### **RESEARCH METHODS**

# "WE MAKE OUR WORLD SIGNIFICANT BY THE COURAGE OF OUR QUESTIONS AND THE DEPTH OF OUR ANSWERS"—*CARL SAGAN*

PSY3213L

**3 CREDIT HOURS** 

SPRING/2024

\*\* ONLINE

**INSTRUCTOR:** Marina A. Klimenko, Ph.D., M.P.A. (mklimenko@ufl.edu)

**INSTRUCTOR'S VIRTUAL OFFICE HOUR VIA ZOOM IN CANVAS:** Tuesday, from 11 to 12 pm or by appointment (please send me a message via Canvas to schedule a zoom meeting)

### GTA (GRADUATE TA):

TBA

### (UNDERGRADUATE TAS):

TBA

**COURSE WEBSITE:** 

https://ufl.instructure.com/

**STRUCTURE OF COURSE IN E-LEARNING:** This course uses E-Learning in Canvas. Students will have to complete weekly readings, quizzes, and a final assignment (exam or research project).

The course is divided into 14 modules, roughly corresponding to the major themes and steps of a typical research process.

### COURSE COMMUNICATIONS: All communication will be done in Canvas—

emails, discussions, and announcements.

**REQUIRED TEXT:** Research Methods in the Social Sciences. (Klimenko, M.). You can purchase it via UF All Access, UF bookstore, or by going directly to the publisher,

### https://sentiapublishing.com/search.php?Search=&search\_query=Klimenko

The instructions and the access code will be emailed to you after you purchase an access code. Please note, that the e-book website is separate from the course website.

### ADDITIONAL RESOURCES: none

**PREREQUISITE KNOWLEDGE AND SKILLS:** Some knowledge of SPSS will be helpful but not required.

**PURPOSE OF COURSE:** Psychology is a discipline dedicated to the scientific understanding of behavior and mental processes. This course will provide students an opportunity to learn about the scientific methods psychologists and other social scientists apply to study psychological and other related questions. The learning will be accomplished, in part, through course readings and lectures, and in part through conducting a small research project.

### **COURSE GOALS AND/OR OBJECTIVES:** By the end of this course, students will:

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- Identify and explain the general process of research in psychology by defining the scientific method, distinguishing between a hypothesis and a research question, identifying the limitations and strengths of the major categories of research design, explaining the rationale for random sampling, and so forth.
- 2. Demonstrate critical thinking and scientific reasoning by testing claims using appropriate psychological research methods.
- 3. Evaluate the quality of evidence in published psychological research.
- 4. Practice doing research in psychology by formulating hypotheses, collecting small data, analyzing data, and communicating results.

- 5. Apply APA guidelines for writing style and formatting to their own academic writing.
- 6. Distinguish science from pseudoscience by identifying the norms and characteristics of each.

### MODULE TIMELINE

Module will begin on a Monday morning (7am) and will end on a Saturday night (11:59pm) (check schedule for exceptions). All graded assignments will be due on Saturday, at 11:59pm. We will respond to your emails Monday-Friday (Occasionally we may be able to respond on weekends; if you have a question about an upcoming assignments you should plan to email them during the week days as we most likely will not respond to your question before the assignment is due).

All modules will be unlocked at the beginning of the semester (unless one is being revised or updated). However, all assignments have specific due dates.

### QUIZZES (40%)

There will be a multiple-choice quiz for each chapter or major topic covered in this class, 12 quizzes in total. <u>Only 11 highest quizzes will be counted towards your final grade.</u> Weekly quizzes are relatively easy, and most students do well on them—the average grade is around 85 and 90.

Each item is worth 1 point and 10 questions. So each quiz is worth 10 points. You will have 15 minutes to complete each quiz. The quizzes are not proctored, and you can assume that they are open textbook. However, I strongly suggest that you study before taking each quiz.

Items are drawn at random from a larger pool of items, so no two people will receive the same quiz. Chapter quizzes are cumulative in the sense that the concepts and ideas in this course don't exist in isolation; similar to algebra, for instance, the terms or concepts that may have been mentioned in one chapter are most likely to be reintroduced in the following chapters but either in different contexts or in more details. Thus, it is important that, as you read and learn the material of one chapter, you understand and retain its information as you move on to the next one. The best way to prepare for each module quiz is to carefully review all materials posted in that given module, including text chapters, lectures, notes, videos, or any other additional information, but also draw the connection to what you've learned in the previous module.

