

IMPORTANT: This syllabus form should be submitted to OAA (gsbs_academic_affairs@uth.tmc.edu) a week before the start of each semester.

NOTE to STUDENTS: If you need any accommodations related to attending/enrolling in this course, please contact the Graduate School's 504 Coordinator, Natalie Sirisaengtaksin, PhD. We ask that you notify GSBS in advance (preferably at least 3 days before the start of the semester) so we can make appropriate arrangements.

Term and Year: Fall 2025 Course Number and Course Title: GS04 1811: G&E Scientific Writing Credit Hours: 1 Prerequisites: Yes Meeting Location: UTHealth Houston/GSBS Cynthia Mitchell Building 3 rd Floor Building/Room#: BSRB S3.8355 (GSBS Conference Room)	Program Required Course: No Approval Code: Yes (If yes, the Course Director or the Course Designee will provide the approval code.) Audit Permitted: No Classes Begin: August 25, 2025 Classes End: December 1, 2025 Final Exam Week: December 8, 2025
Class Meeting Schedule	
Day	Time
Monday	3:15 pm
Course Director Name and Degree: Siddharth Prakash, MD, PhD Title: Professor Department: Internal Medicine Institution: UTH Email Address: Siddharth.K.Prakash@uth.tmc.edu Contact Number: 713-500-7003 Course Co-Director: Name and Degree: Vidya Gopalkrishnan, PhD Title: Professor Department: Pediatrics Institution: MDACC Email Address: vgopalka@mdanderson.org Contact Number: 713-792-0498	Instructor/s 1. Siddharth Prakash, MD, PhD Institution: UTHealth Email Address : Siddharth.K.Prakash@uth.tmc.edu 2. Vidya Gopalkrishnan, PhD Institution: MDACC Email Address: vgopalka@mdanderson.org 3. Richard Behringer, PhD Institution: MDACC Email Address: rbr@mdanderson.org

NOTE: Office hours are available by request. Please email us to arrange a time to meet.

Course Description:

The objectives of this course are to teach the fundamentals of literature review that will help students write candidacy exam proposals, grants, papers, meeting abstracts, and theses/dissertations. Students will research and write a 5 to 10-page mini-review based on a topic related to their dissertations. Students will also learn to edit and critique their fellow students' writing, which will help prepare the students for their candidacy exams. Weekly meetings will consist of short lectures that will address how to compile and summarize articles and how to write various sections of the review and small groups to review feedback from faculty and fellow students.

Textbook/Supplemental Reading Materials

- N/A

Course Objective/s:

Upon successful completion of this course, students will

Complete a mini-review that is focused on a topic that they and their mentors jointly select. The review must be completed entirely but does not have to be in final publishable form.

Specific Learning Objectives:

1. Design a reproducible search strategy to retrieve articles from the literature on their chosen topic.
2. Summarize the scientific content of each article and evaluate the strengths and weaknesses of the research.
3. Write in an organized, scientific style that conveys clear take-home messages to the reader.
4. Provide constructive critiques of scientific writing and understand how to respond to critiques

Student responsibilities and expectations:

Prerequisites:

1. Students should be in their second year of training in their current degree program, have affiliated with a faculty advisor and developed a specific review topic.
2. Registration requires the permission of your advisor and the course directors. Advisors must approve a commitment letter before students may enroll:

"Sent on behalf of Drs. Gopalkrishnan, Prakash, and Behringer"

Dear XXXX,

Your student, XXX, requested to enroll in the G&E Scientific Writing course, and this requires your permission. In this course, the student will develop a short review article that is pertinent to their research thesis area. The goal is for the student to submit this review to an appropriate journal.

For this to be a meaningful and scientifically valid experience, your input is needed. This will include:

- helping the student to identify an appropriately focused topic for their review
- helping the student to identify a target journal
- verifying that the sources used for the review are relevant and scientifically accurate
- reading, reviewing, and commenting on drafts of the outline and the review"

Students enrolled in this course will be expected to perform the following activities each week:

1. Read research articles related to the topic of their review (e.g., primary research)
2. Write a brief (<1/2 page) summary of each article that they intend to include in their review
3. Write sections of the review on time as they are assigned
4. Read and critique other student's writing when it is assigned to them
5. Attend and participate in the small group sessions and course discussions during lectures
6. Complete and turn in all homework assignments by the Friday before the next class

Students are expected to complete all reading prior to class. While you may work and discuss the writing assignment in groups, all writing assignments must be your own.

Using artificial intelligence (AI, chatbots, or equivalent tools) to write the review is strictly prohibited. Using AI for editing (language or grammar corrections) may be acceptable on a case-by-case basis if approved by the instructors.

