

**SYLLABUS**  
**Experimental Design in Psychology**  
**PS 301/301L**  
**Fall 2015**

**INSTRUCTOR:** Beth Martin, Ph.D.  
**OFFICE:** Dolan E376  
**PHONE:** 216-397-1530  
**E-MAIL:** Martin@jcu.edu  
**CLASS TIME:** T: 11 am – 12:45 pm  
TH: 11 am – 1:45 pm

**CLASSROOM:** Dolan E 352

**OFFICE HOURS:** Aug 29 – Sept 23 T: 1pm – 3:30 W: 2pm - 4 TH: 2 pm – 3:30 pm  
Sept 24 – Dec 12 T: 1 pm – 3:30 W: 8am – 11am TH: 2 pm – 3:30 pm

\* This course satisfies the **W requirement** for the core curriculum

---

*REQUIRED TEXTS:* Smith, R.A. & Davis, S.F. (2013) The psychologist as detective. 6<sup>th</sup> edition) Upper Saddle River, NJ: Prentice Hall ISBN:978-0-205-85907-8

American Psychological Association. (2010). Publication Manual of the American Psychological Association (6<sup>th</sup> edition). Washington D.C.: Author. ISBN: 978-1-4338-0561-5

---

Course Description:

Prerequisites: MT 122, 223 (with at least a C- in each); corequisite: PS 301L.  
Introduction to the scientific method as it is used to design, conduct, and analyze experiments in psychology. Students will write a manuscript in APA style describing their research.

Course Goals:

In this course students will learn

1. how psychologists use the scientific method to study human behavior.
2. how to interpret and think critically about published research
3. to develop methods of investigating questions about human behavior
3. to apply statistical thinking and analysis to data
4. to communicate experimental results in APA style writing
5. to judge whether research meets ethical standards

## Course Objectives:

Students will demonstrate their ability to:

1. Find journal articles and information relevant to a topic.
2. Plan, with a group, an experiment that addresses an issue in the selected topic area.
3. Participate, with other group members, in collecting and analyzing data.
4. Independently write a manuscript, following APA style, describing the group project.
5. Provide appropriate comments to other students on drafts of their manuscripts.
6. Explain and apply fundamental principles of research in psychology including ethical behavior, the design of studies to test specific hypotheses, and the interpretation of statistical findings.
7. Become proficient using the Qualtrics software
8. Become skilled at using SPSS software with psychological data
9. Identify confounds and methodological errors in research studies

## **This course meets the following university learning outcomes:**

1. Demonstrate an integrative knowledge of human and natural worlds
3. Apply creative and innovative thinking
4. Communicate skillfully in multiple forms of expression
7. Apply a framework for examining ethical dilemmas
8. Employ leadership and collaborative skills

## **This course meets the following Psychological Science learning outcomes:**

1. A fundamental knowledge base in the core areas of psychological science;
2. Critical thinking skills and their application;
3. Proficiency in the use of the language of psychological science in both written and verbal form;
4. Expertise in the methods of information gathering, organization, and synthesis as applied to psychological science;
5. Mastery of the experimental method and statistical analysis as practiced by psychologists;
6. An understanding of the ethics and values of the discipline;

## Course Requirements:

### 1. Exams

There will be three exams during the semester (the third one is during finals week). Each exam will be non-cumulative. Each exam will consist of a variety of questions. The questions will be based on lectures, labs and the textbook. There will be an applied section in some of the exams. I will give you the exact format for each exam in the week prior to that exam. [Meets Department Learning outcomes: 1, 2, 3, 5, 6]

### 2. Labs

Labs are required as part of the course. You are responsible to be here and participate in the lab. Many of the lab assignments will be done independently. However, some of the lab assignments will be with your lab group. If I feel that lab members are not working well together (or conversely are getting along too well and not getting work done) I reserve the right to disband a lab group. From that point forward all lab members will work independently. All labs must be completed and turned in on the day that they are assigned. Lab work cannot be made up. If you

miss a lab you will receive a 0 for that lab grade. Your lowest lab grade will be dropped. Labs will be graded as follows:

0 points=absent/did not participate in work; work complete but mostly incorrect

2 points= mostly complete work, mostly correct; complete work with few errors

[Meets Department Learning outcomes: 1, 2, 3, 4, 5, 6]

### **3. Class Attendance/Participation**

Class attendance and discussion are required as part of this course. You will be awarded one point for every class period in which you are present – not counting exam days or days that class is canceled due to weather or other circumstances. Attendance will be taken at every class period.

### **4. Group Project**

You will be required to complete a group research project. Along with your 3 lab members, you must identify a hypothesis, design a study to test the hypothesis, submit a proposal to and gain approval from the IRB at John Carroll, collect the data, analyze the data and write a final report in APA format. Therefore, the final report should have a title page, an introduction, methods, results and discussion and reference section. It is expected that the methods and results section among lab members will be similar. However, the introduction and discussion section students are to work on independently. [Meets Department Learning outcomes: 1, 2, 3, 4, 5, 6]

### **5. CITI Training**

Prior to turning in the IRB forms for approval to collect data each student must complete the CITI training. It is basically an online training program for ethics in collecting data using human subjects. [Meets Department Learning outcome: 6]

### **5. Peer Review**

You will each be part of a 4 person team. You will do 3 reviews 3 different times (total is 9 reviews).

