Course Syllabus
PSY 2500 [Online], Introduction to Research Design, 4 Credits
Department of Psychology
Oakland University

Instructor: Dr. Lisa Welling, Ph.D.   **Office: 212 Pryale Hall**
Course Section #: 14684   **E-mail: welling@oakland.edu**
Phone: (248) 370-2915   **Classroom: ONLINE**
TA: Ginny Mitchell (vmitchell@oakland.edu)
Office Hours: Room 106 Pryale Hall with TA by appointment.
<u>EXAM DATES</u>: Feb. 2, Mar. 9, and Mar. 30. Exams may be taken between 6AM and 12PM only.

<u>Course Description:</u> This course will provide an introduction to research designs and methods used in psychological science. General topics include observation and description of behavior, validity, control, experimental design, and correlational research. Class exercises are incorporated to illustrate designs and provide experience in carrying out research.

<u>Course Outcomes:</u> Upon completion of this course, you should have an understanding of the enterprise of science and research methods used in psychology. You should also be able to design experiments, collect and interpret data, know the format for writing scientific research papers, and critically evaluate research designs and findings.

<u>Required Text:</u> Gravetter, F.J. & Forzano, L.B. (2016). *Research Methods for the Behavioral Sciences* (5th ed.). Wadsworth Publishing: Belmont, CA.

*Additional readings can be downloaded by logging in to http://moodle.oakland.edu.
<u>Note:</u> Although this is an online class, **each of the 3 exams will take on a specific date at a specific time (see schedule & info below)**. There are no exceptions. Please plan accordingly.

<u>Technical Skills Required:</u>
Enrolled students should have completed PSY 100 with a final grade of 2.0 or higher. You also are expected to have a moderate level of computer proficiency. You should already be comfortable doing all of the following:
- Using your chosen computer operating system and a web browser
- Following online directions for using a new program
- Typing at least 20 words a minute
- Troubleshooting basic computer problems

<u>Required Technology:</u> In order to fully participate in this course you will need:
- An internet connected computer with the most updated versions of your favorite web browser installed. Use of smartphones and tablets is not recommended.
- Your computer must be equipped with a working microphone, sound card, video card, and webcam, as well as any technology necessary to use ProctorU (see below). You must also have access to Microsoft PowerPoint software.
- In the event that your computer crashes or internet goes down, it is essential to have a backup plan to be able to log in from another computer or another location as needed.

<u>Technical Assistance:</u> If you have general questions about the course (such as due dates, content, etc.), please contact the course instructor. For Moodle technical issues that you cannot resolve on your own, please contact the eLearning and Instructional Support office:
- Phone: (248) 805-1625
- Submit a help ticket: http://www2.oakland.edu/elis/help.cfm?lms=2
- If you have any trouble accessing any of the content in this course, please contact the course facilitator.

Participant and Instructor Expectations: Participants are enrolled into this course as a student-participant role. There are grades and assignments throughout the course with specific due dates. Course participants are expected to:

- Ensure that their computer is compatible with Moodle.
- Login 3-5 times a week; daily login is highly recommended.
- Follow the calendar of events and complete all assignments by their deadline.
- Respond to emails within 2 days
- Participate in a thoughtful manner
- Respect rules of netiquette:
  - Respect your peers and their privacy
  - Use constructive criticism
  - Refrain from engaging in inflammatory comments.

The course instructor will:

- Login to the course at least 3 days per week
- Moderate conversations in forums, if applicable
- Respond to Q&A Forum replies and email within 1-2 days
- Grade assignments in a timely manner

