**PSY 211: RESEARCH METHODS & STATISTICS I**

**Fall 2018 Syllabus**

**INSTRUCTOR INFORMATION:**

Dr. Julia Omarzu, Psychology Program

Office: Hennessy Hall 191

 Office Phone: 588-7524

 Best Way to Reach Me is Email: julia.omarzu@loras.edu

OR Schedule an appointment using: <https://calendly.com/jomarzu>

OR see the eLearn site for Drop-In Office Hours

**COURSE DESCRIPTION:**

This course is an introduction to the use of research strategies and tools of measurement in psychology. The scientific method will be reviewed, as well as standards of ethical research conduct applied to psychology. Students will study the techniques of scientific writing, including the components of an APA style research report, and will practice searching the psychological literature. The course will also survey non-experimental research strategies, including naturalistic observation, surveys, and archival research. The SPSS computer program will be used to introduce basic data handling and descriptive statistics. Students will be expected to participate in elementary research studies, produce APA style research papers, and evaluate research literature. (4 credits)

* **Prerequisite**: PSY 101: Introductory Psychology, and successful completion (with C- or better) of the mathematical modeling requirement.

**REQUIRED MATERIALS:**

* Morling, B. (2015.) *Research methods in psychology* (3rd edition). New York: W.W. Norton.
* *Publication manual of the American Psychological Association*, 6th Edition. (2009.) Washington D.C.: American Psychological Association.

**COURSE OBJECTIVES & LEARNING OUTCOMES:**

This course is designed to assist students in learning the methods used in conducting research in the behavioral sciences, with emphasis on research in psychology. The course is organized around the five general objectives listed below. Underneath each objective are the learning outcomes students will demonstrate related to that objective and, in some cases, assessments of those outcomes.

1. ***Understand the general principles of behavioral research***
	1. Name and explain the steps of the scientific method (*Exam 1)*
	2. Develop hypotheses based on different research goals (*Exam 1)*
	3. Create operational definitions of behaviors (*Exam 1)*
	4. Describe and apply ethical research principles for research. (*Exam 2)*
	5. Explain test validity and reliability (*Exam 3)*
	6. Use basic sampling techniques. (*Exam 3)*
	7. Differentiate between & describe types of research designs. (*Exam 1, 2, 3)*
2. ***Critically evaluate and synthesize previous research***
	1. Understand differences between primary & secondary sources (*Exam 2)*
	2. Navigate & retrieve resources using PsycInfo *(Exam 2, Projects 2 & 3)*
	3. Analyze a published report of research *(Projects 2 & 3)*
	4. Evaluate and choose sources that will inform research *(Projects 2 & 3)*
	5. Write a literature review on a topic of your choice *(Project 3)*
	6. Identify common errors in research (*Exam 1 & 2)*
3. ***Conduct original psychological research***
	1. Conduct an observational study *(Project 1)*
	2. Design a survey instrument *(Project 3)*
	3. Conduct descriptive survey research *(Project 3)*

1. ***Analyze basic descriptive data***
	1. Interpret basic frequency charts & descriptive statistics (*Exam 4)*
	2. Understand scale of data (*Exam 3)*
	3. Use SPSS to produce simple graphs and tables (*Exam 4, Project 3)*
		* Frequency tables & charts
		* Bar charts
	4. Use SPSS to produce basic descriptive statistics. (*Exam 4, Project 3)*
		* Measures of central tendency: mean, median, mode
		* Measures of variability: range, standard deviation
	5. Identify the appropriate graphic format for different types of data *(Exam 4)*
2. ***Use professional reporting styles and formats***
	1. Know the structure of an APA-style research report (*Exam 1 & 2, Project 3)*
	2. Use APA style citations and references correctly (*Exam 2, Projects 2-3)*
	3. Write a report of research using APA style *(Projects 1-3)*
	4. Give an oral presentation of their work, in style suitable for a professional conference (*Project 3)*

**ASSESSMENTS OF LEARNING OUTCOMES**:

Your overall course grade will be determined by your performance on several types of assessments. Each is described below with the breakdown of how each will be weighted in the overall grade.

