PSYCH 4973  
Human Cognition Capstone  
Writing Intensive  
Fall 2017  
Tuesdays & Thursdays 9:30 – 10:45 am  
Agriculture Building 2-11

Instructor: Dr. Lisa M. Bauer  
Office: 215 McAlester Hall  
Telephone: 882-3675  
Email: bauerlm@missouri.edu

Please email me from your MU account. University policy requires all email communication between instructors and students be conducted through the student’s MU account. When you email me please indicate the course in which you are enrolled.

Office Hours: Tuesdays 3:30 – 4:30pm (except on 9/5, 10/3, 11/7, and 12/5) and by appointment. Please feel free to email me to schedule an appointment. I am happy to meet with you at a time (Monday through Friday) that is convenient for both of us.

Teaching Assistant:
Email:  
Office Hours:  
Office Location:

Writing Intensive Tutor: Luke Dietterle  
Office Location: Writing Center  
Please remember that you can schedule appointments with any of the writing tutors. Please call the Writing Center (882 – 2496) to schedule an appointment.

Required Texts


Recommended Text
Supplementary Readings
During the course of the semester, you will be asked to obtain peer-reviewed journal articles from the library. Some of the articles that you will need are available in electronic form from online databases. You have free access to these databases as a registered student at Mizzou. Other articles may not be available in electronic format, and you will have to retrieve them from the library shelves or through inter-library loan. I also encourage you to look through human memory and/or cognitive psychology textbooks for more information about cognition research and for ideas for a research project.

Course Overview and Objectives
This is one of the capstone courses offered for students majoring in psychology. You will gain a better understanding of human cognition research by attending class lectures, reading research articles, participating in classroom demonstrations, completing lab assignments, and conducting an empirical research project. Course objectives focus on the development and integration of knowledge and skills in hypothesis formation, critical evaluation of empirical research, research methodology, data collection procedures, data analysis, and technical writing. Please note that this course is a writing intensive course. Throughout the semester you will be asked to write a number of papers in APA format. In addition to teaching you about psychological research and APA format, the assignments have been created to help you develop your writing skills.

Upon completion of this course, you should:
1. Have an advanced understanding of the research methods used in cognitive psychology.
2. Have the skills and knowledge necessary to conduct research in cognitive psychology and related fields.
3. Have the ability to write a paper that adheres to the guidelines set forth by the American Psychological Association (APA).
4. Have further developed your writing, reviewing, and editing abilities.
5. Have enhanced your critical thinking skills and communicate effectively.

Course Format
Class meetings will consist of lecture, discussions, laboratory demonstrations, and exercises.

Canvas
I will be posting announcements and course content on Canvas. To access Canvas, go to https://courses.missouri.edu/. Under the course login, select Canvas; then, enter your PawPrint and password. If you are having difficulty logging in to the course or you do not see the course listed; please contact the DoIT Help Desk at help.missouri.edu by phone at 573-882-5000.

Use of Electronic Devices
While laptops and tablets are allowed in class for note-taking purposes, I reserve the right to ask you to put away any electronic devices (including cell phones) if they are distracting others (e.g., your classmates, your professor, guest speakers). Please place all electronic devices on silent mode prior to the beginning of class, and refrain from browsing the web or messaging during class time. In order to ensure a supportive learning environment, you may not record our class meetings (unless you have a documented accommodation) and you may not take pictures of your classmates or your professor during class. Please see additional policies on electronic/digital recordings on page 9 of this syllabus.
Based on research, I encourage you to take notes without using electronic devices (e.g.,
http://pss.sagepub.com/content/early/2014/04/22/0956797614524581.short).

Course Requirements

1. Demonstration Reports (2 at 10 points each). You will be asked to participate in several
classroom demonstrations/activities. For two of these demonstrations, you will be asked to
compose a brief description of the study, identify the research design, describe strengths and
weaknesses of the demonstration, and identify possible areas for future research. These
assignments were created to refresh your memory about research terminology (e.g., independent
variable, dependent variable, between-subjects design, within-subjects design, correlational
study, experimental study), gain a deeper understanding of cognition research methodology, and
familiarize you with APA format prior to asking you to work on your own research study.

