



EASTERN  
KENTUCKY  
UNIVERSITY

## COURSE SYLLABUS

Research Methods

Lecture: PSY 309 W-23271 / 23273

Lab: 26086 / 26087

Spring 2017

## GENERAL INFORMATION

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### PROFESSOR INFORMATION



<b>Name:</b>	Michael Chen	<b>Phone:</b>	859-622-3485
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<b>Office Hours:</b>	By appointment	<b>Email:</b>	<a href="mailto:Hung-Tao.Chen@eku.edu">Hung-Tao.Chen@eku.edu</a>

### FACILITATORS INFORMATION

<b>Name:</b>	Dr. Ron Mawby	<b>E-mail:</b>	<a href="mailto:ronald.mawby@eku.edu">ronald.mawby@eku.edu</a>
<b>Name:</b>	Ian Boggero	<b>E-mail:</b>	<a href="mailto:ian.boggero@eku.edu">ian.boggero@eku.edu</a>
<b>Name:</b>	Scott Bradford	<b>E-mail:</b>	<a href="mailto:richard_bradford6@mymail.eku.edu">richard_bradford6@mymail.eku.edu</a>

### COURSE DESCRIPTION AND PURPOSE

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This course is an overview of the methods used in the study of psychology. You will learn how to do a literature search for published articles and how to write a literature review using APA writing style. You will also be introduced to current research methods, including basic principles of research design, data collection, and data analysis. Throughout the semester, you will conduct research studies and write-up the results in empirical APA formatted manuscript. Success in this course requires regular class attendance and participation in activities, the timely reading of class material, and the timely completion of assignments. Readings come from the required textbooks. Make sure you read the assigned chapters before class.

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## **COURSE OBJECTIVES**

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Upon completion of this course, students will:

1. Know how to find published scientific articles on a topic in psychology. This will be assessed through your final paper, which includes a literature review section.
2. Be able to write an abstract, literature review, methods section, results section, discussion section, and a references section using APA style.
3. Have an overall understanding of the research process, including: development of hypotheses, selection of research designs, and use and interpretation of appropriate statistical tests. This will be assessed through a series of quizzes and exams.
4. Be able to identify the distinguishing features of different research designs and understand the strengths and limitations of each one. This will be assessed through a series of quizzes and exams.
5. Know which type of statistical analysis should be used to analyze data in each design. This will be assessed through a series of quizzes and exams.
6. Understand which types of information are provided by descriptive and inferential data analysis methods and understand the assumptions of each. This will be assessed through a series of quizzes and exams.
7. Be able to write up the methods section of a research study and report the statistical analyses using APA style. This will be assessed as part of your final paper.
8. Be able to interpret the results of data analyses and discuss their meaning (using APA style) with regard to the hypotheses they are designed to test. This will be assessed through a series of quizzes and exams.
9. Be able to identify internal and external validity threats. This will be assessed through a series of quizzes and exams.

## **TEACHING METHODOLOGY**

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This is a fully online class with all instructional materials and activities delivered through Blackboard, and/or other internet-based media. Much of the course is built around team work and discussion. Therefore, please maintain a courteous and professional manner at all times, both in your discussion posts and e-mails. There is also an online meeting room that you could use to meet with your course instructor, facilitators, or your classmates.

## **INSTRUCTOR FEEDBACK AND RESPONSE TIME**

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Your assignments in each module are due at the indicated times. You should expect grading and feedback for most assignments within seven days from the due date.

The best way to get in touch with me is through e-mail. I will respond to questions within 24 business hours. If you do not hear back from me within 24 business hours, please re-send the e-mail.

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## HOMEWORK HELP

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The EKU GURUS are carefully selected upperclassmen that offer homework assistance in over 25 different subjects. Skype or schedule an appointment with a GURU for your tutoring needs. Visit us at one of our three locations: Tech Commons, SSB lab, and the Library lab.