Evaluation: There will be three exams based on lecture and assigned reading material (valued at 70% of your total grade). Exams are not cumulative, but they **must be taken on specific dates and at specific times**. A short quiz accompanies each lecture. These lecture quizzes are mandatory, but do not count toward your final grade. Instead, the purpose of the lecture quizzes is to allow you to verify your understanding of the material and to identify areas needing improvement (e.g., concepts you should revisit). These quizzes are self-paced and you may attempt them more than once. There is also a mandatory quiz accompanying each additional reading, which <u>does</u> count toward your final grade (3 quizzes valued at 5% total). These quizzes are timed and you receive only one attempt. There will also be one research project presentation (online) with accompanying abstract and references (valued at 20% of your final grade). You will be expected to watch all research project presentations during the week(s) of class indicated in the course schedule and participate in presentation discussions by posting on at least 5 presentations (discussion posts on presentations and your replies to others' questions on your own presentation are valued at 5% of your final grade). You must reply to all posts on your own presentation before the last day of class at 5pm. All due dates are based on the Eastern timezone (i.e., Detroit time). The information, lectures, assignments, etc., for each week will be made available in moodle on the Sunday before each week (e.g., the lectures/quizzes for Week 2 will be made available on the Sunday of Week 1). Weeks run Monday-Sunday.

Point Distribution & Grading:

Exams(3)	70%
Exam 1 = 25%	
Exam 2 = 20%	
Exam 3 = 25%	
Additional Reading Quizzes (3)	5%
Presentation	20%
Presentation questions and comments	5%

Percentage:	Grade:	
90 – 100	A	(3.6-4.0)
80 – 89	B	(3.0-3.5)
70 – 79	C	(2.0-2.9)
60 – 69	D	(1.0-1.9)
0 – 59	F	(0)

How to Complete Exams: Exams are online, but must be completed on the specific dates indicated in the course schedule below. You have one hour to complete each 50-question exam. Exams may be taken at any time between 6am and 12pm, but you will have only one hour to take exams (i.e., you must START the exam NO LATER THAN 11am to get the full hour) and exams can only be taken once each. Exams are administered through the online proctoring service **ProctorU**, for which **there is a charge for students**. ProctorU is an online proctoring service which many Oakland University faculty use to proctor their tests. The ProctorU service works like this:

1. The instructor logs into Proctor U's website and schedules an exam.
2. The student logs into ProctorU's website, selects the date and time to take their exam, and pays for the proctoring service using a credit card. **You must choose the time you will take your exams by scheduling an appointment during the allotted time on the correct date at least 72 hours in advance.**
3. On the date/time of the exam, the student logs into the ProctorU website again and clicks on a link to start the exam. A live proctor appears on the student's computer screen, and walks the student through the rest of the setup process. **Be sure to log in early!**
4. The student takes the exam as the proctor monitors him/her over the student's webcam.
The Proctor notes any suspicious behavior and contacts the instructor if necessary.

To use ProctorU:
1. Visit http://go.proctorU.com and **create a new TEST TAKER account**, selecting Oakland University as your enrollment. You should set up your account early at the start of the semester.
2. After creating an account, you can login at http://go.proctorU.com using the username and password you selected.
3. Once you are logged in you can **view exams scheduled** for Oakland University. You can **find your exam** and then **schedule a time to take it** (you should do this at least 72 hours in advance of the actual test, to avoid last minute charges). When you do, you will be charged for the order. See https://vimeo.com/107066503
4. On the day/time you selected, you will log back into ProctorU and click a link to **take the test**. When you do, you will be connected to a live proctor, who will appear on your screen. **Have a photo ID on hand** to show the proctor. The proctor will then walk you through the rest of the setup process and then watch you as you take your test.

In order to use ProctorU you will need:
- A windows or apple Operating System
- Webcam (internal or external) with 640x480 video pixel resolution
- Headphones or working speakers connected to the computer
- Microphone connected to the computer (a webcam with a microphone usually works best)
- Reliable high speed Internet connection
- A government issued photo ID
- Web browser with Adobe Flash Player installed
- Authority to allow remote access to your computer and screen by a ProctorU proctor.

Note: You will need to test your computer BEFORE your exam to make sure it has the required hardware/software. You can do this by visiting http://www.proctoru.com/testitout. ProctorU also provides free technical support through this link to ensure you have the best testing situation possible. You will also be able to test your equipment, learn about what to expect during your proctoring session, and ask any questions you may have about the proctoring process with a ProctorU representative (click on the button that says "connect to a live person"). These links are also available on moodle (see ProctorU Instructions page). Any student not completing the exam through ProctorU will receive a zero unless alternative proctoring arrangements have been made with the instructor in advance.

