Syllabus
PGS 382R
Recent Advances in Pharmaceutics
Summer 2018, First Day Handout

“Scientific Writing in Pharmaceutics”

Course Description: Whether you become an academic principal investigator, a scientific director in industry, or a regulatory reviewer, an essential skill for scientific leaders is to be able to critically review research plans and data and be able to effectively communicate these to others. This course will develop scientific reviewing, reasoning, and writing skills essential for students to become scientific leaders.

In the first half of the class the students will have hands on experience with real research manuscripts and the students will critique in a real peer review situation.

In the second half of the class the students will utilize the strengths and weaknesses observed during peer review of other's' work and use their own data in a stepwise course in manuscript writing.

Learning Objectives.
Upon completion of this course the student will be able to:
1. Demonstrate critical interpretation of scientific literature
2. Develop critical scientific reviewing skills
3. Demonstrate ability to suggest improved research designs
4. Demonstrate ability to draft scientific manuscript in a logical stepwise approach
5. Provide critical contributions to other projects

Expectations and Prerequisites

1. In-class participation is expected
2. Turn in assignments on time

In order to complete the writing portion of the course students need to bring to class three solid and independent pieces of real original data. This can be three tables or two tables and a figure. This data needs to be generated prior to the start of the second half of the class (see date below).
Faculty
Dr. Hugh Smyth, Ph.D.
Dr Robert O. (Bill) Williams III, Ph.D.

Other Resources:
1. Office hours are by appointment.
2. Googledocs - this will be used to provide course materials and background readings

Assessment:
Assessment is comprised of the following:
a. Critical reviewing assignments 40%
b. Manuscript writing assignment 40%
c. Contributions in class 20%

Preliminary Schedule/ Topics Covered
This course is designed to expose the student to a broad range of key skills required in academic and professional development.

Part 1: Reviewing
The students will first be assigned several manuscripts that have been submitted to Drug Development and Industrial Pharmacy or AAPS PharmSciTech. The students will be responsible for critically reviewing these manuscripts according to guidance provided by the course instructors. The students will present the findings to the class.

Part 2: Writing
The students will use their own data sets and will develop a draft manuscript for submission. The students will break the manuscript writing into several tasks as outlined in our accompanying “Guide to Writing in the Pharmaceutical Sciences” handout.

Class Dates:

Introductory Class: June 8 - 10:30am - 1:30pm
Dr. Williams will go over “Part 1” background and expectations
Dr. Smyth will go over “Part 2” background and expectations

Part 1: Reviewing papers in the pharmaceutical sciences

Pre-class Reading Assignment. Review the following materials:

Session 1: (Day and time to be set in first class - 4.5 hours) Course overview, Guide to Peer Review (Williams)
   Covers the critical aspects of peer review; each student will be assigned two papers to critically review

Session 2: (Day and time to be set in first class - 4.5 hours) Students walk through their critically reviewed papers in class (Williams)

Session 3: (Day and time to be set in first class - 4.5 hours) Students critically review papers in class (Williams)

**Part 2: Writing papers in the pharmaceutical sciences**

Preclass Reading Assignment: Smyth and Williams “Guide to Writing” (accessed through Canvas)


Preclass Reading Assignment: “Instructions for Authors” from AAPS PharmSciTec (http://www.springer.com/biomed/pharmacology+%26+toxicology/journal/12249)

Session 4: (Day and time TBD) Guide to writing in the pharmaceutical sciences (Smyth)
   a. Review the critical aspects of writing technical and review papers in the pharmaceutical sciences; each student will select a topic to write
   b. Each student will find and review a research paper on a topic directly related to their dissertation research; and be prepared to analyze during the next class period
   c. Writing assignment - each student is assigned to write a paper using their own data. The goal will be to construct a first draft of the paper, focusing on structure and organization (your plan for the paper)
Session 5: (Day and time TBD) Critical review and deconstruction of published papers to identify strengths and weaknesses in structure and organization (Smyth)
   a. Students bring and analyze their papers
Session 6: (Day and time TBD) Students present their draft papers: Abstract, Introduction, Materials and Methods, Results, Discussion and Conclusion sections will be evaluated in class (Smyth)

Other Course Policies

Academic Integrity:

The "Statement on Scholastic Integrity of the College of Pharmacy" reads as follows: "Pharmacy practitioners enjoy a special trust and authority based upon the profession's commitment to a code of ethical behavior in its management of client affairs. The inculcation of a sense of responsible professional behavior is a critical component of professional education, and high standards of ethical conduct are expected of pharmacy students. Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including failure of the course involved and dismissal from the college and/or the University. Since dishonesty harms the individual, fellow students, and the integrity of the University and the College of pharmacy, policies of scholastic dishonesty will be strictly enforced in this class".

Students are expected to work independently on all examinations. Any student caught cheating will be given an "zero" on the exam (minimum). Any student suspected of dishonesty will be reported to the Dean of the College of Pharmacy and to the Dean of Students, as per University regulations. Students are expected to have read and understood the current issue of the General Information Catalog published by the Registrar's Office for information about procedures and about what constitutes scholastic dishonesty.

Students with Disabilities:

The University of Texas at Austin provides upon request appropriate academic accommodations for qualified students with disabilities. All University rules concerning accommodations must be followed, including the student arranging for special accommodations prior to each examination. In the absence of such prearrangement, the student will be assumed that the student is not requesting special accommodations for that exam, and will be expected to take the exam with the rest of
the class at the regularly scheduled exam time. For more information, contact the Office of the Dean of Students at 471-6259, 471-4641 TTY.