

Montgomery County Community College
 ESW 228
 Research Methods in Exercise Science and Wellness
 3-3-0

COURSE DESCRIPTION:

This course introduces the students to the research trends and skills required to conduct valid research in exercise science, wellness, and health professions. Students will explore the latest trends, legal, and ethical issues as they relate to research. Students will develop skills in research, including research design, developing hypotheses and related research questions, conducting analysis and interpreting data, and presenting the data to an audience. The course will guide students through the development and implementation steps of a research project related to the exercise science, wellness, and health professions.

REQUISITES:

Previous Course Requirements

ESW 102 – Introduction to Exercise Science, Wellness, and Sports Studies

ENG 102 – English Composition II

MAT 106 – Math applications, MAT 130 - Probability and Statistics, MAT 131- Introduction to Statistics I, or higher

LEARNING OUTCOMES Upon successful completion of this course, the student will be able to:	LEARNING ACTIVITIES	EVALUATION METHODS
1. Describe the scientific method as it is used in the exercise science, wellness, and health fields.	Lecture/Discussion Readings Research Project	Discussions Quizzes Research Project
2. Identify the legal and ethical issues and concerns in the research of Exercise Science and Wellness	Lecture/Discussion Readings	Discussions Analysis of research
3. Analyze and interpret qualitative and quantitative data.	Lecture/Discussion Readings Research project	Analysis of research Research project

4. Design and conduct a full research study.	Lecture/Discussion Readings Research project	Analysis of research Research project
5. Demonstrate proficiency in communicating health and wellness research concepts.	Lecture/Discussion Readings Blogs	Blogs Presentation of research project

At the conclusion of each semester/session, assessment of the learning outcomes will be completed by course faculty using the listed evaluation method(s). Aggregated results will be submitted to the Director of Educational Effectiveness. The benchmark for each learning outcome is that *70% of students will meet or exceed outcome criteria.*

SEQUENCE OF TOPICS:

1. Introduction to the course and scientific method
2. Background of quality research in exercise science, wellness, and health science professions.
3. Types of research in the field
4. Review of literature in the field
5. Legal and ethical discussions on research practices and studying human behavior in the field
6. Research design and constructs
7. Formulating research questions and hypothesis
8. Developing valid and reliable instruments
9. Collecting data
10. Interpreting and analyzing data
11. Drawing conclusions
12. Communicating results from the research project

LEARNING MATERIALS:

Supplemental information will be provided to the students by the instructor.

Examples of Open Resources:

- Research Quarterly for Exercise and Sport:
<https://www.tandfonline.com/action/showAxaArticles?journalCode=urqe20&>
- Strength and Conditioning: [Strength and Conditioning Journal](#)
- Research Methods in Psychology – open resource:
<https://kpu.pressbooks.pub/psychmethods4e/part/overview-of-the-scientific-method/>
- APA research and citations – open resource:
https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_style_introduction.html

Other learning materials may be required and made available directly to the student and/or via the College's Libraries and/or course management system.

COURSE APPROVAL:

Prepared by: Dr. Anne Livezey

Date: 4/2010

Revised by: Dr. Anne Livezey

Date: 12/2012

VPAA/Provost or designee Compliance Verification:
Victoria L. Bastecki-Perez, Ed.D.

Date: 12/21/2012

Revised by: Dr. Anne Livezey

Date: 11/2021

VPAA or designee Compliance Verification:

Date: 2/22/2022



This course is consistent with Montgomery County Community College's mission. It was developed, approved, and will be delivered in full compliance with the policies and procedures established by the College.