

Course Syllabus

[Jump to Today](#)

 [Edit](#)



MARIAN UNIVERSITY
Indianapolis

PSY 205 Statistical Methods 3 Credits

Spring 2019

Online Instructor: Joe Diaz, M.A., CPLP, SPHR

Email: Contact via Canvas email

Required Textbook(s):

Forde, David R., Fox, James Alan, & Levin, Jack (2017) *Elementary Statistics in Social Research*, (Twelfth Edition). Pearson Publishing, ISBN 9780134427768.

I strongly recommend that you obtain a physical copy of the book, especially if you are not comfortable with math. It will help significantly

A **calculator** capable of addition, subtraction, multiplication, division, taking numbers to a power, square roots, and factorials. A good, inexpensive choice is TI-30X IIS. You do not need a graphing calculator but if you have one, feel free to use it – they are nice. I will be able to help you with your calculator. If you have a question about a calculator you already have, you can email me a picture of it and I will let you know if it will be acceptable or not. I know the iPhone/iPad calculators will do a lot, but you will find that when the problems get more complicated, they aren't good enough – just buy the TI-30 – it shouldn't be more than \$15, and you can sometimes find it on sale

Students are required to purchase the items listed above prior to the start of the course. Look into all of your options - new, used, rental or e-books. If you choose a rental option, be sure to understand the policies and the due dates for the returns. While you have the option to obtain your course materials from any source, ordering from the MU Book Store can be a convenient option. Please note that you can also charge bookstore purchases to your student account or use your MU financial aid if applicable.

Visit www.bkstr.com/marianustore/home (<http://www.bkstr.com/marianustore/home>).

Additional Resources:

The Mother Teresa Hacklemeier Memorial Library at Marian University provides various databases <http://www.marian.edu/library/Pages/default.aspx> (<http://www.marian.edu/library/Pages/default.aspx>)

Prerequisites:

At least one year of high school algebra is recommended. This course is designed to provide the student with an introductory knowledge of the statistical methods used in Behavioral Sciences and experience with their use. Basic concepts, uses, and methods of statistical computation, including descriptive statistics, correlation, probability, estimation, sampling, design, hypothesis testing, t-tests, ANOVAs, and Chi Square are presented in this course. This is a computational and interpretational statistics course designed to prepare students for upper division/graduate courses in research, data evaluation, and analytical reasoning. Computer software and a problem-solving lab are included to facilitate learning.

Course Description

A study of the basic concepts and methods of statistics used in social research, including descriptive statistics, probability, sampling theory and practice, hypothesis testing, and correlation.

Upon successful completion of this course, students will be able to:

Student Learning Objectives

G1.b. Demonstrate a knowledge and applications of the basic concepts of the natural sciences and mathematics and their relationships to contemporary life and work by:

G1.b3. Appropriately using mathematical concepts, language, and tools for problem-solving.

GE Goal 3: Intellectual Skills: This domain involves the acquisition of competent skills and abilities in reasoning, inquiry, information resources, diversity, and quantitative and communication fluency.

Quantitative Fluency – Translate verbal problems into mathematical algorithms and construct valid mathematical arguments using the accepted symbolic system of mathematical reasoning

Student Learning Outcomes

I. To demonstrate computational accuracy for basic algebra skills including solving for unknowns, using the rules of summation and order of operation, using exponents, expanding binomials, and factorials

II. To demonstrate computational accuracy for descriptive statistics including measures of central tendency and variability and the ability to create and interpret graphs, tables, and frequency distributions

III. To demonstrate accurate logic and computation of research data by identifying and applying statistical tests and procedures, recognizing inappropriate values and problem solutions, and correctly applying the

appropriate statistical problem solving

IV. To demonstrate the comprehension of statistical concepts such as probability, theoretical distributions, samples from populations, critical values, and statistical assumptions

V. To accurately interpret and evaluate tests of statistical hypotheses performed by hand and using the SPSS software

Teaching Strategies

Homework, quizzes, exams.

Assignments & Assessment Methods:

Methods of Evaluation

Homework	18%
8 Module Quizzes	73%
Final Examination (comprehensive)	9%
	100%

Grading Scale

GRADE	PERCENTAGE
A	95-100%
A-	90-<95%
B+	87-<90%
B	83-<87%
B-	80-<83%

*C+	77-<80%
C	73-<77%
C-	70-<73%
D+	66-<70%
D	60-<66%
F	<60%

Course Policies:

Student Handbook

Please refer to the Student Handbook for academic and school of nursing policies. The Student Handbook provides information regarding:

All Nursing students are responsible for reviewing and signing the School of Nursing Student Handbook each semester which holds you accountable for all information and addendums made throughout the semester.

NOTE: Students with disabilities who have proper documentation must contact the Director of Academic Support Services in the Learning and Counseling Center to set up a documentation review. If after the review, accommodations are deemed appropriate, an accommodation plan will be developed. As per the ADA (Americans with Disabilities Act) no accommodations can be provided until this process is complete. Contact Marj Batic, Director of Academic Support Services (mbatic@marian.edu; 317.955.6150; or stop by the office in Clare Hall).


















Note: Students who may require assistance in emergency evacuations should contact the instructor as to most appropriate procedure to follow. If there are questions regarding such a procedure, contact the Dean of Student Affairs (Ruth Rodgers – rrodgers@marian.edu) or the Director of Academic Support Service for additional information.

****Any changes to this syllabi will be communicated to the student.**

Course Outline

Schedule

Course Summary:

Date	Details
	 Final Exam (https://marian.instructure.com/courses/2175993/assignments/15071567)
	 Homework 1 (https://marian.instructure.com/courses/2175993/assignments/15073941)
	 Homework 2 (https://marian.instructure.com/courses/2175993/assignments/15073948)
	 Homework 3 (https://marian.instructure.com/courses/2175993/assignments/15073973)
	 Homework 4 (https://marian.instructure.com/courses/2175993/assignments/15073986)
	 Homework 5 (https://marian.instructure.com/courses/2175993/assignments/15073988)
	 Homework 6 (https://marian.instructure.com/courses/2175993/assignments/15073991)
	 Homework 7 (https://marian.instructure.com/courses/2175993/assignments/15073998)
	 Homework 8 (https://marian.instructure.com/courses/2175993/assignments/15074004)
	 Quiz 1 (https://marian.instructure.com/courses/2175993/assignments/15074132)
	 Quiz 2 (https://marian.instructure.com/courses/2175993/assignments/15074799)
	 Quiz 3 (https://marian.instructure.com/courses/2175993/assignments/15074811)
	 Quiz 4 (https://marian.instructure.com/courses/2175993/assignments/15074820)
	 Quiz 5 (https://marian.instructure.com/courses/2175993/assignments/15082815)
	 Quiz 6 (https://marian.instructure.com/courses/2175993/assignments/15082946)
	 Quiz 7 (https://marian.instructure.com/courses/2175993/assignments/15083006)
	 Quiz 8 (https://marian.instructure.com/courses/2175993/assignments/15083148)