

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.

3. Weekly lectures: Required lectures will begin on January 10th. 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 area of research as best possible. 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 fellowship applications. 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 your 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.

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 written in this class for the candidacy exam, then please discuss that with your advisor and program director prior to the first small group session on January 26th.

GS21 1152 GSBS Scientific Writing

Class Schedule - Spring 2023

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: BCB - Klegerman, Iwata; CB – Lopez;
Imm – Akimzhanov, Reuben, Kadara; MP – Brock; NS – Venkatachalam; QS – Rai, Wang

Schedule

- Jan 10 – **Lecture:** Class Organization Session & Why Write a Research Proposal? (**Mattox/Salinas**)
Jan. 12 – **no class**
- Jan 17 – **Lecture:** How to Organize What You Are Writing (**Tutt**)
Jan 19 – **no class**
- Jan 24 – **Lecture:** Developing & Clearly Stating your Hypothesis (**Kolonin**)
Jan 26 – **Small Group:** Topics/Hypothesis Presented
- Jan 31 – **Lecture:** Formulating Specific Aims (**Davis**)
Feb. 2 – **Small Group:** Specific Aims Presented
- Feb 7 – **Lecture:** How to write a Specific Aims Page (**Davis**)
Feb 9 – **Small Group:** Specific Aims Critique
- Feb 14 – **Lecture:** Figures/Graphical Abstracts (**Taylor**)
Feb 16 – **Small Group:** Specific Aims Page Critique 1
- Feb 21 – **Lecture:** How to write a Significance/Innovation Section (**Evans**)
Feb 23 – **Small Group:** Specific Aims Page Critique 2
- Feb 28 – **Lecture:** How to Write a Research Plan I (**Lo**)
Mar 2 – **Small Group:** Significance/Innovation Critique
- Mar 7 – **Lecture:** How to write a Research Plan II (**Lo**)
Mar 9 – **Small Group:** Research Plan Critique
- Mar 14 – **No Class – GSBS Spring Break**
Mar 16 – **No Class – GSBS Spring Break**
- Mar 21 – **Class Discussion:** Faculty Panel Q&A (**Molldrem, and TBD**)
Mar 23 – **Small Group:** Research Plan Critique
- Mar 28 – **Lecture:** Fine Tuning Your Proposal (**Ninetto**)
Mar 30 – **Small Group:** Final Proposal Critique
- April 4 – **Lecture:** Abstract Writing (**Goodoff**)
April 6 – **Small Group:** Final Proposal Critique/Discuss Abstract Content
- April 11 – **Small Group:** Presentations/Mock Review Panels/Continued Feedback
April 13 – **Small Group:** Presentations/Mock Review Panels/Continued Feedback
- April 18 – **Small Group:** Presentations/Mock Review Panels/Continued Feedback (OPTIONAL)
- April 20/25 – **No Class** – finalize proposals for submission
- April 27 FINAL PROPOSAL DUE (5 PM) – upload as a single PDF file at the course Canvas sit**

Course Directors

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

Wassim Chehab, PhD
Program Manager, GSBS
Elamir.W.Chehab@uth.tmc.edu

Lecturers

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

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

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

R. Eric Davis, MD
Associate Professor
Lymphoma and Myeloma
redavis1@mdanderson.org

Brian Taylor, PhD
Associate Professor
Imaging Physics
btaylor9@mdanderson.org

Scott Evans, MD
Professor/Chair Ad interim
Pulmonary Medicine
seevans@mdanderson.org

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

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

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

Small Group Facilitators

Askar Akimzhanov, PhD
Assistant Professor
Biochemistry and Molecular Biology
askar.m.akimzhanov@uth.tmc.edu

Alexandre Reuben, PhD
Assistant Professor
Thoracic/Head & Neck Medical Oncology
areuben@mdanderson.org

Humam Kadara, PhD
Associate Professor
Translational Molecular Pathology
hkadara@mdanderson.org

Kristy Brock, PhD
Professor
Imaging Physics & Therapy Physics
kkbrock@mdnaderson.org

Kunal Rai, PhD
Associate Professor
Genomic Medicine
krai@mdanderson.org

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

Gabriel Lopez-Berestein, MD
Professor
Experimental Therapeutics
glopez@mdanderson.org

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

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

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