Since most concepts and ideas in this course are interconnected and may be better grasped after completing a particular assignment or after reading several different chapters, all quizzes will stay open until the end of the semester (see syllabus calendar for deadlines. Thus, you can take them at any time and/or in any order However, some chapters are better understood if you follow them in order; e.g., chapters 1, 2, and 3 provide the most basic foundation for any research design and, thus, I strongly recommend that you read them before proceeding with the rest of the chapters or whenever you feel you have a good grasp on those topics.

IMPORTANT: You are responsible for your internet strength and reliability, and for using a reliable computer. If you lose internet connection due to issues with **your** computer or internet, you will not be allowed to retake the quiz. If the interruption in connection is caused by issues in Canvas, contact e-learning help desk and get verification. The decision to allow retaking a quiz will be determined on an individual basis and will be based on the cause of the issue. Since the chances of experiencing technical issues more than once in a semester are very small, no one will be allowed to retake more than one quiz.

### MAJOR ASSIGNMENT (RESERCH PAPER OR FINAL EXAM) (40%)

You will have the option to either complete a research project or take the final exam. Only one will count towards your final grade. If you complete both assignments (you can <sup>(C)</sup>) only the highest grade will be counted towards your final grade. Please see more details below about both assignments.

### **RESEARCH PAPER AND TWO RELATED ASSIGNMENTS**

You are not allowed to choose your own topic. If you do, you will receive a 0 on the research paper. The topics and all instructions will be posted on the Research Project page on Canvas.

There will be 3 interrelated assignments for the research project, each building on the preceding one. Instructions and details about the Research Project can be found on Canvas under Research Project Overview tab on the Home page. Only one, the *Research Paper*, will count for 38% of your final grade. The first two assignments, *Research proposal* and *Research Analysis/Collected Data* will not be graded. However, if you complete them, you will receive our feedback and it will help you with the research paper.

In addition to the research paper, you will have to submit the data that you will collect, and based on which you will write your research paper.

Do not hesitate to seek help and ask questions when you don't have a clear sense of what you should do next or have questions about the assignments and the project in general. It will be your responsibility to contact your instructor or TA with any follow up questions. If we don't receive questions from you, we will assume that you understand what you are doing.

### **Research Related Activities & Due Dates:**

Research Proposal (Assignment 1), see *due date* Data & Analysis Proposal (Assignment 2), see *due date* Research Paper (Assignment 3), see *due date* 

### FINAL EXAM

Instead of completing a research project, you can take the final exam. Only one of the two assignments will count towards the final grade. You can choose to do both, and I will count the highest graded assignment. The exam will be conducted online, via Honorlock. It will be multiple-choice questions and cumulative, based on my lectures and the assigned readings. Please do not assume that because it is a multiple-choice exam it will be easy. I will make it hard but fair 😳

### **GROUP DISCUSSIONS (10%)**

There will be 5 group discussions that you will have to complete by specific days. Most every discussion will pose a question, or a set of questions, and you will be asked to give your informed opinion. Most all posts are due on a Saturday, 11:59pm. See syllabus for exceptions.

To receive full credit for your original post, (1) it must be posted on time, (2) the length of your posts should be at least two paragraphs (unless otherwise specified above), (3) be substantive (i.e., contain meaningful ideas and based on some information from our course material when necessary), (3) no errors in terms of understanding the material under discussion, (4) should address the issue/question fully, and (3) be respectful.

No replies are required however you are able and encouraged to reply if you wish to.

- (Module 1) Group Discussion #1: Falsifiability
- (Module 2) Group Discussion #2: Truth or Fable

- (Module 3) Group Discussion #3: Experimental Research
- (Module 13) Group Discussion#4: The Milgram Study
- (Module 14) Group Discussion #5: Research Sharing

### INTRODUCTION FIRST DRAFT/LITERATURE SUMMARY AND PEER-REVIEW (10%)

The purpose of this assignment is to give you an opportunity to receive feedback on your academic writing. **All students must complete this assignment and both parts.** 

### EXTRA CREDITS

There will be two extra credit opportunities. I offer it to boost everyone's final grade (without giving any favors); and this works especially well for those who are close to the next letter grade at the end of the semester. Please consider taking this opportunity (don't miss the due dates if given) as this will be the only opportunities to get a "bump" in your final grade.

