PSYCHOLOGY 380W/L: RESEARCH METHODS

FALL 2018 SYLLABUS

Instructor: Dr. Alexander Swan

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Office Hours: MW 10:30-12, TR 9:30-11, F 10:30-12, MTRF 3-5

OR GO HERE: http://swanpsych.com/contact-about-me/

My Website: www.swanpsych.com

BASIC COURSE INFORMATION

MEETING:

Lecture

• When: Mondays, Wednesdays, & Fridays 12:00 – 12:50 PM

• Where: Burgess Hall 205

Lab

• When: Thursdays 1:15 – 2:05 PM

• Where: Burgess Hall 204

REQUIRED TEXTBOOKS:

VandenBos, G. R. (Ed). (2010). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: American Psychological Association.

Strunk, W., Jr., & White, E. B. (2000). The elements of style (4th ed.). Needham Heights, MA: Allyn & Bacon.

RECOMMENDED READING:

Price, P. C., Jhangiani, R., Chang, i-C. A., Leighton, D. C., & Cuttler, C. (2017). *Research methods in psychology* (3rd ed.). Open Text Library. (RM)

This Research Methods textbook is free. It's actually available as a full PDF to download on Brightspace right now. It is recommend reading (STRONGLY RECOMMENDED) and those suggestions for what we're doing will appear on the course syllabus so you can follow along. I understand that recommended reading is an invitation to not read it. If this is your first Methods course, I strongly recommend it. I can't say that enough. You will not be tested on concepts that appear in this text but not in lecture/lab.

RECOMMENDED COURSE DOWNLOAD/PROGRAM:

We will be using a free statistics program to perform our analyses in lab and on your projects. It is based on one of the leading, but expensive statistical software packages, SPSS. It is called JASP and in some ways, it will be better than SPSS for novices. I will go over the basics of the program at the beginning of the course. Since it is a free program, I HIGHLY RECOMMEND you downloading it to your personal computer. It is available for both Mac and Windows. This is the link: https://jasp-stats.org/

COURSE WEBSITE:

All the course announcements, quizzes, grades, this syllabus, and other resources will be available through the course portal on Brightspace. I will try my best to make the Powerpoint slides used for the lectures available online BEFORE each lecture. However, sometimes life will happen and they might not make it until afterward.

COURSE DESCRIPTION:

College catalog description: Investigation of the fundamentals of research in psychology and the behavioral sciences. Included are the study of philosophy of science as applied to the behavioral sciences, descriptive research techniques, experimental designs, laboratory activity and experiments.

Here's my take:

This is both a lecture and a learn-by-doing course. There will be lecture three times a week that reviews the basics of research methods and introduces advanced concepts. In addition, there is a weekly lab during which you will be able to apply what you have learned over the course of your psychology major. Your grade will be based on several requirements, detailed below.

By the end of this course, you will have a better understanding of the process of psychology as a science, from developing your own research questions and identifying the best methods to test them, through the communication of results. During this course you will gain insight into the scientific process as a whole – its advantages, difficulties, and limitations. As such, you will be able to better evaluate the knowledge science can provide, and integrate that knowledge into a broader worldview.

You will learn primarily about the experimental method and how psychologists use this to answer questions about causes of human behavior. You will also encounter the statistical procedures used to measure properties of these behaviors. However, more importantly, you will develop an understanding of the theoretical motivation behind these procedures. By the conclusion of this course, in conjunction with your previous training in the prerequisite courses, you should have a sufficient grasp of several fundamental design and analysis procedures, including when and why they are used.

CLASS FORMAT:

The course will consist of lectures, demonstrations/activities, videos, and class discussion. Reading assignments should be completed BEFORE the chapter is discussed in class.

INTENDED LEARNING OBJECTIVES:

By the end of the course, you should be able to:

- conduct psychological studies.
- select the best methods to test your research questions.
- communicate the results of your study.
- discuss the advantages, difficulties, and limitations of research methodology in psychological science.
- better evaluate the knowledge science can provide and integrate that knowledge into a broader worldview.