2. Research Project. The purpose of the research project is to provide you with hands-on
research experience. Working in a small group (2 – 4 people) you will develop a hypothesis,
design a study to test it, collect data, and analyze your results. Your course project must build on
prior research. While you may work together to develop and test a hypothesis, the majority of the
written work must be completed independently. You can, and should, work together to form a
testable hypothesis, gather relevant research, develop stimuli for the study, write the informed
consent form, collect data, and analyze the data. However, your paper must be your own work.
You are to write your own sections of the APA paper. To aid you in what may be your first
attempt at writing in APA style, you are asked to provide drafts of the main sections of your
course project proposal. Please see the tentative schedule for due dates.

   a. Preliminary Reference List (10 points). You will be asked to conduct your own
PsycINFO literature search and generate an APA-style reference list of 10 scientific peer-
reviewed articles that are relevant to your research topic. This assignment was created to help you
gather literature for your research project and to familiarize you with how to annotate references
in APA format. You are to work on your own reference list. Once you turn in your preliminary
reference list for a grade, you can share your reference lists with your team members.

   b. Article Summaries (4 at 5 points each). You will be asked to write summaries of 4
scientific peer-reviewed journal articles. The article summaries will be relevant to your research
topic. Each summary should be approximately 2-3 pages in length. These summaries will be
useful in developing your research question and planning your research design. The summaries
may also be re-organized, edited, and used in your literature review.

   c. Preliminary Research Project Planning Form (15 points). The purpose of this
planning form is to help you and your research team to develop a research hypothesis and design
a study that will enable you to test your hypothesis. You are asked to individually complete the
form and then meet as a team to discuss your ideas. Hopefully, by sharing your ideas your project
will begin to take shape. Each research team will turn in one completed preliminary research
project planning form. Therefore, all team members who worked on the form will receive the same grade. I will provide feedback about your hypothesis(es) and design.

d. **Drafts of the Research Project (40 points total).** During the course of the semester you will be asked to turn in drafts of each of the following: Title page, Abstract, Introduction, Method, Results, Discussion, andReferences. **You are to write your own drafts.** This enables you to get feedback on each section of your research paper before turning in a final draft. Please make sure you understand the feedback. If you have any questions, please feel free to ask me. I encourage you to schedule an appointment to meet with me and/or your TA to go over the comments. Please keep all copies of the graded drafts. You will be asked to submit the drafts with your research proposal and your final research paper.

e. **Research Proposal (50 points).** You will write a 7-12 page research proposal that will include a comprehensive introduction and literature review, method section (including your stimuli and informed consent form), proposed analysis section, and a reference section. You must receive my approval of your proposed study before you can start collecting data. Please keep your graded proposal. You will need to turn your graded proposal in with your final research project. Additional information will be provided in class.

f. **Research Project (100 points).** You will write your own 12-20 page research report on the research project you conducted. The manuscript should include Abstract, Introduction, Method, Results, Discussion, and Reference sections. Please turn in the graded proposal along with your final manuscript. Additional information will be provided in class. Failure to contribute equally (e.g., design, data collection, data analysis) to the group project will result in a loss of points from your research project grade. Failure to collect your share of data will result in a 20% point reduction.

g. **Research Presentation (15 points).** Using PowerPoint, you will deliver an oral presentation detailing aspects of your research project. The presentation should be approximately 10 minutes long and should include the following: 1) A review of past research conducted in the substantive area of study, emphasizing the findings and methodologies of previous research, 2) An analysis of the problems and limitations of past research and a rationale for the current study, 3) A description of the methods employed in the research including a description of participants, measurement instruments, and procedures, 4) A brief description of the results, and 5) A brief discussion of the implications of the findings.

3. **Classroom Attendance and Participation (30 points).** Throughout the course of the semester you will be asked to participate in lab demonstrations, classroom discussions, and peer editing sessions. Your attendance is strongly encouraged. In fact, you can only receive participation points if you attend class (the entire class period) and participate in the class discussions/demonstrations/exercises. Regardless of your attendance, you are responsible for all announcements made, policies set, and materials covered in class. An absence does not mean that you can turn in assignments late. Please note that the assignments will require material covered in both the text and material covered in class (some of which will not be in your text).
Policy on Late Assignments
Unless otherwise stated, assignments will be collected at the beginning of class. Therefore, you should not be printing and compiling materials during class time. Assignments received after the beginning of the class are subject to a late penalty. Assignments received by 5 pm on the due date will receive a 5 percent penalty. After that, your assignment will receive an additional 10% late penalty for every day (including Saturdays and Sundays) they are late.