Contact information:

Phone: (859) 622.2496

Available hours phone/social media

7:30am-10:00pm

SSB Computer lab 1<sup>st</sup> floor

Library lab (next to Java City)

Tech Commons (downstairs Powell)



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## IMPORTANT INFORMATION

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### EKU POLICIES (PLAGIARISM & ABSENCE)

For issues concerning plagiarism, please consult EKU's [Academic Integrity Policies](#). Students found guilty of an academic honesty violation will receive a 0 on the assignment in question. Violations could also result in a 0 in the course and/or a referral to the Academic Council. Academic dishonesty includes plagiarism, cheating, and co-responsibility (i.e., "anyone who knowingly assists in any form of academic dishonesty shall be considered as guilty as the student who accepts such assistance").

For excused absence, please consult EKU's [Absence Policies](#).

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### TECHNICAL REQUIREMENTS/SKILLS

One of the greatest barriers to taking a technology assisted class is the lack of basic computer literacy. By computer literacy, I mean being able to manage and organize computer files efficiently, and learning to use your computer's operating system and software quickly and easily. Keep in mind that this is not a computer literacy course; however, students who are required to use Blackboard are expected to have moderate proficiency using a computer.

Although you may use a mobile device to access materials on Blackboard, I strongly discourage you to complete any online assignment using a mobile device.

Please make sure that you have a reliable working computer and internet connection when completing any assignment online. **Missed online assignments, quizzes, or exams due to technical difficulties cannot be made up. No assignments will be reset due to technical difficulties.**

If you have an emergency, please send me an e-mail and I will deal with the situation on a case-by-case basis.

## **ACCESSIBILITY AND ACCOMMODATION**

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The University strives to make all learning experiences as accessible as possible. If you are registered with the ECU Center for Student Accessibility (CSA), please obtain your accommodation letters from the CSA, present them to the course instructor, and discuss the accommodations needed. If you believe you need an accommodation and are not registered with the CSA, please contact the office in 361 Whitlock Building by email at [disserv@ecu.edu](mailto:disserv@ecu.edu) or by telephone at (859) 622-2933. Upon individual request, this syllabus can be made available in an alternative format.

A student with a “disability” may be an individual with a physical or psychological impairment that substantially limits one or more major life activities, to include, but not limited to: seeing, hearing, communicating, interacting with others, learning, thinking, concentrating, sitting, standing, lifting, performing manual tasks, working. Additionally, pregnancy accompanied by a medical condition(s), which causes a similar substantial limitation, may also be considered under the Americans with Disabilities Amendments Act (ADAAA).

## **COURSE PREREQUISITES**

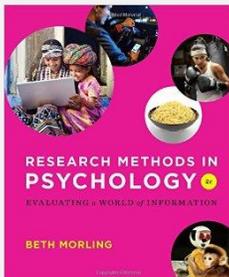
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MAT 105 or 106 with a grade of “C” or better or any MAT course above 106, PSY 200 (or 200W) and 250 (or 250W) or departmental approval.

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## TEXTBOOKS

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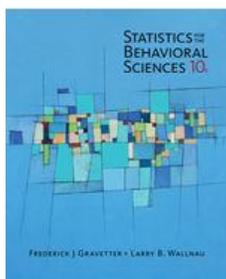
### *Research Methods in Psychology (2<sup>nd</sup> Edition)*

Beth Morlin

WW Norton (2014)

ISBN: 0393936937

Required Text



### *Statistics for the Behavioral Sciences (10<sup>th</sup> Edition)*

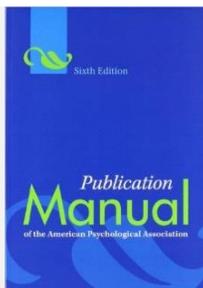
Frederick J. Gravetter

Larry B. Wallnau

Cengage (2017)

ISBN: 1305504917

Required Text



### *American Psychological Association Publication Manual (6<sup>th</sup> Edition)*

ISBN: 1433950618

*Optional Text*

## ATTENDANCE POLICY

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This is a fully online class so there is not a traditional attendance policy. However, you are required to complete quizzes, assignments, papers, and exams by the due dates set in Blackboard.