- SONA participation (or Article Summary) 2% extra credit
- **Possible end of semester question (0.**5%): tba

### **CLASS SCHEDULE**

IN THE FIRST TWO WEEKS, YOU WILL LEARN THE BASICS OF SCIENTIFIC PROCESS WHICH YOU WILL NEED TO START DEVELOPING A RESEARCH PLAN.

# Module 1 & 2: January 8-13: How It All Began (Chapter 1); Modern Science (Chapter 2)

- Take course orientation quiz to unlock the modules (not graded)
- Group Discussion #1 (Falsifiability), Jan 16, 11:59pm.
- Quiz #1 (week 1 material), recommended to be completed by Jan 13, 11:59pm.
- Quiz 2 (chapter 2 and week 2 material), recommended to be completed by Jan 13, 11:59pm.

### Module 3 Jan 16-20: Begin Thinking Like a Scientist (Chapter 3).

- Quiz 3 (chapter 3 and week 3 material), recommended to be completed by Jan 20, 11:59pm.
- Group Discussion #2: Truth of Fable, due Jan 20, 11:59pm.
- Start thinking about the final assignment (exam or research?); choose your topic (from the options I gave you on Research Project page) if you want to do a research project.

### Module 4 Jan 22—27: Learn to content analyze like a scientist (Chapter 4)

• Take quiz #4, recommended to be completed by Jan 27, 11:59pm.

# Module 5 Jan 29—Feb 3: Begin making observations like a scientist (Chapter 5)

- Take quiz #5, recommended to be completed by Feb 3, 11:59pm.
- If you chose to do the research project, please submit Assignment 1 by Feb 3, 11:59pm (to receive our feedback only)
  - *i. General feedback will be posted immediately the next day, on 'Research Project' page.*

### Module 6 Feb 5—10: Learn to experiment like a scientist (Chapter 6)

- Take quiz #6, recommended to be completed by Feb 10, 11:59pm.
- Group Discussion #3: Experimental Research, due Sep Feb 10, 11:59pm.

### Module 7 Feb 12—17: Understand the Logic of Statistics and describe Data Like a Scientist (Chapter 8)

• Quiz #7 (chapter 8), recommended to be completed by Feb 17, 11:59pm

### Module 8 Feb 19—24: Test your Hypotheses Like a Scientist (Chapter 9)

• No Quiz this week.

### Module 9 Feb 26—March 2: Continue Testing Hypotheses Like a Scientist (Chapter 9)

- Chapter 9 material
- Quiz #8 (chapter 9), recommended to be completed by March 2, 11:59pm.
- If you are working on a research project, complete Assignment 2, Data Analysis Proposal and Collected Data to receive our feedback, due March 2, 11:59pm.
  - *i.* General feedback will be posted immediately the next day, on 'Research Project' page.

### Module 10 March 4—8: Begin Writing Like a Scientist (Chapter 10)

- No Quiz
- Everyone must complete Introduction (Literature Summary) Draft part 1, due March 8, 11:59pm

### Module 11 March 18—23: Continue Writing Like a Scientist (Chapter 10)

- Everyone must complete Introduction (Literature Summary) Draft part 2, due March 23, 11:59pm.
- Quiz #9 covering Chapter 10 (writing an academic paper), recommended to be completed by March 23, 11:59pm

# Module 12 March 25--30: Learn to quasi-experiment like a scientist (Chapter 7)

- Quiz #10 covering Chapter 7, recommended to be completed by March 30, 11:59pm.
- Research Paper, Revised Data, and SPSS output assignments due by March 30, 11:59pm (grades will be posted April 27).