COURSE REQUIREMENTS AND GRADING

Unit Quizzes (3)	10% each (30%)	Various Dates
Research Project Paper	50%	Various Deadlines
Research Project Presentation	10%	MWRF, December 3-7, 2018
Participation/Labs	5% each (10%)	Various Dates

GRADING SCALE:

\geq 93%	A	$\geq 80\%$ and $< 83\%$	B-	\geq 67% and $<$ 70%	D
\geq 90% and $<$ 93%	A-	$\geq 77\%$ and $< 80\%$	C+	\geq 63% and $<$ 67%	D
$\geq 87\%$ and $< 90\%$	B+	\geq 73% and $<$ 77%	C	\geq 60% and $<$ 63%	D-
> 83% and $< 87%$	В	> 70% and $< 73%$	C-	< 60%	F

NOTE: Grades will not be changed for any reason, except for clerical errors!

A. UNIT QUIZZES:

- The in-class Quizzes (3 "Units") consist of short-answer questions and are based on the lectures. Each Quiz will only cover material from the unit. Although none of the Quizzes are cumulative, new material tends to build upon previous material. <u>ANY material covered in the lectures may appear on the Quiz.</u>
- Quizzes must be taken on the date scheduled. Vacation is not a valid excuse, nor is an exam scheduled at the same time. If you must miss a Quiz due to some emergency, then you can make it up by taking an essay exam. A doctor's note or some other formal verification of absence is required to make up a Quiz. This is the ONLY condition under which I will give a make-up. All make-up Quizzes are ESSAY in format and must be taken during a make-up period agreed upon by you and me.
- No use of notes is allowed for any Quiz. Please be aware that cheating on a Quiz will result in a grade of zero (0) for the exam and reporting of the incident to the Division Chair and Provost. Cheating includes use of notes, books, cell phones, or copying from someone else's Quiz.

B. TERM RESEARCH PROJECT:

- The capstone experience in this course is the creation, execution, and dissemination of a research project. You will design your own study individually or in a pair, request and receive permission to complete the project, collect your data, analyze that data, and communicate your findings through an APA-style research paper and short-form in-class presentation. There will be a number of small assignment due on Brightspace along the way, including drafts that are graded for completion rather than content (in order to give you feedback). These due dates are available on the course calendar below. More information on the presentations will come later in the semester when it is appropriate to begin to prepare for that. These are the assignments you will work on throughout the semester:
 - a. Research Question
 - b. Annotated Bibliography
 - c. Research & IRB Proposal:
 - Your first step will be to develop a research proposal, outlining the study that you
 intend to conduct. Before any data can be collected, proposals must be approved by
 the IRB (including me and potentially one or more of the Board) for ethical and
 methodological issues.
 - ii. The proposal will consist of the following:
 - 1. a literature review of the relevant work done on your topic of focus (minimum 4 primary sources...meaning empirical research articles),
 - 2. specific hypotheses that you will test,
 - 3. a thorough description of your planned methodology, including any measures or scales you wish to utilize,
 - 4. specific variable or group comparisons you will make in your analyses
 - 5. brief discussion concerning the relevance of your study, including any possible limitations
 - d. Results/Discussion Draft

e. Final Paper

- i. This paper will be the finalized version of your proposal. At this point, you will conduct the study you initially proposed. Therefore, this paper will consist of the following:
 - 1. the final draft of the literature review,
 - 2. the hypotheses you tested,
 - 3. a complete description of your methodology,
 - 4. the results you obtained from your analyses of your data, and
 - 5. a thorough discussion of the meaning of your results, their implications, any problems with the study, and future directions for research on your topic.
- NOTE: Both the Proposal and Final Paper will include proper page numbering, a title page, an abstract, and references, according to APA guidelines.
- Individual vs. Pair Option:
 - a. You have the option to conduct your study alone or with another person. Should you decide to work in a group, you will design and implement your study together. This means you will turn in one research proposal as a pair; the pair will also give the final presentation. For the final paper, you will turn in a *common* literature review and methods section. However, each member will turn in individual results and discussion sections. Therefore, you will be graded as a pair on some aspects of the project, and as an individual on others. Once you have selected your partner, you CANNOT change the membership. In most workplaces today, group projects are common. You will need to learn to deal with possible interpersonal conflicts and be sure that each of you is carrying their own weight in the project.