## STANDARDS FOR WRITING ASSIGNMENTS

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Students in all psychology courses are expected to use correct grammar, spelling and composition in written assignments. These elements of writing will be taken into consideration in grading all out-of-class writing assignments. If you would like free help with your writing, you may visit the Noel Studio, in the Library: The Noel Studio for Academic Creativity is a free resource for the ECU community, including graduate and undergraduate students. At the Noel Studio, a trained consultant will work you or your small group on any piece of written or oral

communication, at any stage in the process from brainstorming to finished product. Consultants can also help you develop effective research strategies. For more information, visit the Noel Studio website at <http://www.studio.eku.edu/> or call 859-622-6229.

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## COURSE DETAILS

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### COURSE COMMUNICATION

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Communication in this course will take place via E-MAIL. Please do not utilize the message function in Blackboard.

### QUIZZES

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There are many quizzes in this course, including module quizzes, and lab quizzes. Each quiz will have between five and 20 questions and they need to be completed throughout the week.

**Please be aware of the deadlines and settings for the various quizzes.**

### EXAMS

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There are a total of four exams in this class. There is also a final exam in addition to the four in-class exams.

### PAPERS

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You will need to complete a research paper in this class. Parts of the paper will be due throughout the semester. These are essentially mini-papers and there are a total of five mini-papers. The five mini-papers will be combined into one complete research paper to be turned in at the end of the semester.

### RESEARCH PARTICIPATION

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As a student in this course you are required to earn 6.0 units in outside activities (SONA research credits). Completion of the course requires earning all six units. **Those students failing to earn the minimum six units will have their final course grade lowered by one letter grade.** To fulfill outside credits for this class you will participate in research projects. If you participate in a study that lasts more than 1 hour you may receive more than one unit credit for it. Please note carefully on the attached sheet that if you sign up for an study and do not show up for it or cancel

at least 24 hours in advance you will be penalized ½ unit credit (This means that you will have to earn an additional ½ credit). If you do not or cannot participate in enough research studies to fulfill the required 6.0 hours, you have the option of completing an alternative assignment that can be found in Blackboard.

To receive credit for participating in research: Sign up for studies via the online system (see handout). The researcher will assign you credit in the computer once you participate. Research credits vary in amount (from ½ to 2), so make sure that you keep track of how many you have done.

ALL OUTSIDE UNIT CREDITS ARE DUE BEFORE FINAL EXAM WEEK.

### ADD/DROP/WITHDRAW DEADLINES

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The university has the policy of dropping any student who does not attend class on the first day of class. Please note that the last day to Add or Drop this course is 01/22 and the last day to withdraw from this course (without a fee) is 02/12. The final withdraw deadline is 04/09 where you will receive a “W” on your transcript. I will update your grades on a weekly basis so that you can make an informed decision concerning add and drop.

### GRADING

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Course Requirements	Weight
Assignments & Quizzes	10%
Exams	40%
Final Exam	10%
Papers	30%
Discussion Posts	10%
<b>Total</b>	<b>100%</b>

Letter Grade	Range
A	90-100

B	80-89.99
C	70-79.99
D	60-69.99
F	Below 60

*Please note that your final grade will not be rounded up*

## COURSE SCHEDULE

Week	Date	Lecture #	Lecture	Lab	Book Chapters & Discussion Posts
1.1	01/16	0	No Class	No Lab	N/A
1.2	01/18	1	Introduction to Research	Complete course survey	<b>READ THE SYLLABUS</b>
1.3	01/20	2	Theory & Hypotheses	Analyze studies	M Chapter 1 Discussion: Introduce Yourself
2.1	01/23	3	Research Articles	PSYCINFO & SONA	M Chapter 2
2.2	01/25	4	Variables & Claims	Examining claims	M Chapter 3
2.3	01/27	5	Variables & Claims	Examining claims	M Chapter 3
3.1	01/30	6	Ethical Guidelines for Research	CITI Training	M Chapter 4
3.2	02/01	7	Ethical Guidelines for Research (Stanford Prison Experiment)	CITI Training	M Chapter 4
3.3	02/03	9	Simple Experiments	Experiment & Group Design	M Chapter 10 Discussion: Understanding Methods
4.1	02/06	10	Independent-Groups Design, Within-Groups Design	Assessing validity	M Chapter 10
4.2	02/08	11	More on Experiments	Exam 1 review	M Chapter 11 & 12
4.3	02/10	12	Rationale for the project experiment (Paper)	<b>EXAM 1</b>	M Chapter 12