1. First review is for APA format only (Title page and Intro only):

You will find just APA errors. Do not fix them, but indicate it is wrong and note the page in the APA manual that explains how it is to be done.

You get 1 point per error found – max is 5 each. If each person on your teams finds 5 errors that is 20 points. If there are less than 20 errors in the paper and you find them all you will get 20 points each. If you say something is wrong and it is not, you will lose 1 point.

2. Second review is for writing (Intro and method):

You will be responsible for reviewing one of the drafts that you read earlier.

Instructions on how to complete the peer review will be given out in class. In general, your task in reviewing others' drafts is to give helpful feedback, but not to rewrite the papers for them. On a separate paper write comments about the clarity of what the writer said. If there are things you do not understand, say so here. If you don't follow the logic of an argument they are making, point this out. Please note: reviews will be graded. Just saying "a great paper" and other encouraging comments will not earn you credit for doing a review if there is anything about the paper that could be improved. You will learn a great deal from this process if you do a thorough job.

3. Third review is writing only (final paper): Instructions are the same as #2 above.  
[Meets Department Learning outcomes: 1, 2, 3, 4, 5, 6]

## **POLICIES**

### **Policy on Make-up Exams**

If a student misses an exam and has an adequate excuse, he/she may take a make-up exam. All make-up exams will be taken M-W of finals week. Therefore, if you are in need of a make up exam **do not** make travel arrangements to leave early at the end of the semester. This is the only time you will be given to make up an exam. If an exam is missed and no make-up is taken a zero will be given for that exam. See me at once if you miss an exam or anticipate missing an exam.

### **Policy on Late Assignments**

An assignment will be considered late if turned **in after the start of the class period** in which the assignment was due. Late assignments will be penalized by a reduction of 8% of the total grade for each day they are late.

### **Policy on Cell Phones**

Phones must be turned off at all times. Texting is not allowed during class. Leaving class to text or make calls in the hallway is not allowed. If there is an emergency you should clear it with me prior to the beginning of class.

### **Eating or Drinking in Class**

Because our classes are quite long you are allowed to bring drinks and snacks to class. You must practice 'liquid management' so that you are not leaving class except during the designated break each day.

### **Laptop Computers**

Computers may be brought to class, but may only be used for work related to the course. If people are working on other courses, surfing the internet, or e-mailing, this policy will be changed.

**DOCUMENTATION AND ACCOMMODATION OF DISABILITIES:** In accordance with federal law, if you have a documented disability (learning, psychological, sensory, physical, or medical) you may be eligible to request accommodations from the Office of Services for Students with Disabilities (SSD). To make a request for accommodations, please contact SSD Director Allison West at (216) 397-4967 or visit the SSD office, located in Room 7A, on the garden (lower) level of the Administration Building. Please keep in mind that accommodations are not retroactive so it is best to register with SSD at the beginning of each semester. Only those accommodations approved by SSD will be recognized by your instructors. Please contact SSD if you have further questions.

**ACADEMIC HONESTY** For the full JCU policy on academic honesty, please refer to the 2015-2017 Undergraduate Bulletin, pp. 110-112.

Academic honesty, expected of every student, is essential to the process of education and to upholding high ethical standards. Cheating, including plagiarism, inappropriate use of technology, or any other kind of unethical behavior, may subject the student to severe academic penalties, including dismissal.

All work submitted for evaluation in a course, including tests, term papers, and computer programs, must represent only the work of the student unless indicated otherwise.

Material taken from the work of others must be acknowledged. Materials submitted to fulfill requirements in one course may not be submitted in another course without prior approval of the instructor(s).

Concerns about the propriety of obtaining outside assistance and acknowledging sources should be addressed to the instructor of the course before the work commences and as necessary as the work proceeds.

## Points and Grades for Course

<i>Course Requirements</i>	<i>Points</i>
Exam I	100
Exam II	100
Exam III	100
Class Attendance/Participation	25
Research Project	250 (total points)
<i>Title Page</i> Review 1 (10 pts)  Final paper (5 pts)	15
<i>Abstract</i> Review 3 (5 pts) Final paper (10 pts)	15
<i>Introduction</i> Review 1 (10 pts) Review 2 (10 pts) Review 3 (15 pts) Final paper (30 pts)	65

<i>Method</i>	45
Review 2 (15 pts)	
Review 3 (15 pts)	
Final paper (15 pts)	
<i>Results</i>	40
Review 3 (20 pts)	
Final paper (20 pts)	
<i>Discussion</i>	40
Review 3 (20 pts)	
Final paper (20 pts)	
<i>References</i>	20
Review 3 (10 pts)	
Final paper (10 pts)	
<i>Figures, &amp; Tables</i>	10
Review 3 (5 pts)	
Final paper (5 pts)	

---

Peer Review	Time 1	20
	Time 2	20
	Time 3	20

---

Lab Grade	45
-----------	----

---

<b>Total Possible Points</b>	<b>680</b>
------------------------------	------------

---

## Grading Scale

Grade	Points
A	612 - 680
B+	596 - 611
B	544 - 595
C+	528 - 543
C	476 - 527
D+	460 - 475
D	408 - 459
F	Below 408