C. TERM RESEARCH PRESENTATION:

• In addition to the APA paper you will write for the course, you will also present your research to the class, much like a short-form conference presentation. These presentations will be 15 minutes each, where 12 minutes is set aside for your talk and there are three additional minutes for questions. If you are familiar with the ILLOWA psychology conference, this is exactly how it is done. You will be graded independently from your paper for this presentation, as the main assessment here is communication, presentation style, and science literacy (essentially, do you know what you're talking about with your research and results, and can you clearly communicate that to a naïve/novice audience in a short period of time?). The rubric and samples will be available on Brightspace later in the semester.

D. PARTICIPATION GRADE:

• Small assignments will be given during class or lab on random days throughout the semester. Points will be given out for completing the assignments that will count toward your participation grade. It is highly recommended that you arrive to class/lab on time in order to complete these assignments.

COURSE POLICIES

1. **GETTING INFORMATION:**

• EMAIL PROTIP: I use email for almost all communications/announcements. If you do not check your Eureka email often, forward it to an address you do check. YAHOO ADDRESSES GET SENT TO MY SPAM FOLDER. The best way to contact me is always via email. If you cannot come to office hours and/or decide to send an email, be sure to use the following format so that I can help you:

To:

Subject Line: "PSY 380: (insert your topic here)"

From: your full address

Dear (insert name of person you are contacting here),

Hello, my name is (your full name here) and I am a student taking PSY 380/Research Methods. I have a question regarding (insert your question here).

(Considerate closing of your choosing), Your full name

A word of caution: I will do my best to reply within 48 hours. Depending on the nature (and popularity) of your question, my answer may be direct OR posted as a general class announcement on Brightspace. Please hold off on resending a message until 48 hours have passed. Finally, I may not respond to emails between the hours of 8 PM and 8 AM, so please keep this in mind when deciding whether to resend the message.

• **OFFICE HOURS**: As you may note from the first page of this syllabus, I will be in my office a lot. I have an <u>open-door policy</u>: stop by whenever within the time frames and I will be happy to chat. Additionally, if my door is open during the day and it's not one of the above time frames, I am available. If my door is closed, but you know I'm here, then you should come back. You can check my website for these times rather than emailing me to ask me if I'll be there. You might want to email me to let me know you're coming, but walk-ins are welcome. I will specify whether there are circumstances that will cut into my office time as needed.

2. LATE WORK AND MAKE-UP POLICY:

- If participation in university-sponsored events (e.g., athletics) or observance of a religious holiday or other sanctioned event prevents your attendance, you must contact me prior to the relevant date, and you must have any appropriate documentation. If an assignment is due on that date, arrangements must be made to complete the assignment ahead of time, if possible.
- Unless otherwise stated, all assignments are due at the beginning of class (unless otherwise noted for electronic assignment submissions). Late assignments will only be accepted in the case of extraordinary circumstances and appropriate documentation, and may involve point/percentage deductions (standard penalty is 10%/24-hr period). Please alert me to these extraordinary circumstances by email within 24 hours of the missed class, and we will set up a time to discuss these on a case-by-case basis. You will be allowed to hand in ONE assignment late without penalty. However, the assignment is to be no later than THREE days, and I must be notified of this by the time the assignment is due.
- Without appropriate circumstances and documentation, early Quizzes or Quiz make-ups will not be granted.
- **BENEFIT OF DOUBT POLICY**: However, I recognize that sometimes life happens; therefore, I have built some flexibility into the course to allow for illness, other obligations, and bad days.
 - First, on Quizzes, extra credit will be offered from one Quiz to the next if there is a 10% improvement. For example, if Quiz 1 receives a 60%, a 70% or higher on Quiz 2 will result in an additional percentage increase of extra credit. If you miss a Quiz AND notified me appropriately, and cannot make-up the Quiz prior to the next Quiz, I will count your next Quiz score twice (so no zeroes are given out).
 - In addition, your lowest Participation assignment will be dropped from your final category computation. You will not be able to make these up—they are dropped for whatever reason you missed, no questions asked!