			Experiments with more than one IV	<b>(Chapters 1-4 + 10)</b>	
5.1	02/13	13	Bivariate Correlation	Annotated Bibliography 1	M Chapters 8
5.2	02/15	14	Surveys & Observations	Annotated Bibliography 2	M Chapters 6
5.3	02/17	15	Surveys & Observations	Practice Surveys & Observations	M Chapters 6 Discussion: What's Our Study About?
6.1	02/20	16	Sampling	Annotated Bibliography 3	M Chapters 7
6.2	02/22	17	Sampling	Practice Sampling	M Chapters 7
6.3	02/24	18	No Lecture	Annotated Bibliography 4 Exam 2 Review	
7.1	02/27	19	Lecture about introduction section writing and formatting (Paper I)  Midterm Week	<b>EXAM 2</b> <b>(Chapters 6-8 + 11-12)</b>	
7.2	03/01	20	Introduction to Statistics	Practice basic statistics	G&W Chapter 1
7.3	03/03	21	Frequency Distribution	Annotated Bibliography 5	G&W Chapter 2
8.1	03/06	22	Frequency Distribution	Practice frequency distribution	G&W Chapter 2
8.2	03/08	23	Central Tendency	Peer-review of introduction section	G&W Chapter 3
8.3	03/10	24	Central Tendency	Exam 3 review <b>Paper I Due</b>	G&W Chapter 3 <b>Experiment 1 Data due</b>

9.1	03/13			Spring Break	
9.2	03/15			Spring Break	
9.3	03/17			Spring Break	Discussion: Spring Break Discussion
10.1	03/20	25	Building Qualtrics Survey	<b>EXAM 3: Frequencies &amp; Central Tendency (G&amp;W Chapters 1-3)</b>	Discussion: Creating Online Questionnaires
10.2	03/22	26	Variability	Lecture and writing of methods section	G&W Chapter 4
10.3	03/24	27	Variability	Practice variability	G&W Chapter 4 Discussion: Eyeballing Our Data
11.1	03/27	28	Variability	Practice variability	G&W Chapter 4
11.2	03/29	29	Z scores	Lecture and writing of results section (analyze data together)	G&W Chapter 5
11.3	03/31	30	Z scores	Peer review Paper II	G&W Chapter 5 Discussion: Practice Reporting Data
12.1	04/03	31	Z scores	Practice Z scores <b>Paper II Due</b>	G&W Chapter 5

12.2	04/05	32	Probability / Experiment 2 Design	Search for two more papers on PsycINFO	G&W Chapter 6
12.3	04/07	33	Probability	Practice probability / work on Paper III	G&W Chapter 6
13.1	04/10	34	Probability	Practice probability	G&W Chapter 6
13.2	04/12	35	Probability and Samples	Peer review for Paper III	G&W Chapter 7
13.3	04/14	36	Probability and Samples	Practice probability and samples	G&W Chapter 7 Discussion: Practice Reporting Data II <b>Experiment 2 Data Due</b>
14.1	04/17	37	Probability and Samples	Practice probability and samples  <b>Paper III Due</b>	G&W Chapter 7
14.2	04/19	38	Review session for Exam 4	<b>EXAM 4: Variability &amp; Probability</b>  <b>.(G&amp;W Chapters 4-7)</b>	
14.3	04/21	39	Hypothesis Testing	Analyzing results data together for Paper IV	G&W Chapter 8 Discussion: Spot My Methods
15.1	04/24	40	Hypothesis Testing	Practice Hypothesis testing	G&W Chapter 8
15.2	04/26	41	Hypothesis Testing	Peer review of Paper IV	G&W Chapter 8

