

# PSYC 301 – Research Methods in Psychology

## Spring 2014

**Class Location:** CAS B35

**Class Hours:** Monday Wednesday 9:30 – 10:45

**Instructor:** Tilbe Göksun

**Office Hours:** Monday Wednesday 11:00 – 12:00 or by appointment

**Office Location:** SOS Z11A

**Office Phone:** 1872

**Email:** [tgöksun@ku.edu.tr](mailto:tgöksun@ku.edu.tr)

### **Course Assistants:**

NAME	E-mail	Office Location	Office Hour
Ezgi Aytürk	<a href="mailto:eayturk@ku.edu.tr">eayturk@ku.edu.tr</a>	SOS Z23A	Tuesday 12:30-13:30
Sezin Öner	<a href="mailto:seoner@ku.edu.tr">seoner@ku.edu.tr</a>	SOS Z23A	Tuesday 12:30-13:30
Burcu Beşiroğlu	<a href="mailto:bbesiroglu13@ku.edu.tr">bbesiroglu13@ku.edu.tr</a>	SOS Z33	Thursday 15:30-16:30

*In addition to office hours, if you would like to meet your TA, you need to make your appointments 48 hours ahead of the time.*

**Prerequisite:** PSYC 201 and MATH 201 or MATH 206

### **Course Description and Objectives**

This course covers the research process in behavioral and social sciences from question generation to presenting research outcome. We will give particular emphasis on designing research and the analyses of data using inferential statistics. We have two main aims: (1) providing the fundamentals of research and (2) providing hands-on research experience in addition to the coverage of various research topics and examples of research.

### **Learning Objectives**

In this course students develop a number of skills. At the end of this course, students will:

- Be able to think critically, scientifically, and systematically about research.
- Learn and evaluate psychological research
- Gain hands-on experience on conducting research on each level from conception of ideas to designing a study, data collection, data analysis, writing research report, and explaining your research to others.
- Be able to think alternative designs, methods, and analyses for research questions that contribute to creative problem solving skills.

### **SPSS Lab Session**

There is a separate session for SPSS (Statistical Package for Social Sciences) instruction. This session is structured to be semi-independent, focusing on the practical aspects of the SPSS use. Your course assistants will teach the SPSS lab session. Information will be available in the separate syllabus provided in that session. This lab session is required and you all will be expected to attend to each session.

## **Course Materials**

### ***Books***

Smith, R. A., and Davis, S. F. (2013). *The Psychologist as Detective* (6<sup>th</sup> edition). New Jersey: Pearson.

American Psychological Association. (2009). *Publication Manual* (6<sup>th</sup> edition). Washington, D.C.: Author.

The course will rely primarily on the Smith & Davis book, which will provide as the source for two main components of the course, research methods and statistics. You are required to read the chapters in your textbook *prior* to the lecture. The content of the lectures will exceed the coverage of the textbook.

The *Publication Manual* of the APA is the standard we will use in writing the reports of the projects. It is a reference book and will be useful for all psychology courses.

## **Course Assessment and Grading**

### ***1. Assignment and Quizzes***

There will be (mostly) in-class assignments and pop-quizzes throughout the semester. These assignments will aid you to calculate statistics and interpret your results. They will count **10%** of your grade.

### ***2. Tests***

In addition to the assignments and quizzes, there will be one mid-term test (**on April 2**) and one final test (**TBA**). The final test is comprehensive and the emphasis of the final will be on application of your research knowledge. The midterm will count **15%** of your grade and the final will count **20%** of your grade. There will be a review session before the midterm exam. You need to come to class with your questions. If you are not able to come to the exam (e.g., medical reasons), you must send me an email before exam time and provide your report of excuse. I will arrange a make-up exam time. If you do not show up in the make-up exam date without an excuse and/or appropriate written documentation, you will receive “0” from the exam with no exceptions.

