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 one of the Graduate School's 504 Coordinators, Cheryl Spitzenberger or Natalie Sirisaengtaksin. 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 2023

Course Number and Course Title:
GS04 1811 Scientific Writing (G&E)

Credit Hours:

Meeting Location: Gallick Classroom

Building/Room#: BSRB S3.8367

WebEx/Zoom Link:

Program Required Course: ☐ Yes ☑ No

Approval Code: ☑ Yes ☐ No

(If yes, the Course Director or the Course Designee will provide the approval code.)

Audit Permitted: ☐ Yes ☑ No

Classes Begin: August 28, 2023

Classes End: December 8, 2023

Final Exam Week: December 11, 2023

Class Meeting Schedule

Day	Time
Monday	3:00 PM

Course Director

Name and Degree: Siddharth Prakash, MD, PhD

Title: Associate Professor

Department: Internal Medicine

Institution: ☑ *UTH* ☐ *MDACC*

Email Address: Siddharth.K.Prakash@uth.tmc.edu

Contact Number: 713-500-7003

Course Co-Director/s: (if any)

Name and Degree: Tim McDonnell, MD, PhD

Title: Professor

Department: Hematopathology

Institution: ☐ *UTH* ☑ *MDACC*

Email Address: tmcdonne@mdanderson.org

Contact Number: 713-563-4720

Office Hours: To be arranged on request

Instructor/s (Use additional page as needed)

1. Name and Degree: Richard Behringer, PhD
   Institution: MDACCC
   Email Address : rrb@mdanderson.org

2. Name and Degree: Siddharth Prakash, MD, PhD
   Institution: UTHealth
   Email Address :Siddharth.K.Prakash@uth.tmc.edu

3. Name and Degree: Timothy McDonnell, MD, PhD
   Institution: MDACC
   Email Address: tmcdonne@mdanderson.org

4. Name and Degree:
   Institution:
   Email Address:

Teaching Assistant: (if any) N/A Name and Email Address Name and Email Address	**Cont. Instructor/s** 5. Name and Degree: Institution: Email Address:

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 (if any)

- N/A
-
-
-

<u>Course Objective/s</u>:

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 permission of your advisor and the course directors. Advisors must approve a commitment letter before students may enroll:

"Sent on behalf of Drs. Tim McDonnell, Siddharth Prakash, and Richard 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"

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

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

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. 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) ☑ Pass/Fail	
Student Assessment and Grading Criteria : (May include the following:)	
Homework (50 %)	Description Assignments due on Friday before each class
Quiz (%)	Description
Presentation (%)	Description
Midterm Exams (%)	Description
Final Exam (%)	Description
Workshop or Breakout-Session (%)	Description
Participation and/or Attendance (50 %)	Description Students are expected to attend each class.

CLASS SCHEDULE

Day/Date	Duration [Hour(s) taught by lecturer]	Lecture Topic	Lecturer/s
		See separate schedule	

Genetics & Epigenetics Program Scientific Writing Course

Fall 2023 August 28 – December 8

3:00PM Mondays 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 28	Choosing a title for your review (RB) How to summarize articles (TM)	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 4	NO CLASS LABOR DAY HOLIDAY		
Week 3 Sep 11	Search strategies and compiling references (SP)	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 18 SP out	Components and structure of a mini-review (RB)	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 25	How to create an effective outline (SP)	**Whole group check-in:** How do you ensure that you identified all relevant articles? **Small groups:** Students present & critique general outline of review	Refine and complete outlines; draft Introduction
Week 6 Oct 2 SP out	"Writing an Effective Narrative Review"	**Small groups:** 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 9	Figures, Legends and Tables (TM) "Creating Effective Tables"	**Whole group check-in:** What do you need to include in the Intro to address the goals of the review? **Small groups:** 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 16	"Tackling the Writing Process"	**Small groups:** Students present & critique data presentation sections	Revise article summary section. Draft tables and figures.
Week 9 Oct 23	"Confusing Sentences Made Clear"	**Whole group check-in:** Do tables and figures appropriately support the goal of the review? **Small groups:** Students present & critique draft tables and figures.	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.

Week 10 Oct 30	How to write an effective Conclusion (SP)	**Small groups:** Students present & critique first draft of concluding section.	Finalize tables and figures. Complete the concluding section, incorporating feedback.
Week 11 Nov 6	How to write an effective Abstract (TM)	**Whole group check-in:** Are key take-home points consistent with stated goal of review? Anything missing? **Small group:** 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 13	"Avoiding Wordiness"	**Small group:** Students present & critique Abstract	Turn in final drafts by Friday Nov 20.
Week 13 Nov 20	THANKSGIVING WEEK NO CLASS		Critique one fellow student's draft review (will be assigned).
Week 14 Nov 27	How to write a cover letter (SP)	**Whole group check-in:** How to read and respond to critiques **Small group:** One-on-one review of student critiques	Instructors' comments on reviews given to students by morning of Friday Dec 2.
Week 15 Dec 4	Review process & responding to reviewers (RB)	**Whole group check-in:** Checklist for completion of review **Small group:** One-on-one review of instructors' comments	

Instructors:

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