Class Structure and Participation: You are responsible for all material and notifications covered during this course. Each week there will be lectures, quizzes, and/or exams that <u>must be completed in a specific order during that week</u>. There are at least two tasks listed in the course schedule each week. The first task(s) listed in the course schedule must be completed by the Wednesday of that week <u>before</u> 5pm (as indicated in the schedule below) and the second task(s) must be completed before Sunday at 5pm. Please note the due dates column in the course schedule below. Failure to complete any task by the deadline will result in a zero on that task. No exceptions.

Late Submissions: Late submissions will not be accepted unless there are mitigating circumstances such as a sickness, death in the family, etc. Discuss these circumstances with the instructor no later than 24 hours after a missed deadline. According to University Policy, the only legitimate excuse for missing an exam is a serious medical problem. A make-up exam will be offered ONLY for a personal medical problem or a serious personal/family problem (e.g., death in the family). Verifiable documentation (e.g., doctor's note) <u>MUST</u> be provided and must be dated appropriately or the student will receive a zero. Suspected document forgeries will be reported to the Dean of Students Office for academic misconduct. If you must miss an exam, notify the instructor by e-mail as soon as possible, and <u>no later</u> than 24 hours after the exam. Notification received after that time will result in a score of 0 for that exam except in unusual circumstances. Make-up exams will NOT be provided for someone who completes an exam and then says s/he was not feeling well at the time. This policy will be strictly enforced.

Research Participation Requirement: All students enrolled in PSY 250 must fulfill the departmental requirement for research participation. The credit you will earn for each study will correspond to the amount of time required for your participation. Students must earn 10 credits per semester. The list of available studies is located here: http://wwwp.oakland.edu/psychology/research-participation/
The last day to earn research credits for this semester will be posted on the above website. It is the student's responsibility to know the last day to earn research credits. Students completing the Alternative Assignments must keep a screen shot or print their assignment summary for proof of completion. The assignment summary page is displayed after you complete the assignment. Also, students can keep track of their credits in SONA. <u>Failure to complete this requirement will result in a substantial deduction of grade points</u>.

Extra Credit: There are no extra credit opportunities in this class. If this changes, any extra credit opportunities will be announced in the News Forum and will be available to the whole class.

Policies on Academic Conduct: Students are expected to conduct themselves in a manner conducive to an environment of academic integrity and respect for the educational process and the safety and well being of all members of the community. Adherence to the Student Code of Conduct will be expected; violations of this code will be reported to the Dean of Students. The Code of Academic and Student Conduct can be found at http://www2.oakland.edu/deanofstudents/handbook/conduct.cfm. Students found in violation of academic conduct regulations may receive a 0.0 for the course. Plagiarism is using someone else's ideas or work as your own. Proper citation of other's ideas and work in APA style is a requirement of this course. Both the use of quotation and paraphrasing must be referenced. Students committing plagiarism will be subject to disciplinary action. University resources are available for additional assistance with research or writing. Please talk with the professor if you would like additional assistance.

Add/Drops & Incompletes: The University add/drop and incomplete grade policies will be explicitly followed. It is the student's responsibility to be aware of the University deadline dates for dropping the course. Incompletes (grades of "I") will be given only in the case of unavoidable medical emergencies (e.g., written note from doctor), and <u>not</u> if you are failing the course.

Special Considerations: Students with disabilities who may require special considerations should make an appointment with campus Disability Support Services. Students should also bring their needs to the attention of the professor as soon as possible.

Recording Policy: Students are not allowed to record lectures or class activities without the explicit permission of the instructor, which is only granted under special circumstances. If granted permission, these recordings may only be used for the purpose of personal study. Students may not share these recordings with other individuals without the consent of the professor. At the conclusion of the semester, students may request permission to keep these recordings if needed, otherwise it is expected that all audio-recordings will be deleted from all electronic recording and storage devices. Similarly, recording or photographing assignments, quizzes, or exams is considered a violation of academic conduct and will be reported to the Dean of Students.

