

# MTR/REG 6010 Practical Scientific Writing

Summer 2023

July 11 - August 17, 2023

Time: Tuesdays 10:45 am - 12:15 pm

Location: 8030 Maloney, HUP

## Instructor Information

### Course Director

Rachel E. Locke, PhD  
[rlocke@upenn.edu](mailto:rlocke@upenn.edu)

### Course Coordinator

Megan Maxwell, MSW  
Sr. Associate Director, ITMAT Education  
Perelman School of Medicine, University of Pennsylvania  
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## General Course Information

### Description

**Overview and Objectives:** Students should expect this process to be iterative. Students will learn, and practice in class, multiple techniques that they can apply in the future to improve their scientific writing. These include how to: (a) define the scope of a scientific document; (b) save time organizing, navigating, and formatting scientific documents; (c) read scientific articles efficiently; (d) establish a workflow for reading large volumes of scientific material; (e) efficiently find the most relevant articles in biomedical databases include PubMed, Embase, Scopus, Web of Science; (f) use large language models like Chat GPT as tools; (g) improve writing mechanics to craft clear and compelling scientific discourse. Note: point (g) encompasses ~15 different writing mechanical techniques taught and practiced over multiple class sessions. This is a hands-on course during which students will develop a solid draft of the introduction to their master's thesis; sometimes this introduction is referred to as a 'literature review' (~3- 6 pages double-spaced, >100 references).

**Approach:** To achieve the course objectives, we use didactic presentations by the course director, outside experts, and students; group/partner discussion; in-class exercises; and weekly homework assignments.

### Evaluation Methods

Students will be graded based on class attendance, in-class exercises, weekly homework assignments, and the final submission (i.e., the draft-level introduction to their thesis).

Grading Scale	
Category	Percentage
Attendance and participation	25%
In-class exercises	25%
Weekly homework (n~5)	25%
Final submission (i.e., the draft-level Introduction to the thesis)	25%

## Assignments

See Canvas for a description of weekly and final submissions. Typically, there will be one homework assignment per week.

## Course Policies:

### Academic Integrity:

As a student at The University of Pennsylvania, you are required to uphold the Code of Academic Integrity. Specifically, this means that materials that you submit either online or in person should be independent works created by you that uphold all tenets of academic integrity (i.e., do not cheat, fabricate, or plagiarize, amongst others). We encourage you to reach out to the course director or coordinator if you are not clear on what potential violations are.

### Attendance & Participation

Students are expected to attend *and participate* in all classes. If for any reason a student will not be in class, they should contact the course coordinator prior to class to alert them of the absence and make arrangements to make up course content. Two absences are allowed during the course; these will not affect the attendance grade as long as make up assignments are completed .

If a class date conflicts with a holiday or religious observance, please contact the course coordinator. If an assignment is due during this time, please work with the course director and course coordinator to determine an alternative due date.

### Canvas:

All course materials (ppts, announcements, lecture recordings) and assignments will be posted on Canvas. We recommend that you choose the “Notify me right away” option for your most frequently checked email address in the “Announcements” area of the “Notification Preferences” page: <https://canvas.upenn.edu/profile/communication>.

### Course Evaluations:

Course evaluations are completed in the BLUE system. These are a required part of course participation. An email from the BLUE team will be sent to students with a link and directions on how to complete the course evaluation(s).

### Student Disabilities Services:

The University of Pennsylvania provides reasonable accommodations to students with disabilities who have self-identified and been approved by the office of Student Disabilities Services (SDS). Please make an appointment to meet with me as soon as possible to discuss your accommodations and your needs. If you have not yet contacted SDS, and would like to request accommodations or have questions, you can make an appointment by calling SDS at 215-573-9235. The office is located in the Weingarten Learning Resources Center at Stouffer Commons 3702 Spruce Street, Site 300. All services are confidential.

## Course Schedule

Class	Date	Topic

1	Jul 11	Identify the broad scope and content of your thesis introduction; Save time navigating, organizing, and formatting your thesis document (by becoming proficient using styles in MS Word, part 1: overview)
2	Jul 13	Options for organizing your thesis introduction; Techniques for reading the literature efficiently; Options for establishing a workflow; Become proficient at using your reference manager
3	Jul 18	Efficiently find the most relevant references (become a PubMed super-user using MeSH terms and Advanced Search) ( <i>Carlos Rodriquez, PSOM biomedical librarian</i> )
4	Jul 20	Find relevant resources in biomedical databases beyond MEDLINE/PubMed, e.g., Embase, Scopus, Web of Science (presentations by class members)
5	Jul 25	Scientific writing, part 1
6	Jul 27	Using Chat GPT (and other large language models) as a lit research tool ( <i>outside expert TBD</i> ); Discuss challenges and progress on lit review.
7	<b>Aug 1</b>	Scientific writing, part 2
8	Aug 3	Scientific writing, part 3. Discuss challenges and progress on lit review.
9	Aug 8	Catch up and review/recap/discussion of any and all prior topics, if needed.
10	Aug 10	Save time navigating, organizing, and formatting your thesis document (part 2: getting into the details).
11	Aug 15	Scientific writing, part 3. Discuss challenges and progress on lit review.
12	Aug 17	Final Class