3. GRADE DISPUTE POLICY:

• If you disagree about how your term paper was graded, you must dispute the issue *in writing* (not email). Write a paragraph about why you think your attempt was correct/sufficient and turn it (with the original assignment) in to me at the lecture following the return of the relevant assignment. Only reasonable and well-justified complaints will be considered, and all decisions are final. Please note that if you submit a complaint, I will re-grade the entire assignment, and your grade could increase, decrease, or remain the same. **This policy does not apply to final course grades.**

4. CLASS ETIQUETTE:

- Please do not use your cell phones during class. I would prefer them to be put on silent or off and away in your bag/pocket. If your cell phone goes off during class or quiz, please silence it immediately; do not let it ring through. I will remind everyone prior to exams to make sure their phones are turned off. Please refrain from text messaging during class. I know you think you're being subtle; I assure you that I can see you texting.
- Please do not leave the class partway through unless it is an emergency; it is very disruptive. If you
 must leave, please sit near a door or at the edge of an aisle so as to not disrupt your fellow
 classmates.
- Please have respect for the class, your peers, and yourselves by being fully present in the class.
 Please avoid anything not relevant to the class, such as sleeping, surfing the Internet/social media, or doing homework for other classes.
- <u>LATENESS</u>: Please try to arrive a few minutes before the start of lecture. We will begin promptly at 12:00 PM, and it can be distracting to me and to your peers if you arrive late. I will try not to keep you late. I realize this is lunch time—I do not care if you eat in class, so if you need to do so to make sure you're in class and not late, go for it!

5. LAPTOP & TABLET POLICY:

- Research indicates that taking notes by hand results in significantly better retention of conceptual information than taking notes on a laptop (see Mueller & Oppenheimer, 2014), even when students are engaged in the material (i.e., are not also checking their email or Facebook feed).
- Further, laptop use can be distracting in various ways to the entire class. Because my goal is to maximize the likelihood of a favorable learning environment, **I strongly recommend that you not use laptops in class.**
- However, laptops will be permitted on a probationary basis; should the use of laptops be taken advantage of or prove distracting to other students, I will revisit this policy then.

6. ATTENDANCE:

- Students who take notes, ask questions, respond to questions, and come to office hours are typically the ones who succeed in this class.
- Though attendance is not required by College policy, I strongly recommend you attend class prepared and present. As such, you will not be penalized in your grade for missing a class. However, I WILL REWARD folks who arrive to class on time and attend each class, most likely with some helpful exam advice, if you catch my drift. If you do happen to miss a class, that's OK, but you will be responsible for *all* material covered in lecture, some of which will not be covered by the textbooks. If you know about an absence beforehand, please send me an email to let me know.

7. ADVICE FOR COURSE SUCCESS:

• It is important for all students to realize that there will be a distribution of grades in this class that reflects your mastery of some very technical and often-challenging concepts. Complete mastery of all concepts will earn an "A," good but imperfect knowledge earns a "B," average or adequate