Departmental Policy for Resolution of Student Academic-Related Concerns: The student has an obligation to attempt to resolve all academic-related concerns with the instructor. If a suitable solution cannot be reached, then the student should consult the Department of Psychology Procedure for the Resolution of Student Academic-Related Concerns at
https://www.oakland.edu/Assets/Oakland/psychology/files-and-documents/

Excused Absence Policy: Excused absences applies only to participation as an athlete, manager, or student trainer in NCAA intercollegiate competitions, or participation as a representative of Oakland University at academic events and artistic performances approved by the Provost or designee. Students shall inform their instructors of dates they will miss class due to an excused absence prior to the date of that anticipated absence. For activities such as athletic competitions where schedules are known prior to the start of a term, students must provide their instructors during the first week of each term a written schedule showing days they expect to miss classes. For other university excused absences, students must provide each instructor at the earliest possible time the dates that they will miss. It is the responsibility of the student to request from the instructor an opportunity to complete missed exams. This policy only applies to exams and only when the date absent is the same as the exam. Students are expected to complete other tasks prior to the date they will be absent. Students are responsible for all material covered in this course that they miss, even when their absences are excused, as defined above.

Research Project Presentation: Design and present an **original** experiment pertaining to any aspect of Psychology that you find interesting. **Originality is key**, so make sure your proposed experiment has not been done before. Students who do not take adequate steps to ensure their proposed research is original will be penalized. YOU WILL NOT ACTUALLY BE CONDUCTING THE RESEARCH DUE TO TIME CONSTRAINTS, but you will design a feasible experiment that you might carry out, for example as a senior thesis project. Choose something small in scope and easy to analyze. Use the textbook and class notes (in addition to relevant literature) and demonstrate that you are applying course knowledge to your study design, but the textbook and class notes do not count as sources. You will turn in your presentation via email to the instructor by 5PM on the date listed in the schedule. Presentations will be graded before the last day of class.

Presentations should be approximately 10 minutes in length, including time for questions. The presentation portion should be no less than 7 minutes long and no more than 12 minutes long. Begin by introducing yourself, and clearly state your research question and your hypothesis.

Students should use voice-over-Powerpoint slides (NOT Keynote or Prezi), which MUST be emailed to the instructor **BY 5PM on the date indicated in the schedule.** Voice-over-Powerpoint slides include narration when viewed. You may not use video clips. **You should save your presentation as a video file**, but it is recommended you also keep a copy that is saved as a powerpoint presentation in case of computer malfunction. Name the presentation video file

'lastname_firstname.mp4' (e.g., Welling_Lisa.mp4). Please see the "Instructions on Voice-Over Powerpoint" file on moodle.

Each student must submit an abstract of approximately 200 words detailing their presentation via email <u>when they submit their presentation videos.</u> Be sure to include your name, student ID number, your presentation title, presentation date, and **attach a page listing ALL your references in APA format**. The abstract and references should be created using Microsoft Word and **submitted as one file** (i.e., abstract followed by references on a different page within the same document) as a word document, with the filename 'lastname_firstname.doc' (e.g., Welling_Lisa.doc). Use academic sources only (peer-reviewed journal articles) and reference a **<u>minimum of 6</u>** different sources. Each student must include their references where appropriate on the slides, as well as alphabetically on their submitted reference page. Use academic sources only (peer-reviewed journal articles) and reference a **<u>minimum of 6</u>** different sources.

<u>Please note:</u> Late abstracts, references, and/or presentation video will **<u>NOT</u>** be accepted and will result in receiving a **<u>ZERO</u>** on your final presentation. **<u>There are no exceptions</u>**. Make arrangements to have your abstract/references and presentation video completed and emailed to the instructor <u>ON TIME</u>! Powerpoint slides **MUST** be saved as a **.mp4 video file** with voice-over narration and the video must be emailed to Dr. Welling **BY 5PM** the day presentations are due! **Students who do not follow these instructions and submit the wrong file format (e.g., .mov, .ppt, .pptx) will receive a zero.** See additional instructions in the "Instructions for Voice-Over Powerpoint" and "Presentation Handout" documents on Moodle.

