

GEORGE MASON UNIVERSITY
School of Recreation, Health, and Tourism

EFHP 690—Scientific Communications (3)
Fall 2012

DAY/TIME:	M, W 10:30AM – 11:45AM	LOCATION:	PW BRH # 212
PROFESSOR:	Dr. Jatin P. Ambegaonkar	EMAIL ADDRESS:	jambegao@gmu.edu
OFFICE LOCATION:	Bull Run Hall #201C	PHONE NUMBER:	703-993-2123
OFFICE HOURS:	W 1.15 PM – 2:00 PM and by APPT	FAX NUMBER:	703-993-2025

PREREQUISITES

EFHP 612, EFHP 620, EFHP 621, or Permission of Instructor

COURSE DESCRIPTION

Study and application of the written and verbal communication skills in reading, analyzing, writing, and distributing scientific information in Applied Kinesiology

COURSE OBJECTIVES

At the completion of this course students should be able to:

1. Review and evaluate the quality of scientific literature
2. Demonstrate understanding of scientific communication including style and sentence construction, common misuses of words, elements of composition, different types of scientific literature
3. Describe the stages of the scientific communication processes (prewriting, drafting, revising, final edits, analyzing audience and purpose)
4. Present scientific information using professional written and verbal communication formats

COURSE OVERVIEW

In this course students learn the skills required for scientific communications. Students will review scientific information presented in professional and popular media. Students will also develop a scientific communication proposal that will include describing the significance ability to communicate will be evaluated using in a variety of formats as they present information

In addition to learning effective communication, students will learn to evaluate the quality of science presentation available across various media from popular media (news, magazines) to professional sources (scientific journals). The course will cover scientific writing styles, grammar, parts of speech, punctuation, tense, and agreements, different types of research and scientific literature, presentation of graphical information via figures and charts. Through multiple assignments, students will learn the scientific process from organization of a manuscript to its final publication, and professional presentation of scientific results (oral and poster).

Students are held to the standards of the George Mason University Honor Code. You are expected to attend class sections, actively participate in class discussions, complete in-class exercises and fulfill all assignments. Assignments must be turned in at the beginning of class on the specified date due or **no credit will be given**.

NATURE OF COURSE DELIVERY

Classroom instruction

REQUIRED READINGS

Matthews JR, Matthews RW (2008) *Successful scientific writing. A step-by-step guide for the biological and medical sciences*. Cambridge University Press 2008 ISBN-10: 0521699274.

RECOMMENDED READINGS

Hoffman A. (2009) *Scientific Writing and Communication: Papers, Proposals, and Presentations* Oxford University Press, USA; 1 edition ISBN-10: 0195390059

Constance H. (2001) *Sin and Syntax: How to Craft Wickedly Effective Prose*. Broadway Books ISBN-10: 0767903099

EVALUATION

This course will be graded on a point system, with a total of 100 possible points.

Participation

Students are expected to be on time, attend all class meetings and be prepared for in class assignments and projects. Excused absences include the following: illness (must bring a receipt or note from a doctor), family death, athletic/academic event, and others at the discretion of the instructor. For known upcoming absences, students must contact the instructor at least one week in advance to the missed class to make up work. In the case of illness or some other unforeseen absence, the student must contact the instructor via e-mail or telephone. At the next attended class meeting the student will discuss material that is to be completed. It is the student's obligation to pursue any make-up work.

Writing Assignments General Guidelines

1. All papers must be formatted as follows: single spaced, 12 point times new roman font, 1 inch margins, name and title in running header at top left hand corner, continuous line numbers on left margin, page numbers top right in header. Page limits do not include reference section
2. In text citations and references must follow the most current style guidelines published by the American Medical Association (AMA).
3. Points will be deducted for spelling, grammatical, or formatting errors.
4. A digital copy must be turned in online with the accompanying reference library associated with the assignment.

Review

Students will review two publications about a chosen scientific topic and provide a 1-page summary each. One publication will be a primary source (e.g. journal article) and the other a secondary source (e.g. magazine).