- knowledge will earn a "C," and poorer knowledge will receive grades of "D" or "F." By these criteria, the majority of grades should (and likely will) be "B/C" grades. Remember that your grade in this course is not a reflection of your general ability or your character.
- This is a difficult, but not impossible course; it is my hope that you will find this class challenging but rewarding in terms of the knowledge you will walk away with. If you anticipate having difficulty (or when you are), I strongly urge you to do the following:
 - Attend every lecture, and take good notes. While attendance will not be graded, per se, the ability to truly learn and use the material in this class is strongly related to attendance.
 - Review lecture notes on the day of the lecture (before you go to bed). If you need clarification on anything, ask in the next lecture, lab, or office hours. Don't wait until right before the exams!
 - Manage your time wisely. This is an intense course with many moving pieces.
 Familiarize yourself with the syllabus, put important dates in your calendars now, and space out your work there is just too much to do it at the last minute
 - Use the resources available to you that includes your course materials (especially this syllabus), me, and the many amazing services offered on campus.
 - Discuss the material with another student. Form a study group. Go to office hours. Ask me questions. ASK QUESTIONS. ASK ALL THE QUESTIONS—DO NOT WALLOW IN YOUR OWN CONFUSION.

ADDITIONAL COURSE AND COLLEGE INFORMATION

ACCESSIBILITY (ADA) STATEMENT:

The Learning Center, located on the first floor of Alumni Hall, provides academic services to all Eureka College students. Consultations are available in the areas of math and writing. Study groups, individual academic counseling, and course specific tutoring are also available by contacting Jason Zimmerman at x6520 or jzimmerman@eureka.edu.

Any Eureka College student with a disability or other special circumstances requiring accommodations or other consideration in order to successfully complete the requirements of this course is requested to identify himself/herself to the instructor and discuss the matter privately. This disclosure should be made within the first week of the course so proper accommodations can be made.

ACADEMIC HONESTY AND INTEGRITY STATEMENT:

Eureka College strives to instill individual responsibility and integrity in its students, and expects its students to behave with integrity throughout their time at the College. Any giving or receiving of unpermitted aid on tests or assignments is considered cheating. If a student is uncertain about how to document sources or incorporate materials into a paper, it is his or her responsibility to seek help by speaking to the faculty member, another professor, or a Writing Center tutor. The College's Academic Dishonesty policy is outlined in the Student Handbook.

Academic dishonesty constitutes a major breach of the trust that exists between the instructor and the student. It includes passing off another's ideas as one's own, any attempt to gain information about a test or exam prior to the test or exam date without the instructor's consent, and providing unauthorized assistance on a test, exam, paper, or other assignment to another student. Cheating on a test, exam, quiz, paper, or other assignment will result in a failing grade for the assignment. Further dishonesty will result in failing the course. Students who fail for academic dishonesty will not have the option of withdrawing from the course.

A specific note on plagiarism: Plagiarism occurs when someone misrepresents the work of another as his or her own. Plagiarism may consist of using the ideas, sentences, paragraphs, or the whole text of another without appropriate acknowledgement, but it also includes employing or allowing another person to write or alter work that a student then submits as his or her own. Although some assignments or projects in this class can be completed in pairs, all writing must be the work of the student whose name is on the assignment, and that student alone. If you are at all uncertain about what constitutes plagiarism, please see me – do not risk your grade or integrity! I also encourage you to meet with me if you suspect that another student in the course has engaged in academic misconduct.

COUNSELING SERVICES:

Provided by Tazwood Center for Wellness, seeing a professional counselor as a Eureka College student is easy and free. Whatever is on your mind, don't be afraid to talk to someone.

Tazwood Center for Wellness visits campus twice a week for on campus counseling appointments. Each student receives 6 free sessions per semester.

Tazwood Center for Wellness 3248 Vandever Ave. Pekin, IL 61554 309-437-5522 (Phone) 309-347-1148 (Emergency Response Services)

CHANGES TO SYLLABUS:

I reserve the right to make policy/course changes to the syllabus at any time with advance notice to students.

TENTATIVE COURSE SCHEDULE

Note: The schedule is subject to change depending on the progress of the course.