Important: It is strongly recommended that you complete your project at least 1 day in advance of the deadline and check the video file prior to sending it. This will give you time to correct any issues (e.g., sound and video issues). **Computer problems are not a valid excuse for failing to complete this project on time.** Students who submit a video file without sound will receive a zero.

Presentations should follow this general organization:
1) Introduce yourself and your Topic.
2) Very briefly review most pertinent background research, which should be very focused to lead to your hypothesis/prediction.
3) Introduce and outline your particular Hypothesis and Prediction(s).
4) Outline your Research Strategy – How would you conduct your study? e.g., true experiment, quasi or non experiment? correlational, descriptive?
5) Your Research Design: groups? between or within subjects? IVs and DVs, controls, etc.
6) Your Methods: participants, materials, testing environment, procedures, debriefing methods, etc.
7) Significance: How is your idea original? How would it add to the field?

You should spend the majority of the time focused on your design and methods. It is important to state the aims of your project at the outset. What is your research question? Why is this question important to the particular field of study? How have investigators in the past explored this topic? Discuss the results most relevant to your proposed study and state any criticisms or shortcomings of past research. You must try to find the most relevant **recent** research or reviews on your topic. If your topic is not well researched, attempt to find tangentially relevant lines of research to review and **cite**. ALWAYS REFERENCE SOURCES!

For your methods, you will need to <u>indicate how the current research will extend or challenge previous findings</u>. How will your study be conducted? What would different patterns of results from your experiment allow you to conclude? Here you will describe who your participants will be – how are they recruited and assigned to conditions. Justify your choice of participants. How many will be assigned to each group, etc? How will you operationally define your IVs and DVs? What materials will your study require, e.g. tests, apparatuses, rewards, etc.? Also you will clearly describe the step

by step procedure in enough detail that your study could be replicated. Keep in mind how you will control for extraneous variables. At what time of day will your study be run and where?

Explain and describe:
A) Your research question and hypothesis.
B) Your independent variable(s) and your dependent variable(s) (or criterion and predictor variables).
C) Your participants, describing what population they would come from, how many you would use, how you would assign them to groups/treatments, defending your approach.
D) Your methodology (briefly describe any apparatus or existing tests utilized).
E)What controls would you implement, and what would these controls protect your experiment against.
F) Your analysis – describe in detail what experimental design you would use, what statistical measures and tests you would apply and what various outcomes would mean – e.g., what would a main effect of each variable, or an interaction between variables, tell you?
G) Does your experiment involve any ethical concerns? How would you address these concerns? What are your obligations, as the researcher, to the participants during and following the experiment?
H) How would your results contribute to knowledge in the field of Psychology? How would is this study original and unique compared to past research?

Be concise – focus on the most important points – be organized and articulate! But try also to be relaxed and natural and engage the class in discussion if possible.

You will be graded on both content and style, including pace and flow of presentation, speech volume, interest, organization, etc. A good presenter conveys enthusiasm about his/her own topic. Twelve points will be assigned to content (knowledge, originality, experimental rigor and care, clarity of explanation, abstract, etc.) and 8 points will be assigned to style (pace, volume, flow, enthusiasm, creativity, etc.). Please contribute by asking questions of the other presenters! Bonus marks may be given to students who significantly contribute to the discussion.

THERE ARE NO ALTERNATIVE ASSIGNMENTS TO THE PRESENTATION. ANYONE WHO DOES NOT GIVE A PRESENTATION WILL AUTOMATICALLY RECEIVE A <u>ZERO</u> ON THE ASSIGNMENT.

Each student must view all class presentations and must provide comments or questions on at least 5 presentations. Presentations will be posted to moodle by the instructor in **five different groups**, and you are required to **comment/post a question on at least one presentation per group**. Students should first post comments/questions on presentations **that have not yet had any other comments or questions.** This should occur until all presentations have at least one posted comment/question. Students must also respond to comments or questions on their own presentations **before 5PM on the last day of classes** (see course schedule). Students will be graded on the number and breadth of questions on other people's presentations and will lose points for failing to address/answer comments/questions on their own videos.