**Assessments:**

Reading Quizzes (10) 100 points

Practice Exercises (20) 200 points

 Exams (5) 400 points

Research Projects (3) 300 points

**TOTAL 1000 points**

***Reading Quizzes: 10% (100 points)***

On most class days you will have an assignment due in our textbook. There is a Reading Guide to help you identify and study the important concepts in each reading assignment. For each assignment there will be a short quiz to assess your knowledge of basic concepts in the reading. Each quiz will be worth 10 points. Some quizzes will be completed on your own through eLearn. These will be due 30 minutes before class. Others will be given during class. (See Assignment Schedule for specifics on each quiz.) There will be 15 days with reading quizzes. Your top 10 quizzes will be counted toward your grade in the course for a possible total of 100 points. *There are no make-up options for quizzes. This includes missed quizzes due to late class arrivals.*

***Practice Exercises 20% (200 points)***

To help with your understanding of basic research methodology, you will be completing Practice Exercises. Most will be completed and corrected in class. Each Practice Exercise will usually be worth 10 points. There will be opportunities to complete 22 exercises, so your top 20 will be counted in your grade. If you have to miss class you may send an Exercise to me online or via email as long as I receive it by 5:00 of the day following the class period during which we completed the exercise.

***Exams 40% (400 points)***

Exams will be an important part of your evaluation this semester. Many of the basic learning outcomes of the course will be assessed with exams. There will be four exams given during the semester. The first four exams will be worth between 70 and 120 points each and will consist of short answer problem questions. The fifth exam will be given during Finals Week, and will consist of an online exam covering most of the learning objectives for the semester. This final exam will serve as a posttest evaluating your progress based on a pretest given during the first week of the semester. Make-up exams may be available only for the first four exams, and will be given only if you contact me before the scheduled exam with a legitimate reason for missing it. Use either voicemail or email to notify me. Legitimate reasons consist of verifiable illness or required attendance at another event sponsored by Loras College. A make-up exam must be taken within 48 hours of the original exam.

***Research Projects 30% (300 points)***

Another important component of this course will be your Research Projects. You will be required to complete two pieces of research and an intensive literature review on a topic of your choice. For each of the projects, you will submit a written report in APA style. Specific requirements for conducting each project will be given in class. Topics for your studies and literature review must be cleared with me before proceeding with your research. Students are allowed to file for a 5-day extension on the due date for the final draft of first Research Project ***or***the final draft of the Literature Review. Other late papers will be assessed a 5% late penalty per day (including weekend days).

**Grading Scale:**

A = 93-100% B+ = 87-89% C+ = 77-79% D+ = 67-69%

A- = 90-92% B = 83-86% C = 73-76% D = 63-66%

 B- = 80-82% C- = 70-72% D- = 60-62%

**COURSE POLICIES**

All teachers have their own individual expectations for academic performance and behavior in their classrooms. Mine are outlined below in the form of “Frequently Asked Questions”.

* ***Is class participation required?***

Yes. I want you to be involved in this class – to talk, to move around, to pass out papers, and come up to the chalkboard. If you’d rather just sit in your desk and take notes, I’m sorry, but you should find another course. Don’t panic, though, it’s not about quizzing you orally every day in class. I just expect you to come to class prepared to learn about the topic of the day and contribute your questions and thoughts. You should also expect that we will move around from time to time in this class. Or that I might ask you to read out something or hand something out to other students. If you have some anxiety about any of this, please let me know. I can give you tips to perhaps reduce your stress a bit.

* ***What happens if you miss class?***

I highly recommend that you attend all your classes, but I believe that Research Methods and Statistics in particular is a course in which it is **very** difficult to succeed if you miss class. The course moves quickly and the opportunity to work with other students on assignments during class is extremely beneficial. However, I do not have a formal attendance policy. There are no “excused” or “unexcused” absences in my class – an absence is an absence. If you feel unable or unwilling to participate in class on a particular day, I expect that you are capable of making the decision of whether or not to attend. You do not need to notify me or to get my permission to miss a class session. I do expect you to be responsible for getting notes from another student, turning in any assignments due through eLearn or email, and checking the course schedule for any new assignments. Please do not contact me to ask “if you missed anything.” I assure you, we will still have class in your absence and so you will obviously have missed something. Also please read the policies on make-up assignments and quizzes – there might be no make-up work allowed in a particular course.

* ***What if you are late or have to leave early?***

Please make an effort to arrive on time for class. Late arrivals are distracting to me and other students – and being late every day does not give me a great impression of you. If you have a circumstance that will likely make you late to class on a regular basis (like a class in Hoffman immediately before this one), let me know. If something unforeseen does happen, though, to make you late on a particular day, please come to class anyway. I would rather have you attend late than to not attend at all. If you need to leave early, I also appreciate it if you let me know in advance. This is not because you need my permission, (again, I expect that you can make adult decisions about this), but so I won’t worry that you’ve left because you’ve been taken ill or been offended by something in class.