Week	Day	Date	Lecture/ Lab	Торіс	Recommended Reading	Assignment Due
1	M	8/20		NO CLASS – OPENING WEEK		
	W	8/22	1	Course Introduction and Requirements		
	R	8/23	L1	JASP & Excel Introduction		
	F	8/24	2	Research Methods Basics I	RM: Ch 1 & 2	
2	M	8/27	3	Research Methods Basics II		
	W	8/29	4	Ethical Guidelines	RM: Ch 3	
	R	8/30	L2	IRB Quiz & Searching for Lit Lab		
	F	8/31	5	Starting your Research I		
3	M	9/3		NO CLASS – LABOR DAY		
	W	9/5	6	Starting your Research II		
	R	9/6	L3	RQ Formulation Lab		
	F	9/7	7	Measurement I	RM: Ch 4	
4	M	9/10	8	Measurement II		Research Question Due
	W	9/12	9	Sampling & Power Analysis		
	R	9/13	L4	Measurement & PA Lab		
	F	9/14	10	Research Designs: Surveys I	RM: Ch 7	
5	M	9/17	11	Research Designs: Surveys II		
	W	9/19	12	Research Designs: Correlational Designs	RM: Ch 6	
	R	9/20	L5	JASP Descriptive Stats Lab		
	F	9/21		QUIZ 1		Annotated Bibliography Due
6	M	9/24	13	Research Designs: Experiments I	RM: Ch 5	
	W	9/26	14	Research Designs: Experiments II		
	R	9/27	L6	JASP Correlational Stats Lab		
	F	9/28	15	Research Designs: Experiments III		
7	M	10/1	16	IRB Process I		
	W	10/3	17	IRB Process II		
	R	10/4	L7	IRB Proposal Open Lab		
	F	10/5		NO CLASS – HOMECOMING		
8	M	10/8	18	Research Designs: Experiments IV	RM: Ch 9	Research/IRB Proposal Due
	W	10/10	19	Analyzing & Interpreting Data I		
	R	10/11	L8	JASP NHST Lab I		
	F	10/12	20	Analyzing & Interpreting Data II		
9	M	10/15		NO CLASS – FALL BREAK		
	W	10/17	21	Analyzing & Interpreting Data III		
	R	10/18	L9	JASP NHST Lab II		
	F	10/19	22	Analyzing & Interpreting Data IV		
10	M	10/22	23	Analyzing & Interpreting Data V		

	W	10/24	24	Analyzing & Interpreting Data VI		
	R	10/25	L10	JASP NHST Lab III		
	F	10/26		Quiz 2 Review Day		Optional: 2nd Proposal Draft
11	M	10/29		QUIZ 2		
	W	10/31	25	Research Designs: Other Experimental Designs	RM: Ch 8	
	R	11/1	L11	Open Lab		
	F	11/2	26	Threats to Internal Validity I		
12	M	11/5	27	Threats to Internal Validity II		
	W	11/7	28	Research Designs: Observational & Archival		
	R	11/8	L12	Open Lab		
	F	11/9	29	Research Designs: Over Time		
13	M	11/12	30	Writing: Basic Elements of Good Scientific Writing	RM: Ch 11	
	W	11/14	31	Writing: Results & Discussion		
	R	11/15	L13	Open Lab: Stats Consultation		
	F	11/16	32	Designing APA Graphs in Excel		Results/Discussion Draft Due
14	M	11/19		NO CLASS – THANKSGIVING		
	W	11/21		NO CLASS – THANKSGIVING		
	R	11/22		NO CLASS – THANKSGIVING		
	F	11/23		NO CLASS – THANKSGIVING		
15	M	11/26	33	Communicating Research I		
	W	11/28	34	Communicating Research I		
	R	11/29	L14	Open Lab: Stats or Writing Consultation		
	F	11/30		Open Class: Stats or Writing Consultation		
16	M	12/3		Research Presentations		
	W	12/5		Research Presentations		
	R	12/6		Research Presentations		
	F	12/7		Research Presentations		
F	F	12/14		QUIZ 3 (8 – 10 AM)		Final Research Papers Due