Additional information and examples are provided in the Presentation Handout posted on Moodle.

Course Schedule: (Topics and dates subject to change at any time during the semester)

Week	Topic/Task	Chapter / Add. Reading	Due Dates
1: Jan. 3-Jan. 7	Syllabus Quiz	Syllabus	Sunday by 5pm.
	Lecture 1: Overview & Introduction	1	
2: Jan. 8-Jan. 14	Library Plagiarism Tutorial	(see Moodle)	Wednesday by 5pm.
	Lecture 2: Introduction	1	Wednesday by 5pm.
	Lecture 3: Research Ideas	2	Sunday by 5pm.
3: Jan. 15-Jan. 21	Video & Tutorial on Peer-Review	(see Moodle)	Wednesday by 5pm.
	Quiz on Willcock et al., 2011	Willcock et al. (2011)	Wednesday by 5pm.
	Lecture 4: Defining and Measuring Variables	3	Wednesday by 5pm.
	Lecture 5: Defining and Measuring Variables part 2	3	Sunday by 5pm.
4: Jan. 22-Jan. 28	Lecture 6: Ethics in Research	4	Wednesday by 5pm.
	Lecture 7: Ethics in Research 2	4	Sunday by 5pm.
5: Jan. 29-Feb. 4	Lecture 8: Selecting Research Participants	5	Wednesday by 5pm.
	EXAM 1: FEB 2nd **Time: Between 6am-12pm (1 hr)**	**Ch. 1-5** **Willcock et al. (2011)**	**Complete on specified date/time.**
6: Feb. 5-Feb. 11	Lecture 9: Research Strategies & Validity	6	Wednesday by 5pm.
	Lecture 10: Research Strategies & Validity part 2	6	Sunday by 5pm.
7: Feb. 12-Feb. 18	Lecture 11: Experimental Research Strategy	7	Wednesday by 5pm.
	Quiz on Richardson & Day, 1999	Richardson & Day (1999)	Wednesday by 5pm.
	Lecture 12: Experimental Research Strategy	7	Sunday by 5pm.
Week 8: Feb. 19-Feb. 25: WINTER BREAK – NO CLASS			
9: Feb. 26-Mar. 4	Lecture 13: Between-Subjects Designs	8	Wednesday by 5pm.
	Lecture 14: Within-Subjects Designs	9	Sunday by 5pm.
10: Mar. 5-Mar. 11	**EXAM 2: MAR 9th** **Time: Between 6am-12pm (1 hr)**	**Ch. 6-9** **Richardson & Day (1999)**	**Complete on specified date/time.**
	Lecture 15: Non/Quasi-Experimental Designs	10	Sunday by 5pm.
	Quiz on Weinstein, 2007	Weinstein, 2007	Sunday by 5pm.
11: Mar. 12-Mar. 18	Lecture 16: Correlational Research	12	Wednesday by 5pm.
	Lecture 17: Factorial Designs	11	Sunday by 5pm.
12: Mar. 19-Mar. 25	Lecture 18: Descriptive Research	13	Wednesday by 5pm.
	Lecture 19: Single-Subject Designs/Presentations	14	Sunday by 5pm.
13: Mar. 26-Apr. 1	Lecture 20: Review for Exam 3		Wednesday by 5pm.
	EXAM 3: MAR 30th **Time: Between 6am-12pm (1 hr)**	**Ch. 10-14** **Weinstein (2007)**	**Complete on specified date/time.**
14: Apr. 2-Apr. 8	**Presentation Video, Abstract, & References Due APR. 2nd**	**Email to instructor by 5PM Monday. Projects received after 5PM will receive a zero.**	
	Presentations	Post on 5 other presentations (one per group on moodle) by **Friday Apr. 13th, by 5pm.**	
15: Apr. 9-Apr. 15	Presentations	Post on 5 other presentations (one per group on moodle) by **Friday Apr 13th, by 5pm.**	
16: Apr. 16-Apr. 17	Presentations Replies	**Reply to all posts on your presentation by Apr. 17th by 5PM.**	