

CSAT 5077
Scientific Writing
Fall 2022

CLASS DAYS and TIME: Mon, Wed 1.00 pm to 1.50 pm

CLASSROOM: LEC 3.102B.00

COURSE FACULTY: Rita Ghosh; Thirumalai Kannan; Naomi Sayre; Lingtao Jin

OFFICE LOCATION and HOURS: By appointment

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READ THIS DOCUMENT CAREFULLY - YOU ARE RESPONSIBLE FOR ITS CONTENTS.

COURSE DESCRIPTION AND OBJECTIVES

This course will provide students with the opportunity to develop skills in scientific writing and the presentation of research results. It will emphasize learning-by-doing-and-re-doing. Students will be required to write something every week. The capstone project for students will be to write a grant proposal and defend it in front of the class. Classes will be devoted to lectures, student presentations, critique and revision of student writing by other students, and by the assigned writing mentors. Topics to be covered include: (1) fundamentals of writing clearly, (2) principles of revision, (3) effective presentation of data, (4) fundamentals of oral presentation, (5) writing/presenting to the appropriate audience, (6) developing hypothesis and specific aims, (7) writing significance/innovation sections, (8) choosing appropriate methods for experimental approach, and (9) accepting and offering constructive critiques of one's own and others' writing

Pre-requisites – None

Semester credit hours – 2 credit hours will be awarded for successful completion of the course

By the end of this course, each student should be able to:

- To read and determine gaps in the scientific knowledge of their particular field of interest
- To formulate a hypothesis, develop specific aims to test their hypothesis
- To formulate an experimental plan to address the specific aims of the proposal
- To write a six-page NIH-format pre-doctoral grant proposal
- To create a PowerPoint presentation and give a ten-minute oral overview of their proposal

COURSE ORGANIZATION

The main teaching modalities used in this course include:

- 1) Didactic lectures
- 2) In class discussion/writing activities
- 3) Student Oral presentations/discussions

Materials – None

Computer Access – Students will bring computers to work in class and for oral presentation

Reading Assignments – As listed on the class schedule

ATTENDANCE

Students are required to attend all the classes as detailed in class schedule. 2 points will be deducted for every unexcused absence. Please see the grading policy.

TEXTBOOKS

Required: NA

Recommended: The grant Application Writer's Hand Book; Stephen W Russell and David C. Morrison; WWW. GrantCentral.com

GRADING POLICIES AND EXAMINATION PROCEDURES

Final Proposal: 50 points. The final proposal will be graded in the following manner: Presentation of rationale, *clarity of the proposed hypothesis, aims and logical experiments* (**20 points**); Responsiveness to mentor critiques (**20 points**); clarity of writing including *grammar, syntax, appropriate formatting and appropriate level of formality* (**10 points**)

Timely submission of written assignments: 20 points*

Class participation: 10 points

Oral presentation: 10 points

Attendance: 10 points**

*1 point deducted for each late assignment submission. 1 point/day deducted for late submission of final proposal

**2 point deducted for every unexcused absence. Absence is considered unexcused if the mentor(s) is not alerted prior to the start of class on the day of the absence. Inability to communicate due to serious illness is an exception (doctor's note should be provided).

Grading System

Include a grading scale used to determine final grades, see example below

A = 90-100% B = 80-89% C = 70-79% F = < 69%

REQUESTS FOR ACCOMODATIONS FOR DISABILITIES

In accordance with policy 4.2.3, **Request for Accommodation Under the ADA and the ADA Amendments Act of 2008 (ADAAA)**, any student requesting accommodation must submit the appropriate request for accommodation under the American with Disabilities Act (ADA, form 100). to his/her appropriate Associate Dean of their School and a copy to the ADA Coordinator. Additional information may be obtained at <http://uthscsa.edu/eo/request.asp>.

ACADEMIC INTEGRITY AND PROFESSIONALISM

Any student who commits an act of academic dishonesty is subject to discipline as prescribed by the UT System Rules and Regulations of the Board of Regents. Academic dishonesty includes, but is not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an exam for another person, signing attendance sheets for another student, and any act designed to give unfair advantage to a student or the attempt to commit such an act. Additional information may be obtained at <http://catalog.uthscsa.edu/generalinformation/generalacademicpolicies/academicdishonestypolicy/>

TITLE IX AT UTHSCSA

Title IX Defined:

Title of the Education Amendments of 1972 is a federal law that prohibits sex discrimination in education. It reads “no person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance.”

University of Texas Health Science Center San Antonio’s Commitment:

University of Texas Health Science Center San Antonio (UTHSCSA) is committed to maintaining a learning environment that is free from discriminatory conduct based on gender. As required by Title IX, UTHSCSA does not discriminate on the basis of sex in its education programs and activities, and it encourages any student, faculty, or staff member who thinks that he or she has been subjected to sex discrimination, sexual harassment (including sexual violence) or sexual misconduct to immediately report the incident to the Title IX Director.