* ***What are the rules for laptop use in class?***

We will be using laptop computers in class ***FREQUENTLY***. Please try to have your computer charged BEFORE class in order to have maximum use of it, especially on our Lab days. There may be some days, though, when I will ask that you keep computers closed and put away. On those occasions I expect you to comply with my request. I would recommend bringing paper and writing utensils to class as well as the computer. Laptops will be valuable tools for our class, but sometimes I prefer face-to-face contact with students rather than face-to-screen contact. Do not use your computer to message, email, shop, or play games during my class. Trust me; you need to keep up with the class in order to succeed in this course. Facebooking or scanning Pinterest during class will not help you with this.

* ***What if you have trouble getting along with your work group?***

You may be asked to complete group projects in this course. I will usually assign groups in order to give you experience working with people you might not otherwise get to know. I expect you to work with other students respectfully, listen to others’ ideas, making the effort to help others when needed, and work out any personality conflicts together. Please do not complain to me that your group is bringing down your grade. This is *almost* never true. If you are doing better work than other members of your group then you should be helping them improve or taking a leadership role. Your unwillingness to do this is not your group’s fault. It may also be the case that you are not giving others a chance to contribute and so they are clamming up in resentment. If a member of your group is truly not doing his or her share of the work, you need to find a way to discuss this as a group, (I suggest asking the person what’s going on, before accusing him or her of slacking.) However, if a group member is behaving erratically or seriously disrupting your group’s work, please let me know so that I can take action to help you and the other students.

* ***Is late work accepted?***

The short answer here is “no.” I expect you to turn in your work on time. All assignments, including electronically submitted assignments, should be submitted and received by me by the due date and time, even if class is cancelled on the due date of an assignment. Do not expect me to remind you of every deadline in class. It is your responsibility to read this syllabus and know the class schedule. I will make every effort to keep deadlines for projects and exams as scheduled, but sometimes things happen. Check on-line for changes in assignments, *especially* if you need to miss a class. You should complete assignments well enough in advance to avoid problems related to personal computers or the Loras College network. “The computer (or the printer) ate my homework” is an unfortunate situation with which I sympathize, but it does not change my policies. **You may file for one extension on a paper (see Grading & Evaluation for details). Please review the policies in the Assessment section for missed quizzes or Practice Exercises.**

* ***What about make-up work or tests?***

As a general rule, there is no make-up work allowed in this class. Students who miss an exam will be allowed to make-up the exam only in cases of illness, documented emergencies, or required attendance at a college-sponsored event. Students with these circumstances must contact me BEFORE the scheduled exam ends. In these cases the exam must be made up before the next class session. Questions and format of make-up exams may be different than what was in the original exams. If you should have an emergency situation that requires you to miss a substantial number of class sessions, you need to notify me as soon as possible, and document the situation with the college. We can then discuss ways for you to complete the work you will miss. If you are a member of an athletic team or other college organization that travels frequently for events, you need to check your schedule NOW to see if there will be conflicts with this class. I expect you to take responsibility for working out those conflicts early in the semester. If I need to cancel class on an exam or quiz date, we will have the exam or quiz on the next date that we meet. If class is cancelled on a date prior to an exam, the test will still occur on its scheduled date.

* ***What happens if you have a conflict with another College-sponsored event?***

If you are involved in intercollegiate athletic competitions, theater and choral performances, or debate, and have activities that may conflict with this course you should follow these instructions from the College’s official policies:

1. Submit a copy of your team/organization’s schedule to your instructors no later than the first day of class with all specific course conflicts highlighted.
2. Through oral and email notification, communicate with your instructor(s) at least one class prior to each class that you are scheduled to miss to coordinate how you will make up and turn in missed work.  Your course syllabus may require greater advance notice of a pending absence.  You are expected to make up coursework missed (or an appropriate equivalent) by the original due date.
3. Forward all relevant changes to the schedule to your instructors as soon as you are notified.
4. Submit all course syllabi and schedule of course commitments to coach/moderator as soon as possible.
5. It is a privilege to participate in college sponsored events.  Students found to be intentionally abusing this policy will lose the opportunity to participate in college sponsored events.

This policy does not cover practice for any college sponsored event, or academic/co-curricular conferences.