### ***3. Project***

One of the aims of this course is to gain hands-on experience with research. We will have group research projects. Each group is supposed to consist of 3 students. You can create your own group and tell your group members to your TAs at the end of the first week. Each group will design an experimental or quasi-experimental study. You need to keep us informed about your project at all times. For certain parts of the project, I will ask each group member to work on their own and send us an individual report rather than a group report. Below I give you a list what you need to do for each project. While you follow the steps that constitute the project, you can use this as a checklist. The project will count **30%** of your grade (**5%** draft paper, **15%** final paper, and **10%** presentation).

### ***4. Extra credit***

I will not take attendance in each class. However, there will be pop-quizzes you can miss. For those who attend to all classes, I'll give extra credits (**1.5 points** to your final grade). Also, for Steps 1 to 4 of the research project (see below), your TA's will evaluate you or your group out of 3 points. At the end of the semester if you get an average of '2' from these assignments you will again get extra credit (**1.5 points** to your final grade). Thus, in total you may get **3 extra points**.

## RESEARCH PROJECT STEPS

\_\_\_\_ **Step 1. Research question:** Think about your research question and decide on one. Your research question should be simple and inherently answerable. Then you will need to find 7-9 articles related to your research area from scientific journals (those listed in PsychINFO, PsycARTICLES, or Social Science Citation Index). In selecting the articles, keep in mind that you will use them to build up an argument for your hypothesis. Think about the question as a group. Yet, each student will find 2-3 articles by his/her own and send the list to his/her TA (by **Feb 19**). Then, you can make one final reference list for the group.

\_\_\_\_ **Step 2. Background:** After reading the articles, as a group, you will write two-paragraph summaries for each article, particularly making the connections between your research question and the issues in the articles. Each student in a group is required to read all articles (as a group, submit copies of the articles and the summaries by email to your course assistant by **Feb 24**)

\_\_\_\_ **Step 3. Hypothesis:** As a group, you will submit a hypothesis and a justification of this hypothesis, relating it to the articles you had read. This will be a synopsis of the introduction section of your paper (email to your TA by **Feb 24**)

\_\_\_\_ **Step 4. Designing a study:** As a group, you will design a study to test your hypothesis. You start thinking about it from the very beginning of the class. Yet, you also will write what sort of a study you plan to conduct with details including, who your research participants will be and how you will collect data from them. You can consult your research assistants about the designs. You will submit your design to me and to your TA by **Feb 26**. Your assistants will submit feedback to you and approve your designs in a few days.

\_\_\_\_ **Step 5. Discussion of designs:** Once your design is approved, you will prepare materials necessary for data collection, submit them to your assistant and receive their approval on them by **Feb 28** (of course you should be thinking about the materials from the beginning of your research ideas). We will discuss some of the designs in class in **Week 6**.

\_\_\_\_ **Step 6. Ethics Committee:** You will fill out a form necessary for the review of the ethics committee. You should work with your assistant in preparing this form. The completed form is due **March 6**, to your TA. Keep in mind that you need to work with your TA *before* this date to make sure that your application involves all the required parts. This date is very important! We have to send your forms to ethics committee by **March 6**.

\_\_\_\_ **Step 7. Data Collection:** Once you get approval from the ethics committee you will start collecting data. If you will use the Research Participant Pool of Koç University, you should consult with the coordinator of the Pool. For data collection, each student in a group is expected to contribute to data collection. At the end of data collection, you will submit your TA how many participants each person tests.

\_\_\_\_ **Step 8. Analyses:** After data collection, you will need to consult with your assistant about how to enter your data and you will discuss with them how your data need to be analyzed. Based on this discussion, you will analyze your data.

**Step 9. Paper Draft:** As a group, you will write a full draft of the paper that will consist of all parts expected in a regular APA format paper such as the abstract, introduction, method, results, discussion, and references as well as tables, figures, and appendices if necessary. Each group will submit their paper to another group for review. However, the group members will write independent reviews for the other group's paper. I will determine the reviewers and announce them before the due date. You will also e-mail a copy of your draft to your assistant by **May 7**.

**Step 10. Peer review:** Prepare your written reviews of your classmates' papers using a guide we will provide you. Then, return the reviews to the group members and to your TA by **May 9**.