In an emergency, victims of sexual abuse should call 911. For non-emergencies, they may contact UPD at 210-567-2800. Additional information may be obtained at <http://students.uthscsa.edu/titleix/>

EMAIL POLICY

Every student is issued a University e-mail address and account at the time of enrollment. As a matter of University Policy, communications between students and faculty that occur using the student’s University e-mail address is considered official business. Therefore, students are expected to check their university email inboxes on a regular basis so that any announcements, instructions, or information regarding this course will be received in a timely way. Missed communications due to inadequate monitoring of incoming emails on the University’s email server will never be a valid excuse for unsatisfactory academic progress

USE OF RECORDING DEVICES

Recording of lectures and other learning activities in this course by any means (e.g., video, audio, etc.) is only permitted if approved by the instructor or required for compliance with Americans with Disabilities Act (ADA).

ELECTRONIC DEVICES

Computers, tablets use is allowed only for participating in classroom activities (e.g., viewing slides presented in lecture or reading assignments or articles etc.). Activities unrelated to course objectives such as using phone or texting are not allowed.

Tentative Schedule

Will be available before the start of the fall semester.

| CSAT 5077 Scientific Writing 2022 | |
|---|---|
| Instructors: Drs. Rita Ghosh, Thirumalai Kannan, Naomi Sayre | |
| Days: Mon, Wed Time: 1-1:50pm | |
| Location: LEC 3.102B.00 | |
| Date | In-Class Topics |
| 22-Aug | Introductions/Grading Dr. Ghosh |
| 24-Aug | Hypothesis & specific aims Dr. Sayre |
| 29-Aug | Significance Dr. Ghosh |
| 31-Aug | Innovation Dr. Ghosh |
| 5-Sep | Labor Day- No Class |
| 7-Sep | Approach/Res Design Dr. Ghosh |
| 12-Sep | Students present aims |
| 14-Sep | Students present aims |
| 19-Sep | Students present aims |
| 21-Sep | Students present aims |
| 26-Sep | Students present aims |
| 28-Sep | Students present aims |
| 3-Oct | Students present aims |
| 5-Oct | Students present aims |
| 10-Oct | Students present aims |
| 12-Oct | Potential Problems Dr. Sayre |
| 17-Oct | Introduction to resubmission Dr. Ghosh |
| 19-Oct | Plagiarism Dr. Reiter |
| 24-Oct | Statistical considerations Dr. Pertsemidis |
| 26-Oct | Abstract/Summary Dr. Sayre |
| 31-Oct | Oral Presentation Skills Dr. Sayre |
| 2-Nov | In-class writing/discussions with instructors & peers |
| 3-Nov | In-class writing/discussions with instructors & peers |
| 7-Nov | Oral presentaion |
| 9-Nov | Oral presentation |
| 14-Nov | Oral presentation |
| 16-Nov | Oral presentation |
| 21-Nov | Oral presentaion |
| 23-Nov | No class |
| 28-Nov | Oral presentation |
| 30-Nov | Oral presentation |
| 5-Dec | Oral presentaion |
| 7-Dec | Oral presentaion |
| 14-Dec | Final proposal due |



Assignments (paper copy or electronic submission) are due at the start of class (1:00 PM) on the appropriate due date

The goal of the writing class is to help you develop a proposal that will serve as the qualifying examination (QE) proposal in the Spring semester. The student will identify a relevant unsolved problem in the biomedical sciences that is approved by the discipline QE committee/course director. The QE question must be based on an idea conceived and developed by the student without help from the supervising professor, and must not duplicate any aims in his/her mentor's active and or pending grants. A written declaration from the student should be submitted to the course director in order to clarify the relationship between the proposed research and that of the student's dissertation mentor's research. The topic may be related to the student's dissertation research so long as the idea is solely that of the student. Further, the dissertation mentor is not allowed to help the student with writing the proposal.

Assignment 1: Provide the background to this research topic ending with the unanswered question that needs to be filled and the significance of this research. Prepare a 2 page report on your topic, with half inch margins in Arial, Helvetica, Palatino or Georgia font (11 point) with citations to support the proposal. Later on this will serve as the significance and innovation section of your proposal. Include the references you cited in the report as a separate attachment (this is not counted towards the two page limit). The report will be due **September 8th**.

Assignment 2: Create a stand alone specific aims section. This should include the scientific premise of the study, hypothesis, specific aims, research outcomes and impact of your findings on the field. Formatting guidelines: Length: 1 page, single spaced, 0.5 in margins. Due: **Sept. 14th**.

Specific aims presentation starts on **Sept 12th** and runs through **Oct 10th**. Powerpoint presentation of the specific aims of the project. 2 presentations/class

Assignment 3: Significance and Innovation section. 1 1/2 pages with same formatting as specific aims. **Due: Sept 21st**

Assignment 4: Experimental approach for specific aim 1. Include controls and explain outcomes, potential problems and alternatives. 2 pages. Same formatting as specific aims page. **Due: Oct. 12th**

Assignment 5: Experimental approach for specific aim 2. Include controls and explain outcomes, potential problems and alternatives. Same length and formatting instructions as aim 1. **Due: Oct 26th.**

Begin peer review: Nov 4th Peer-review is an on-going process in the background via email.

Create a 10 min PowerPoint presentation outlining the proposal. Presentations will start: **Nov 7th.** We will have 2 presentations/class. Sign up sheets will be available.

Assignment 6: Abstract/Project Summary. **Due: Nov 9th.** Continue peer-review.

Continue to revise proposal as suggested by peer reviewers.

Assignment 7: Submit full draft to instructors. Follow formatting guidelines. **Due: Nov 21st.**

Instructors return proposals **Dec. 5th.**

Assignment 8: Final proposal due **Dec. 14th**