

George Mason University
College of Education and Human Development
Exercise, Fitness, and Health Promotion Program
EFHP 598 – 003 — Analyses of Health and Human Performance
3 Credits, Fall 2017
T 9:00 am - 11:40 am, Bull Run Hall 134, Prince William Campus

Faculty

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Prerequisites/Corequisites

Permission of Instructor

Course Description

Studies problem areas in exercise, fitness, and health promotion research, theory, or practice under direction of faculty member.

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**.

Course Delivery Method

Face-to-Face meetings with hybrid in-class and online assignments

REQUIRED READINGS

Matthews JR, Matthews RW (2014) *Successful Scientific Writing. A Step-By-Step Guide for the Biological and Medical Sciences*. 4th ed. Cambridge University Press SBN-13: 978-1107691933 ISBN-10: 1107691931. (SSW)

Morgan SE, Reichert T, & Harrison, TR, (2001) *From Numbers to Words: Reporting Statistical Results for the Social Sciences*. Pearson ISBN-10: 080133280X | ISBN-13: 978-0801332807 (NTW)

Writing Assignments General Guidelines

1. Unless explained otherwise in class, all papers must be formatted as follows: double spaced, 12 point times new roman font, 1 inch margins, student name and paper 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.

Course Performance Evaluation

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

Introduction

Students will write the introduction section of their chosen scientific project that may include but is not limited to: significance of topic, known background information, gaps in the literature, and the purpose of their project.

Methods

Students will write a methods section to investigate their chosen scientific project that may include but is not limited to: participants, Institutional Review Board (IRB) approval details, experimental procedures, instrumentation, and statistical analyses.

Results

Students will write a preliminary draft of their results of statistical tests of their chosen scientific project. Mock data may be used if real data are unavailable.

Presenting Data Visually

Students will present their results using at least 1 table and at least 1 figure (e.g. graph, chart) to describe the results of their chosen scientific project. Mock data may be used if real data are unavailable.

Discussion

Students will write a discussion interpret findings of their chosen scientific project. Sections include but are not limited to: explanation of findings, comparing and contrasting with previously published literature, limitations and future recommendations, practical and/or clinical implications, and a conclusion section.

References

Students will format a reference list for their scientific project according to American Medical Association (AMA) format guidelines

Abstract

Students will write an abstract about their scientific project in format for submission to a professional conference or a target journal using the following template: National Athletic Trainers' Association (NATA) Research and Education Foundation Free Communications Program conference or journal guidelines <http://natafoundation.org/free-communications/peer-reviewed-track-instructions>

Poster Presentation

Students will submit a formal PowerPoint poster of their chosen scientific project.

Oral Presentation

Students will make a formal oral PowerPoint presentation of present their chosen scientific project.

Manuscript

Students will write a full manuscript draft in a formal format for possible submission to a peer-reviewed journal. Students will submit an initial full draft and a final full draft using the Journal of Athletic Training guidelines http://natajournals.org/page/ForAuthors_JAT.

Participation

Students will actively participate in class discussions.

Peer Review

Students will review their peers' papers in a timely manner.

<i>Requirements</i>	<i>Points</i>
Introduction	5
Methods	5
Results	5
Presenting Data Visually	5
Discussion	5
References	5
Abstract	5
Poster PowerPoint Presentation	5
Oral PowerPoint Presentation	15
Manuscript Initial Full Draft	10
Manuscript Final Full Draft	20
Participation	5
Peer Review	10
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- DATE	TOPIC	READINGS	ASSIGNMENT DUE
1 – Aug 29	Course Overview / Goals of Scientific Communication, Plagiarism, Ethics	SSW Ch. 1	
2 – Sep 5	Evaluating Scientific Literature: Primary and Secondary Articles	SSW Ch. 2	
3 – Sep 12	Word Processing		
4 – Sep 19	Writing Coherently	SSW Ch. 5	Introduction
5 – Sep 26	AMA Style, Clarity, Style, Grammar, Transitions, Coherence	AMA Style Handout	
6 – Oct 3	Word Choice and Syntax	SSW Ch. 6	
7 – Oct 10	COLUMBUS DAY BREAK		
8 – Oct 17	Grammar, Numbers and Mechanics	SSW Ch. 7	Methods
9 – Oct 24	Reporting Statistics	NTW Ch.1, 2, 4, 5, 6, 7	
10 – Oct 31	Visually Supporting Data		Results, Present Data Visually
11 – Nov 7	Effective Oral and Poster Presentations, and Speeches	SSW Ch. 3& 4 NTW Ch.8, App	Discussion and References
12 – Nov 14	Media and General Public Communications		Abstract and Initial Manuscript
13 – Nov 21	The Publication Process – Journal Requirements, Addressing Reviewer Feedback	SSW Ch. 8 NTW Ch. 9	Poster PowerPoint
14 – Nov 28	Bringing it all Together		Oral PowerPoint Presentations
15 – Dec 5	Bringing it all Together		Oral PowerPoint Presentations and Final Manuscript

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

Professional Dispositions

Students are expected to exhibit professional behaviors and dispositions at all times. It is critical each student conduct themselves in an appropriate manner and decorum fitting of a health care professional within and outside class.

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: <http://cehd.gmu.edu/values/>.



GMU Policies and Resources for Students

Policies

- Students must adhere to the guidelines of the Mason Honor Code (see <http://oai.gmu.edu/the-mason-honor-code/>).
- Students must follow the university policy for Responsible Use of Computing (see <http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/>).
- Students are responsible for the content of university communications sent to their Mason 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 with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor (see <http://ods.gmu.edu/>).
- Students must follow the university policy stating that all sound emitting devices shall be silenced during class unless otherwise authorized by the instructor.

Campus Resources

- Support for submission of assignments to Tk20 should be directed to tk20help@gmu.edu or <https://cehd.gmu.edu/aero/tk20>. Questions or concerns regarding use of Blackboard should be directed to <http://coursesupport.gmu.edu/>.
- For information on student support resources on campus, see <https://ctfe.gmu.edu/teaching/student-support-resources-on-campus>

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For additional information on the College of Education and Human Development, please visit our website <https://cehd.gmu.edu/students/> .

Attendance

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 (contact instructor in advance), 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 the same day of the absence. At the next attended class meeting the student will discuss material that is to be completed with the instructor. *Students will have one week from the excused absence to complete any missed assignments.* It is the student's obligation to pursue any make-up work.

Assignments

Late assignments will not be accepted. Assignments should be submitted at the beginning of the class meeting on the due date. Late assignment will result in a zero (0) for the assignment. This applies to electronic submissions as well. Your name **MUST** be on your papers when you turn them in. Failure to put your name will result in a zero (0) for the assignment.

Technology Use During Class

As per GMU policy, all sound emitting technology is required to be turned off during the lecture and laboratory class meeting times. Additionally, no laptop computers or tablets will be permitted for use during class time; the exceptions are for use during presentations/projects, and technology deemed as necessary by the Office of Disability Services. Students utilizing various technology devices during class will be asked to leave class and will not be permitted to complete course work or receive any points for assignments that day.

E-Mail Correspondence

Only messages that originate from a George Mason University address will be accepted; thus your e-mail address must end in gmU.edu. The instructor will not read e-mail messages not originating from a GMU account. Also, when corresponding with any professional at GMU or off campus via e-mail, use the following, appropriate professional format; any e-mail not using this format will be returned to the students for revision before a response will be issued:

Dear Dr. Ambegaonkar (Beginning salutation)

I am looking forward to your class. (Text

body)

Regards, (Ending Salutation)

(Your name)