**Steps 11-12. Final draft and Paper Presentation:** You will revise your paper considering their reviews and submit a final copy of your group paper to your assistant (by **May 14**). Also, as a group, you will give a 15- to 20-minute **presentation** of your paper. Even though it is a group presentation, each person is expected to talk and present parts of the research (**May 12-14**).

### **Grading Summary:**

<b>Assignments &amp; Pop-quizzes</b>	<b>10%</b>
<b>Midterm</b>	<b>15%</b>
<b>Final Exam</b>	<b>20%</b>
<b>Project Paper (5% draft + 15% final)</b>	<b>20%</b>
<b>Paper Presentation</b>	<b>10%</b>
<b>SPSS Lab Session</b>	<b>25%</b>
<b>Total</b>	<b>100%</b>

### **Grades:**

A 95-100	C+ 77-79
A- 90-94	C 73-76
B+ 87-89	C- 70-72
B 83-86	D+ 65-69
B - 80 - 82	D- 60-64
	F below 60

## TENTATIVE WEEKLY CLASS SCHEDULE

Week	Date	Topics	Readings	Assignment
1	Feb 03 - 05	Overview, Scientific Study	<ul style="list-style-type: none"> <li>• Syllabus,</li> <li>• Ch 1</li> <li>• Ch 2 (14-29)</li> </ul>	<b>Choose your groups</b>
2	Feb 10 - 12	Ethics, Methods of Study	<ul style="list-style-type: none"> <li>• Ch 2 (29-49)</li> </ul>	
3	Feb 17 - 19	Using Scientific Methods	<ul style="list-style-type: none"> <li>• Ch 5</li> </ul>	<b>STEP 1</b>
4	Feb 24 - 26	Conducting Experiments	<ul style="list-style-type: none"> <li>• Ch 6</li> <li>• Ch 7</li> </ul>	<b>STEP 2, STEP 3, STEP 4, and STEP 5</b>
5	March 03 - 05	Validity	<ul style="list-style-type: none"> <li>• Ch 8</li> </ul>	<b>STEP 6</b>
6	March 10 - 12	Experiment Design: Two Groups	<ul style="list-style-type: none"> <li>• Ch 9</li> <li>• Ch 10</li> </ul>	
7	March 17 - 19	Experiment Design: More than two groups	<ul style="list-style-type: none"> <li>• Ch 11</li> </ul>	
8	March 24 - 26	Experiment Design: More than one variable	<ul style="list-style-type: none"> <li>• Ch 12</li> </ul>	
9	March 31 – April 2	<b>Review and Midterm</b>		<b>Midterm (April 2)</b>
10	<b>No Class: SPRING BREAK</b>			
11	April 14 -16	Mixed design, within subjects, Other designs	<ul style="list-style-type: none"> <li>• Ch 13</li> </ul>	
12	April 21	Survey, Correlation, Regression	<ul style="list-style-type: none"> <li>• Ch 4</li> </ul>	<b>No class on April 23</b>
13	April 28 -30	Writing Research Papers	<ul style="list-style-type: none"> <li>• Ch 14</li> </ul>	
14	May 5 - 7	Writing Research Papers Review and Wrap-up		<b>STEP 9 (Full Paper Draft by May 7) STEP 10 (Peer Review by May 9)</b>
15	May 12 - 14	<b>STEP 11 Class Presentations</b>		<b>STEP 12 FULL PAPER (May 14)</b>
<b>FINAL (TBA)</b>				

## Academic Integrity

Students are expected to follow Koç University policy for academic conduct. Please review the information provided on the University main homepage from the following links:

**Rules and Regulations:** <http://dos.ku.edu.tr/regulations>

**Classroom Code of Conduct:** <http://vpaa.ku.edu.tr/academic/classroom-code-of-conduct>

**Student Code of Conduct:** <http://vpaa.ku.edu.tr/academic/student-code-of-conduct>

## Academic Dishonesty

### Koç University Statement on Academic Honesty with Emphasis on Plagiarism

Koç University expects all its students to perform course-related activities in accordance with the rules set forth in the Student Code of Conduct (<http://vpaa.ku.edu.tr/academic/student-code-of-conduct>). Actions considered as academic dishonesty at Koç University include but are not limited to cheating, plagiarism, collusion, and impersonating. This statement's goal is to draw attention to cheating and plagiarism related actions deemed unacceptable within the context of Student Code of Conduct:

All individual assignments must be completed by the student himself/herself, and all team assignments must be completed by the members of the team, without the aid of other individuals. If a team member does not contribute to the written documents or participate in the activities of the team, his/her name should not appear on the work submitted for evaluation.

**Plagiarism** is defined as 'borrowing or using someone else's written statements or ideas without giving written acknowledgement to the author'. Students are encouraged to conduct research beyond the course material, but they must not use any documents prepared by current or previous students, or notes prepared by instructors at Koç University or other universities without properly citing the source. Furthermore, students are expected to adhere to the Classroom Code of Conduct (<http://vpaa.ku.edu.tr/academic/classroom-code-of-conduct>) and to refrain from all forms of unacceptable behavior during lectures. Failure to adhere to expected behavior may result in disciplinary action.

There are two kinds of plagiarism: Intentional and accidental. Intentional plagiarism (Example: Using a classmate's homework as one's own because the student does not want to spend time working on that homework) is considered intellectual theft, and there is no need to emphasize the wrongfulness of this act. Accidental plagiarism, on the other hand, may be considered as a 'more acceptable' form of plagiarism by some students, which is certainly not how it is perceived by the University administration and faculty. The student is responsible from properly citing a source if he/she is making use of another person's work. For an example on accidental plagiarism, please refer to the document titled "An Example on Accidental Plagiarism".

If you are unsure whether the action you will take would be a violation of Koç University's Student Code of Conduct, please consult with your instructor before taking that action.

### **An Example on Accidental Plagiarism**

This example is taken from a document prepared by the City University of New York. The following text is taken from Elaine Tyler May's *Myths and Realities of the American Family*:

“Because women's wages often continue to reflect the fiction that men earn the family wage, single mothers rarely earn enough to support themselves and their children adequately. And because work is still organized around the assumption that mothers stay home with children, even though few mothers can afford to do so, child-care facilities in the United States remain woefully inadequate.”

Below, there is an excerpt from a student's homework, who made use of May's original text:

“As Elaine Tyler May points out, “women's wages often continue to reflect the fiction that men earn the family wage” (588). Thus many single mothers cannot support themselves and their children adequately. Furthermore, since work is based on the assumption that mothers stay home with children, facilities for day care in this country are still “woefully inadequate” (May 589)”.

You may think that there is no plagiarism here since the student is citing the original author. However, this is an instance of accidental plagiarism. Although the student cites May and uses quotation marks occasionally, the rest of the sentences, more specifically the following section: “Thus many single mothers cannot support themselves and their children adequately. Furthermore, since work is based on the assumption that mothers stay home with children, facilities for day care in this country are still “woefully inadequate.” (May 589)” almost exactly duplicates May's original language. So, in order to avoid plagiarism, the student either had to use quotation marks for the rest of the sentences as well, or he/she had to paraphrase May's ideas by using not only his/her own words, but his/her own original ideas as well. You should keep in mind that accidental plagiarism often occurs when the student does not really understand the original text but still tries to make use of it. Understanding the original text and understanding why you agree or disagree with the ideas proposed in that text is crucial both for avoiding plagiarism and for your intellectual development.

Reference(s):

*Avoiding and Detecting Plagiarism: A Guide for Graduate Students and Faculty.*  
The Graduate Center. City University of New York, 2012. Web.  
<[http://www.gc.cuny.edu/CUNY\\_GC/media/CUNY-Graduate-Center/PDF/Publications/AvoidingPlagiarism.pdf](http://www.gc.cuny.edu/CUNY_GC/media/CUNY-Graduate-Center/PDF/Publications/AvoidingPlagiarism.pdf)>