### Module 13 April 1—6: Become an Ethical Scientist (Chapter 11)

- Lecture & videos (no chapter reading)
- Take a Quiz #11, recommended to be completed by April 6, 11:59pm.
- Contribute to Group Discussion #4 (The Milgram Study), due April 6, 11:59pm

### Module 14 April 8—13: Become a Critical Thinker

- Alternative to Extra Credit Survey to be completed by April 13, 11:59pm.
- Quiz 12, recommended to be completed by April 13, 11:59pm.
- Contribute to Group Discussion #5, due April 13, 11:59pm.

### Module 15 15--24: Review of the course and prepare for the final exam.

- All Quizzes must be completed by April 20, 11:59pm.
- <u>Final Exam</u> will be on April 24, between 7am and 11:59pm. All inquiries about final exam grades must be emailed to instructor by April 26, 11:59pm.

### POLICY FOR DISPUTING GRADES

You will have <u>one week (exception is the last quiz for which your inquiries should</u> <u>be emailed to instructor within two days of its completion)</u>, including weekends and holidays, after the release of the grade to dispute it (disputes are defined as questions about the material on quiz or assignments), and will NOT be accepted after that date.

If you want to dispute a grade you will need to write a paragraph explaining the dispute (write out the question on the quiz or explain the part of the assignment in detail). Quiz disputes must be sent to my Canvas mail (your instructor). Disputes about your research paper or group work should be sent to your graduate TA via Canvas mail.

### COURSE POLICIES & GUIDELINES

1. All communication will be done in Canvas.

If you have any questions/comments pertaining to

- a. Course administration, not time sensitive: post your question in **Technical issues and course materials errors/ FAQ** discussion board.
- b. Course concepts: post your question in **Course Concepts** discussion board.

c. If you do not receive an answer from either FAQ or Course Concepts discussion boards within 24 hours, contact instructor or TA by Canvas mail.

\*Discussion boards will not be monitored on Saturdays and Sundays.

If you have a question about

- a. A quiz, email instructor via Canvas mail.
- b. Research project, email instructor or your TA.
- c. If you have concerns/need help, email me instructor or your TA.

Do <u>not</u> post questions or information about your grade on the discussion boards.

### \*CANNOT CONTACT INSTRUCTOR OR GTA WITH QUESTIONS ABOUT ASSIGNMENTS 8 HRS BEFORE THE ARE DUE!!!

- **d.** In the case of a serious medical condition, a family emergency or other situation that will keep you out of class a week or more, email instructor (mklimenko@ufl.edu).
- 2. All interactions with instructors and among class members are expected to be professional and appropriate. Students are encouraged to answer each other's questions on the FAQ and Course Content Board.
- 3. Announcements: Occasionally, announcements will be made If there are any changes to class schedule or assignments.
- 4. Extension of deadlines may be requested <u>ONLY</u> for university excused absences with adequate documentation. Requests for an extension must be based on University approved reasons and must include proper documentation as per University guidelines. Requests for extensions must be made before the deadline, if possible, or within 24 hours of the deadline for unexpected emergencies.
- 5. Computer/internet access to e-learning is required for this course. Students are responsible for maintaining access to e-learning.
  - e. Extensions will not be given for student-based technical difficulties. Do not wait until the last minute to complete assignments and quizzes! Do not take your quizzes on the bus! Use a land connection instead of Wi-Fi.
  - f. If UF e-learning experiences technical difficulties, deadlines will be adjusted to allow for completion of assignments.

- 6. This course adheres to all University Policies. See <u>http://www.dso.ufl.edu/</u> for useful information at the Dean of Students Office webpage.
- Academic Honesty: This course uses the definitions and guidelines for academic honesty as described by the Dean of Students Office. See http://www.dso.ufl.edu/judicial/academic.php for details.
- 8. Students with disabilities: Students requesting accommodations should first register with the Disability Resource Center (352-392-8565, <a href="https://disability.ufl.edu/">https://disability.ufl.edu/</a>) by providing appropriate documentation. Once registered, students will receive an accommodation letter that must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.
- 9. Religious Observances: Please check your calendars against the course syllabus. Any student having a conflict due to religious observance should contact me as soon as possible so that we can make any necessary arrangements.
- 10. Copyright Statement: Some of the materials in this course are possibly copyrighted. They are intended for use only by students registered and enrolled in this course and for instructional activities associated with and for the duration of the course. <u>They may not be retained in another medium or</u> <u>disseminated further.</u> They are provided in compliance with the provisions of the Teach Act.
- 11. Syllabus Change Policy: Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice. If changes are made to this syllabus they will be announced and/or emailed. It is **your** responsibility to check for announcements and/or email of changes online.
- 12. Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <a href="https://gatorevals.aa.ufl.edu/students/">https://gatorevals.aa.ufl.edu/students/</a>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <a href="https://ufl.bluera.com/ufl/">https://ufl.bluera.com/ufl/</a>. Summaries of course evaluation results are available to students at <a href="https://gatorevals.aa.ufl.edu/public-results/">https://gatorevals.aa.ufl.edu/public-results/</a>.