Plagiarism and failure to properly cite scientific literature and other sources will not be tolerated and are grounds for dismissal from the course and further GSBS disciplinary action. Cheating or engaging in unethical behavior will be grounds for dismissal from the course without credit and further GSBS disciplinary action.

Expectations for the mini-review:

1. Sections: Abstract, Introduction, Body of the review with article summaries, Concluding commentary, Annotated references, Tables, Figures.
2. Minimum text length (abstract and body) of five double-spaced pages.
3. Minimum of one table or figure.
4. Maximum total of 3 tables or figures.

Time commitment:

Students should spend at least 2 hours per week outside class reading articles, critiquing review drafts, and/or writing sections of the review.

Grading System: Letter Grade (A-F) OR Pass/Fail

Student Assessment Criteria:

Percentage	Description
Homework (20 %)	Assignments due on Friday before each class. One letter grade will be deducted for work that is submitted late.
Participation and/or Attendance (50 %)	Students are expected to attend each class and contribute to each discussion.

Final mini-review draft (30%)	Students are expected to turn in a complete draft of their mini-review by the due date.
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Grade	Expectations
A	All homework turned in on time, exemplary class participation, mini-review draft is 100% complete without identifiable errors or omissions
B	Most homework turned in on time, above average class participation, final mini-review draft has minor errors or omissions
C	Most homework not turned in on time, average class participation, final mini-review draft has at least one significant error or omission
D	Most homework not turned in on time, below average class participation, final mini-review draft incomplete

See separate class schedule.

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Genetics & Epigenetics Program Scientific Writing Course

Fall 2025 August 25 – December 1
3:15PM Mondays, GSBS Gallick Classroom

Class	Lectures	In-Class Student Activities	Assignments for Next Week
Before Class #1			With advisor input, decide on review topic, select three key references, and propose target journal(s)
Week 1 Aug 25	Choosing a title for your review (RB)	Student introductions and two minute 'elevator talks;' present selected references and target journals	Identify questions that review will focus on; summarize up to 3 key references
Week 2 Sep 1	NO CLASS LABOR DAY HOLIDAY		
Week 3 Sep 8	Components and structure of a mini-review (RB)	Students present & critique questions that review will address (aims) and summaries of 1-3 key articles	Develop search strategies; is there enough literature to support a review in this area?
Week 4 Sep 15 RB out	Search strategies and compiling references (SP)	Students present & critique search strategies and aims of review	Finalize and implement search strategy; expand reference list; create a general outline of the review
Week 5 Sep 22	How to summarize articles (VG)	Whole group check-in: How do you ensure that you identified all relevant articles? Students present & critique general outline of review	Refine and complete outlines; draft Introduction
Week 6 Sep 29	How to create an effective outline (SP)	Students present & critique Introduction	Revise and complete Introduction. Outline article summary section. What is your organizing principle? Examples: timeline (chronological), result (positive or negative), method.
Week 7 Oct 6 SP out	Figures, Legends and Tables (VG)	Whole group check-in: What do you need to include in the Intro to address the goals of the review? Students present & critique Intro and outline of data summary sections	Review and revise Introduction using input from class and your advisor. Draft article summary section. How complete is the data? Is available data consistent with the goals of your review? Adjust as needed.
Week 8 Oct 13 SP out	How to write an effective abstract (VG)	Students present & critique data summary sections	Revise article summary section. Draft tables and figures.
Week 9 Oct 20	AI for editing and organizational tools (SP)	Whole group check-in: Do tables and figures appropriately support the goal of the review?	Revise tables and figures. Prepare draft of concluding section: summarize key points, take home messages, perspectives, current questions in the field, areas needing future study.

		Students present & critique draft tables and figures.	
Week 10 Oct 27 SP out	How to write an effective Conclusion (VG)	Students present & critique first draft of concluding section.	Finalize tables and figures. Complete the concluding section, incorporating feedback.
Week 11 Nov 3	Communicating effectively: finding your audience, a clear perspective, and a consistent message (SP)	Whole group check-in: Are key take-home points consistent with stated goal of review? Anything missing? Students present & critique draft of concluding section.	Draft Abstract and start to put it all together in final draft of review. Did your conclusions change? Do you need to reanalyze articles from a different perspective?
Week 12 Nov 10	How to write a cover letter (SP)	Small group: Students present & critique Abstract	Reminder: Turn in final drafts by Friday Nov 15.
Week 13 Nov 17	How to read and respond to critiques (RB)	Review student critiques	Instructors' comments on reviews given to students by morning of Friday Nov 22.
Week 14 Nov 24	THANKSGIVING WEEK NO CLASS		Critique one fellow student's review (will be assigned).
Week 15 Dec 1 VG out	Review process & responding to reviewers (RB, SP)	Whole group check-in: Checklist for completion of review Review instructors' comments	

Instructors:

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