specific thesis project including specific aims. Usually this means they are in the second year of training in their current degree program. Registration requires permission of the course director.

This course meets the GSBS Writing Course Requirement for all 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.

3. Weekly lectures: Required sessions will begin on August 29th. 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 weekly, starting September 14th, with a faculty facilitator who is matched to the student's general area of research. Sessions are scheduled for Thursdays at 2:00 but can be held at a different time agreed to by the facilitator and 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 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 organize ideas, compose grant proposal sections, 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 writing 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 both the course instructor and group faculty facilitator.
- C. Participate satisfactorily in each small group session as determined by the faculty facilitator.
- D. Submit a satisfactory and complete specific aims page **by October 17th** and a complete research proposal on **December 8th** as instructed. **See “Final Research Proposal Format Guidelines” on Canvas for details of formatting and expected content of your proposal.**

7. Use of ChatGPT and other large language model (LLM) AI sources

As this course is specifically intended to develop your research proposal writing skills, the use of LLM online aids is prohibited for producing any of the text used in your written assignments submitted in this class. The final proposals including specific aims page will be submitted for AI detection by Turnitin.

8. Plagiarism and Originality

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 and is a violation of the GSBS code of conduct. Any student determined to have purposely committed plagiarism will be given a failing grade and may be subject to further disciplinary action.

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

GS21 1152 GSBS Scientific Writing

Class Schedule - Fall 2023

Tuesday Lectures: 2:00 – 3:30 PM **Room** BSRB S3.8371

All lectures are intended to be 1 to 1.5 hrs in length, some classes will end before 3:30.

Thursday Small Group: Scheduled time is 2:00 – 3:30 Thursdays starting Sept 14. 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: **NS** – Venkatachalam **QS** –Daniel-MacDougall, Kundu
GE Ying/Huse, Torres **CB**- Schadler, Orlowski/Abbas **BCB** – Klegerman/Iwata

Schedule

Aug 29 – **Lecture:** Class Organization Session & Why Write a Research Proposal? (**Mattox/Salinas**)
Aug 31 – **no class**

Sept 5 – **Lecture:** Developing & Clearly Stating your Hypothesis (**Kolonin**)
Sept 7 – **no class**

Sept 12 – **Lecture:** How to Organize What You Are Writing (**Tutt**)
Sept 14 – **Small Group:** Topics/Hypothesis Presented

Sept 19 – **Lecture:** Formulating Specific Aims (**Ting**)
Sept 21 – **Small Group:** Specific Aims Presented

Sept 26 – **Lecture:** How to Write a Specific Aims Page (**Ting**)
Sept 28 – **Small Group:** Specific Aims Critique

Oct 3 – **Lecture:** Figures/Graphical Abstracts (**Mattox**)
Oct 5 – **Small Group:** Specific Aims Page Critique 1

Oct 10 – **Lecture:** How to Write a Significance/Innovation Section (**Justice**)
Oct 12 – **Small Group:** Specific Aims Page Critique 2:

Oct 17 – **Lecture:** How to Write a Research Plan I (**Lo**)
Oct 17 – DRAFT SPECIFIC AIMS PAGE DUE - upload file on Canvas by 5 PM
Oct 19 – **Small Group:** Significance/Innovation Critique

Oct 24 – **Lecture:** How to Write a Research Plan II (**Lo**)
Oct 26 – **Small Group:** Research Plan Critique 1

Oct 31 – **Class Discussion:** Faculty Panel Q&A (**Wang, Frost, Frigo**)
Nov 2 – **Small Group:** Research Plan Critique 2

Nov 7 – **Lecture:** Fine Tuning Your Proposal (**Ninetto**)
Nov 9 – **Small Group:** Final Proposal Critique

Nov 14 – **Lecture:** Abstract Writing (**Goodoff**)
Nov 16 – **Small Group:** Final Proposal Critique

Nov 21 – **Thanksgiving Week – no class**
Nov 23 – **Thanksgiving Week – no class**

Nov 28 – **Small Group:** Presentations/Mock Review Panels/Continued Feedback (Tuesday -optional)
Nov 30 – **Small Group:** Presentations/Mock Review Panels/Continued Feedback

Dec 5 – **Small Group:** Presentations/Mock Review Panels/Continued Feedback (Tuesday -optional)

Dec 8 FINAL PROPOSAL DUE (5 PM) – upload as a single PDF file at the Canvas course site.

Course Directors

Bill Mattox, PhD
Senior Associate Dean, GSBS
wmattox@mdanderson.org

Natalie Sirisaengtaksin, PhD
Asst Director Academic Affairs, GSBS
Natalie.Sirisaengtaksin@uth.tmc.edu

Lecturers

Erica Goodoff, ELS(D)
Senior Scientific Editor
MDA Research Medical Library
eagoodoff@mdanderson.org

Nicholas Justice, PhD
Associate Professor
Institute of Molecular Medicine, UTHH
nicholas.j.justice@uth.tmc.edu

Mikhail Kolonin, PhD
Professor
Institute of Molecular Medicine, UTHH
mikhail.g.kolonin@uth.tmc.edu

Hui-Wen Lo, MS MA PhD
Professor
Neurosurgery, UTHH
Hui-Wen.Lo@uth.tmc.edu

Amy Ninetto, PhD
Scientific Editor
MDA Research Medical Library
alninetto@mdanderson.org

Raquel Salinas, PhD
Director, GSBS
Student Affairs and Career Development
Raquel.Y.Salinas@uth.tmc.edu

Angela Ting, PhD
Associate Professor
Epigenetics and Mol Carcinogenesis, MDA
ahting@mdanderson.org

Bryan Tutt, MA
Scientific Editor
MDA Research Medical Library
BFTutt@mdanderson.org

Small Group Facilitators

Hussein Abbas MD/PhD
Assistant Professor
Leukemia/Genomic Medicine, MDA
habbas@mdanderson.org

Carrie Daniel-MacDougall, PhD
Associate Professor
Epidemiology MDA
cdaniel@mdanderson.org

Jason Huse, MD PhD
Associate Professor
Pathology, MDACC
jhuse@mdanderson.org

Junichi Iwata, DDS PhD
Professor
Diagnostic and Biomedical Science, UTHH
junichi.iwata@uth.tmc.edu

Melvin Klegerman, PhD
Professor
Department of Internal Medicine, UTHH
melvin.e.klegerman@uth.tmc.edu

Suprateek Kundu, PhD
Associate Professor
Biostatistics, MDA
skundu2@mdanderson.org

Robert Orlowski MD PhD
Professor
Lymphoma/Myeloma
Experimental Therapeutics, MDA
rorlowski@mdanderson.org

Keri Schadler, PhD
Associate Professor
Pediatrics Research, MDA
klschadl@mdanderson.org

Keila Torres, MD PhD
Associate Professor
Surgical Oncology, MDA
ketorres@mdanderson.org

Kartik Venkatachalam, PhD
Professor
Integrative Biology and Pharmacology, UTHH
kartik.venkatachalam@uth.tmc.edu

Haoqiang Ying, PhD
Associate Professor
Molecular and Cellular Oncology, MDA
hying@mdanderson.org

Panel Members

Jeff Frost, PhD
Professor
Integrative Biology & Pharmacology, UTHH
jeffrey.a.frost@uth.tmc.edu

Dan Frigo, PhD
Professor
Cancer Systems Imaging, MDA
frigo@mdanderson.org

Wenyi Wang, PhD
Professor
Bioinformatics and Comp. Biology, MDA
wwang7@mdanderson.org