13. Sexual Harassment is not tolerated in this class, in the Department of Psychology, or at the University of Florida. Sexual harassment includes: the inappropriate introduction of sexual activities or comments in a situation where sex would otherwise be irrelevant. Sexual harassment is a form of sex discrimination and a violation of state and federal laws as well as of the policies and regulations of the university. All UF employees and students must adhere to UF's sexual harassment policy which can be found here: <u>https://hr.ufl.edu/forms-policies/policies-managers/sexualharassment/</u>. Please review this policy and contact a university official if you have any questions about the policy. As mandatory reporters, university employees (e.g., administrators, managers, supervisors, faculty, teaching assistants, staff) are required to report knowledge of sexual harassment to UF's

Title IX coordinator. For more information about UF's Title IX office see: <u>https://titleix.ufl.edu/</u>. You can also complete a Sexual Harassment Report online (Title IX) at: <u>https://titleix.ufl.edu/title-ix-reporting-form/</u>.

14. In-Class Recording: Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor. A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session. Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a

person injured by the publication and/or discipline under UF Regulation 4.040 Student.

## 15. Extra Help: Contact me as soon as possible for extra assistance if you discover you are having trouble. I want you to do well!

- 16. For information about the privacy policies of the tools used in this course, see the links below:
  - Instructure (Canvas)
    - Privacy Policy
    - <u>Accessibility</u>
  - Sonic Foundry (Mediasite Streaming Video Player)
    - Privacy Policy
    - <u>Accessibility</u>
  - Vimeo
    - <u>Privacy Policy</u>
    - <u>Accessibility</u>
  - PlayPosit
    - Privacy Policy
    - <u>Accessibility</u>
  - Zoom
    - Privacy Policy
    - <u>Accessibility</u>
  - YouTube (Google)
    - Privacy Policy
    - <u>Accessibility</u>
  - Microsoft
    - <u>Privacy Policy</u>
    - <u>Accessibility</u>
  - Adobe
    - Privacy Policy
    - <u>Accessibility</u>

### GRADING

Assignment Groups

#### Percentage Estimation of your grade

11 (out of 12) quizzes (A1)	<mark>40%</mark>
Group Discussions (5) (A2)	10%
Research Proposal	0%
Data Analysis Proposal	0%
Introduction Draft + Peer-Review (A3)	10%
Research Paper or Final Exam (A4)	<mark>40%</mark>
Total	100%

**IMPORTANT:** "Canvas is always working to calculate two grades, the current grade and the total grade, for students. The current grade is calculated by adding up the graded assignments according to their weight in the course grading scheme. This grade is calculated with the **Calculate based only on graded assignments** checkbox selected in the sidebar. The total grade is calculated by adding up all the assignments according to their weight in the course grading scheme. If a course is using weighted assignment groups, students can also see how each assignment is weighted in the course.

To view the total grade in the course, students can deselect the **Calculate based only on graded assignments** checkbox." https://guides.instructure.com/s/2204/m/67952/l/55015-what-are-what-if-grades)

The good news is – these grades are firm – there is no curve. Everybody in the class can get an A grade and I hope you do.

The bad news is – these grades are firm – there is no curve. If you score just a quarter of a point below the cutoff then you will receive the lower grade.

### **GRADING SCALE**

Grade	%
А	95% - 100%
A-	90% & up
B+	87% & up
В	83% & up
В-	80% & up
C+	77% & up
С	73% & up
C-	70% & up
D+	67% & up
D	63% & up
D-	60% & up
Е	<60%