* ***What if you need a special accommodation for this course, due to disability?***

The College makes reasonable accommodations for persons with disabilities. Students should notify the Lynch Learning Center located in ARC 120 and their instructor of any disability related needs. For more information, see [www.loras.edu/learningcenter](http://www.loras.edu/learningcenter). If you have specific physical, psychiatric or learning disabilities and require accommodations, please let me know early in the semester so that your needs may be appropriately met.

**And last but certainly not least….**

**Academic Honesty**

The following is from Loras College’s policy: “Dishonesty (cheating, plagiarism, etc.) in class and/or assigned work will result in total loss of credit for the class and/or assigned work. Dishonesty in examinations, which are not final examinations, will result in total loss of credit for the examination. Dishonesty in final examinations will result in the grade of Fail for the course. All cases of student dishonesty are reported in writing to the Associate Vice President for Academic Affairs by the faculty member. The student may appeal cases of dishonesty to the Associate Vice President for Academic Affairs.”

If you have questions about whether or not something constitutes cheating or plagiarism, please see me. If you find yourself tempted to take an unethical shortcut because of overwhelming workloads, life problems, or pure procrastination, please see me to investigate alternative solutions. I take this **very** seriously and expect you to do so as well. I expect and believe that my students are generally honest, which is whyI believe it to be important to act when I find that some are not. I ***will*** report all such incidents to the academic dean and to the advisor(s) of the student or students involved. Do not expect me to sympathize with cheating – regardless of situation. Everyone does notcheat, nor do circumstances excuse it. Forms of academic dishonesty include (but are not limited to):

* Copying others' answers during exams/quizzes or allowing others to copy your answers.
* Allowing or paying others to write your papers or "give" you the answers.
* Copying sentences, paragraphs, or ideas from the textbook, Internet sites, or other sources without citing your references appropriately.