15.3	04/28	42	Writing the discussion section (bring your laptop)	Work on Paper V <b>Paper IV Due</b>	
16.1	05/01	43	Work on Final Paper	Finalize Paper	
16.2	05/03	44	Review for the final exam	Peer review Paper V	
16.3	05/05		TBD	<b>Paper V Due</b>	
	05/10		<b>Final Comprehensive Exam (12:00AM – 11:59PM)</b>		

### Outside Activity Requirement for Psychology 200, 250, 309, and 310

As a student in one of these courses you are required to earn 6 units in outside activities. Completion of the course requires earning all 6 units. Failure to complete the required units will result in a reduction of your course grade by one letter grade. You may earn these units in any of the following ways:

1. Participate in research conducted by psychology undergraduate or graduate students, or faculty, and complete a follow-up assignment as required by your instructor. See other side for how to sign-up for studies.

- If you participate in an on-line survey, you will earn:
  - 1 unit for each 1 hour of participation
  - ½ unit for each 30 mins of participation
- If you participate in an in-person study, you will earn:
  - 2 units for each 1 hour of participation
  - 1 unit for each 30 mins of participation
- *Please Note: If you participate in 5 units of research (option #1 above) without receiving a no-show penalty (not showing up for a study and not informing the research 24 hours in advance), you do not have to complete the sixth unit.*

2. Participate in mock clinical interviews and assessments conducted by psychology students, and complete a follow-up assignment as required by your instructor.

2 units per hour; 1 unit per half hour or less

3. Attend a colloquium or presentation (for example, the Chautauqua lectures) approved by the professor, and complete a follow-up assignment as required by your instructor.

1 unit

4. Other activities as offered by the instructor.

Unit worth will vary depending on activity

All written summaries/reactions will be graded on a pass/fail basis.

## Information about Participating in Research or Interviews

### Your rights as a participant

1. You have a right to discontinue participation in a study or interview if, after it is explained to you, or after you begin, you find it to be objectionable. You will NOT be penalized for conscientious refusal to participate. That is, although you will not receive credit for participation, neither will you receive an "unexcused absence".
2. At the end of each study, the researcher will provide you with information about the research, including references for further reading. Feel free to contact the researcher if you have any questions or would like to know more about the study. Researchers welcome reactions and questions from students interested in their research.

### Procedures for participation in research

In order to sign up for research or mock interviews/assessment for outside activity credits, you must go to

<http://eku.sona-systems.com/>

The first time you go to the site, you need to create your own account by clicking below "New User?" Follow the instructions by creating a login and password, adding an (optional) alternate email address, **AND BE SURE TO SELECT THE SECTION OF EITHER 200, 250, 309 OR 310 YOU ARE ENROLLED IN FROM THE LIST PRESENTED. Be sure you select the correct section. Check for your instructor's name and the time of the class. There are many sections of some courses.**

If you are enrolled in more than one course that allows you to participate in research, you must set-up separate accounts for each class.

In order to receive credit for participating in research, you **MUST** bring your 5-digit ID code (from the participation sign-up system, it's in your profile in your account--*this is NOT the same as your EKU ID*) with you to the in-person studies. The researchers need this number to award you credit for participation.

Once your account is established, and after you have read some important information about privacy and ethics, you can begin to sign up for research. To sign up for research, click on “Study Sign-Up” and browse the available study descriptions and times.

For online studies, you will be asked to complete the study immediately after you sign-up.

For in-person studies, you will be asked to sign-up for a timeslot offered by the researcher that fits your schedule.

Once you have found a study that looks interesting and/or fits your schedule, click on that link to select the timeslot. You should receive email confirmation of your sign-up shortly. If you have to cancel your appointment, you must do so at least 24 hours in advance, by clicking the cancel link for that particular appointment. If you do not show up for your appointment without canceling at least 24 hours in advance, you will receive an NO SHOW PENALTY. It is very important for researchers and interviewers that you show up for activities you have signed up for, or that you give advance notice of your inability to attend. So please be careful to select studies that fit your schedule.

You can track your progress toward completing this requirement by logging into your account. If you forget the time or location of a study you signed up for, you can always get that information from logging in to your account.

If you have problems using the research sign-up system or questions about it, please email [psyresearch@eku.edu](mailto:psyresearch@eku.edu).