Introduction

Students will write background information and the introduction section of their chosen scientific topic to define a scientific research project

Methods

Students will write a methods section to investigate their chosen scientific project

Results

Students will write a preliminary draft of their results section interpreting their project (mock data may be used if real data are unavailable)

Discussion

Students will write a preliminary draft of their discussion and limitations sections.

Abstract

Students will write an abstract about their scientific project in format for submission to a professional conference.

Oral Presentation

Students will present their chosen scientific project in a formal oral presentation.

Manuscript

Students will revise and collate all materials from the above assignments into a full manuscript draft. Students will submit an initial full draft and a final full draft.

<i>Requirements</i>	<i>Points</i>
Participation	10
Review #1	5
Review #2	5
Introduction	5
Methods	5
Results	5
Discussion	5
Abstract	10
Oral Presentation	20
Manuscript Initial Full Draft	10
Manuscript Final Full Draft	20
TOTAL	100

Grading Scale

The student's final letter grade will be earned based on the following scale:

Grade	Percentage	Quality Points	Grade	Percentage	Quality Points
A+	93%	4.00	B	83%	3.00
A	93%	4.00	B-	80%	2.67*
A-	90%	3.67	C	73%	2.00
B+	87%	3.33	F	<73%	0.00

Note: * Although a B- is a satisfactory grade for a course, students must maintain a 3.00 average in their degree program and present a 3.00 GPA on the courses listed on the graduation application.

TENTATIVE COURSE SCHEDULE

WEEK	TOPIC	ASSIGNMENT DUE
1(Aug 27/29)	Course overview	
2(Sep 3/5)	Goals of scientific communication, plagiarism, ethics	Review 1 and 2
3(Sep10/12)	Evaluating scientific literature: primary and secondary articles	
4(Sep 24/26)	Writing: grammar, parts of speech, punctuation, tense, and agreements	Introduction
5(Sep 24/26)	Writing: grammar, parts of speech, punctuation, tense, and agreements	
6 (Oct 1/3)	AMA Style; clarity, style, grammar, transitions, coherence	Methods
7 (Oct 9/10)	Research project logistics; consent letters; data sheets	
8 (Oct 15/17)	The basics of grant writing	Results
9 (Oct 22/24)	Effective Abstract and Outlines Writing	
10 (Oct 29/31)	Effective Oral presentations and Speeches	Discussion
11 (Nov 5/7)	Effective Poster presentations	
12 (Nov 12/14)	Communicating with the media and the general public	
13 (Nov 19)	Bringing it all together	
14 (Nov 26/28)	Writing critiques and reviews of the work of peers	Initial Full Manuscript Draft
15 (Dec 3/5)	The publication process – journal requirements, addressing reviewer feedback	
16 (Dec 12)	Final In-class presentations 10: 30AM- 1:15PM	Oral Presentation and Full Manuscript Draft

Note: Faculty reserves the right to alter the schedule as necessary.

Student Expectations

- Students must adhere to the guidelines of the George Mason University Honor Code [See <http://academicintegrity.gmu.edu/honorcode/>].
- Students with disabilities who seek accommodations in a course must be registered with the George Mason University Office of Disability Services (ODS) and inform their instructor, in writing, at the beginning of the semester [See <http://ods.gmu.edu/>].
- Students must follow the university policy for Responsible Use of Computing [See <http://universitypolicy.gmu.edu/1301gen.html>].
- Students are responsible for the content of university communications sent to their George Mason University email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students solely through their Mason email account.
- Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.
- Students are expected to exhibit professional behaviors and dispositions at all times.

Campus Resources

- The George Mason University Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students' personal experience and academic performance [See <http://caps.gmu.edu/>].
- The George Mason University Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing [See <http://writingcenter.gmu.edu/>].
- For additional information on the College of Education and Human Development, School of Recreation, Health, and Tourism, please visit our website [See <http://rht.gmu.edu>].

CORE VALUES COMMITMENT: The College of Education and Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles.