**ASSIGNMENT SCHEDULE -- FALL 2018**

 **DATE RA# IN CLASS READ FOR CLASS TURN IN**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| M | 8/27 |  | IntroductionExercise #1 – Self-Analysis |  |  |
| W | 8/29 | **1** | Scientific methodEx #2 – Questions & Hypotheses | Morling Ch 1 (pp 5-16) | Quiz 1 (eLearn) |
|  | ***LAB*** |  | PRETEST |  |  |
| F | 8/31 | **2** | Evaluating Research ReasoningEx #3 – Critical Thinking | Morling Ch 2 (pp 24-38) | Quiz 2 (eLearn) |
| M | 9/3 |  | ***Labor Day – No class*** |  |  |
| W | 9/5 | **3** | Observational ResearchEx #4 - Observation | Morling Ch 6 (pp. 165-174)  | Quiz 3 (eLearn) |
|  | ***LAB*** |  | TOPIC FOR PROJECT #1 |  |  |
| F | 9/7 | **4** | Operational Definitions Ex #5 – Operational Definitions | Morling Ch 3 (pp 58-60) & Ch 5 (pp. 118-122) | Quiz 4 (in class) |
| M | 9/10 |  | Recording observationsExercise #6 |  |  |
| W | 9/12 | **5** | APA research report structure | Morling Appendix (pp 505-516) & APA Pub. Ch 2 | Quiz 5 (in class) |
|  | ***LAB*** |  | INTRO & METHOD PROJECT #1 |  |  |
| F | 9/14 | **6** | Research DesignsEx #7 – Design ID | Morling Ch 3 (pp 61-68) | Quiz 6 (eLearn) |
| M | 9/17 | **7** | Design Flaws | Morling Ch 3 (pp 68-79) | Quiz 7 (eLearn) |
| W | 9/19 | **8** | CRITIQUING RESEARCH (Ex #8) | PowerPoint: Design Validity  | Quiz 8 (in PPT assignment) |
|  | ***LAB*** |  | Project 1 work day  |  | Data Project 1 |
| F | 9/21 |  | ***EXAM 1*** |  | ***EXAM 1*** |
| M | 9/24 | ***9*** | EthicsExercise #9 – Ethics Cases  | Morling Ch 4APA pp 11-20 | Quiz 9 (in class) |
| W | 9/26 |  | Share results of Project |  | Rough Draft Project 1 |
|  | ***LAB*** |  | WORKSHOP DRAFT |  |  |
| F | 9/28 |  | Reading the literatureEx #10 – Article Critique |  |  |
| M | 10/1 |  | Introduce Literature Review | One Sample Lit Review (eLearn) | ***FINAL DRAFT******PROJECT #1*** |
| W | 10/3 |  | **Meet in Library! (ARC 202)**Using PsychInfo |  |  |
|  | ***LAB*** |  | LITERATURE SEARCH EXERCISE |  |  |
| F | 10/5 |  | Discuss topics for Lit Review  |  |  |
| M | 10/8 | **10** | APA Style overview; Citations & referencesEx #11 – Citation practice  | Online guideAPA Pub Ch 6 |  |
| W | 10/10 |  | ***Advising Day – Online Assignment***  |  | PROJECT 2 SOURCE LIST |
|  | ***LAB*** |  | ***Advising Day – Online Assignment*** |  |  |
| F | 10/12 |  | APA styleEx #12 - Plagiarism |  |  |
| M | 10/15 |  | ANNOTATED REFERENCE LIST |  |  |
| W | 10/17 |  | ***EXAM 2*** |  | ***EXAM 2*** |
|  | ***LAB*** |  | ANNOTATED REFERENCE LIST |  | ANNOTATED REF LIST |
| F | 10/19 |  | Lit review Outline |  | PROJECT 2 OUTLINE |
| M | 10/22 |  | ***Fall Free Days***  |  |  |
| W | 10/24 |  | Proofreading Exercise #13 |  |  |
|  | ***LAB*** |  | LIT REVIEW DRAFT WORK |  |  |
| F | 10/26 | **11** | Survey researchEx #14: Survey Questions | Morling Ch 6(pp. 153-164)PowerPoint: Survey Questions | Quiz 11 (eLearn) |
| M | 10/29 |  | Lit Review Peer Review |  | Rough Draft Project #2 |
| W | 10/31 | **12** | Reliability & ValidityEx #15: Reliability & Validity | Morling Ch 5 (pp 124-146) | Quiz 12 (eLearn) |
|  | ***LAB*** |  | PROJECT 3 – SCALE CHOICE & CONSTRUCTION |  |  |
| F | 11/2 | **13** | Sampling - Ex #16 | Morling Ch 7 | Quiz 13 (eLearn) |
| M | 11/5 | **14** | Scale of measurement Ex #17 | Morling Ch 5 (pp. 122-124) | ***FINAL DRAFT******LIT REVIEW DUE***Quiz 14 (in class) |
| W | 11/6 | **15** | Intro to descriptive statistics  | Morling Appendix(pp 442-444) |  |
|  | ***LAB*** |  | FREQUENCY CHARTS (Ex #18) |  |  |
| F | 11/9 |  | ***EXAM 3*** |  | ***EXAM 3*** |
| **S** | **11/10** |  | ***TRI-STATE RESEARCH CONFERENCE******9am-3pm*** |  |  |
| M | 11/12 | **16** | Descriptive Stats: Central TendencyExercise #19 | Morling Appendix (pp 460-462) | Quiz 15 (in class) |
| W | 11/14 | **17** | Descriptive Stats: Variability | Morling Appendix (pp 462-468) | Quiz 16 (in class) |
|  | ***LAB*** |  | STATISTICS (Ex #20) |  |  |
| F | 11/16 |  | Reliability on SPSS  |  |  |
| M | 11/19 |  | Writing about statisticsExercise #21 | PowerPoint: APA Style Results |  |
| W | 11/21 |  | ***THANKSGIVING*** |  |  |
| F | 11/23 |  | ***THANKSGIVING*** |  |  |
| M | 11/26 |  | Work day: Project #3 |  |  |
| W | 11/28 |  | Work day: Project #3 |  | Data Project 3 |
|  | ***LAB*** |  | WORK ON RESULTS PROJECT #3 |  |  |
| F | 11/30 |  | ***EXAM 4*** |  | ***EXAM 4*** |
| M | 12/3 |  | Oral presentations of research |  | Project 3 Data Analyzed  |
| W | 12/5 |  | Prep for Presentation |  |  |
|  | ***LAB*** |  | PRESENTATION (Exercise #22) |  |  |
| F | 12/7 |  | Workshop Project drafts; Review for exam; last questions |  | Rough draft Project 3 |
| M | 12/101:00 |  | **COMPREHENSIVE EXAM** |  | ***FINAL DRAFT PROJECT #3***  |

**SUBJECT-TO-CHANGE WARNING**

 Information in this document may be subject to change for a variety of reasons. It is my intention to follow the above outlined schedule and grading policies as closely as possible, but time constraints, weather or other events may make adjustments necessary. It is essential for students to regularly attend class and check the course website for possible updates or changes in course due dates or requirements.