Grading

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Points</th>
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<tbody>
<tr>
<td>Demonstration Reports</td>
<td>20</td>
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<tr>
<td>Preliminary Reference List</td>
<td>10</td>
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<tr>
<td>Article Summaries</td>
<td>20</td>
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<tr>
<td>Preliminary Research Project Planning Form</td>
<td>15</td>
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<tr>
<td>Drafts</td>
<td>40</td>
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<tr>
<td>Research Proposal</td>
<td>50</td>
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<tr>
<td>Research Paper</td>
<td>100</td>
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<tr>
<td>Research Presentation</td>
<td>15</td>
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<tr>
<td>Class Attendance/Participation</td>
<td>30</td>
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300 points total

Grading Rubric
Of the 300 possible points available during the semester, your point total will earn you a grade as follows:

A+ = 294+      B+ = 261+      C+ = 231+      D+ = 201+      F = < 180
A  = 279+      B  = 249+      C  = 219+      D  = 189+      A- = 270+      B- = 240+      C- = 210+      D- = 180+

Final grades are determined by the points you earn in the class. It is to your advantage to attend class regularly and to stay on top of the assignments throughout the semester so you are not in the position at the end of the semester of missing the next higher grade by less than a point or two.
# Tentative Course Outline and Assignment Schedule

Below is the tentative schedule for topics that will be covered in class. In order to make sure you understand the material, please read the readings ahead of time. Please note that additional readings will be assigned in class.

<table>
<thead>
<tr>
<th>Dates</th>
<th>Topic</th>
<th>Reading Assignment</th>
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<tbody>
<tr>
<td>Aug 22 – 24</td>
<td>Introduction to the Course</td>
<td>Assigned Journal Articles</td>
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<tr>
<td></td>
<td>Introduction to the Study of Human Cognition</td>
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<td></td>
<td>Demonstration #1</td>
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<td></td>
<td><em>Think about a Research Topic</em></td>
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<tr>
<td>Aug 29 – 31</td>
<td>Studying Human Cognition</td>
<td>Assigned Journal Articles</td>
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<td></td>
<td>Selecting a Research Topic</td>
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<td></td>
<td>Demonstration #2</td>
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<td></td>
<td><em>Demonstration Report #1 Due (31st)</em></td>
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<td></td>
<td><em>Think about a Research Topic</em></td>
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<td></td>
<td><em>Work on Demonstration Report #2</em></td>
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<tr>
<td>Sept 5 – 7</td>
<td>Reviewing and Evaluating Research Articles</td>
<td>Assigned Journal Articles</td>
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<td></td>
<td>Citing References in APA Format</td>
<td>Chapters 1 – 6 &amp; 13</td>
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<tr>
<td></td>
<td>Conducting a Literature Review</td>
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<td></td>
<td>Formulating a Hypothesis</td>
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<td>Writing in APA Style</td>
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<td><em>Research Topic Due (5th)</em></td>
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<tr>
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<td><em>Demonstration Report #2 Due (5th)</em></td>
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<td><em>Preliminary Reference List Due (7th)</em></td>
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<td></td>
<td><em>Gather Articles Relevant to your Research Topic</em></td>
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<td></td>
<td><em>Work on Article Summaries</em></td>
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<tr>
<td>Sept 12 – 14</td>
<td>Writing in APA Style/Format</td>
<td>Chapters 9 &amp; 10</td>
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<td></td>
<td>Designing a Research Study</td>
<td>Assigned Journal Article(s)</td>
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<td></td>
<td><em>(Method: Participants, Procedure, and Stimuli)</em></td>
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<td></td>
<td><em>Article Summaries #1 &amp; #2 Due (12th)</em></td>
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<td><em>Article Summaries #3 &amp; #4 Due (14th)</em></td>
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<td></td>
<td><em>Work on Preliminary Research Project Planning Form</em></td>
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<tr>
<td>Sept 19 – 21</td>
<td>Creating Stimuli</td>
<td>Assigned Journal Article(s)</td>
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<td>Ethics in Research</td>
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<td><em>Preliminary Research Project Planning Form Due (19th)</em></td>
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<td></td>
<td><em>Work on Introduction and Method Section (see examples on Canvas)</em></td>
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<td>Sept 26 – 28</td>
<td>Ethics in Research</td>
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<td><em>Introduction and Method Draft Due (28th)</em></td>
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<td><em>Work on Research Proposal (see examples on Canvas)</em></td>
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| Oct 3 – 5 | Making Revisions  
Information about Data Analysis  
_work on Research Proposal (see examples on Canvas)  
You may turn your proposal in early if you would like |
| Oct 10 – 12 | Information about Data Collection  
Writing the Results and Discussion Sections  
_Research Proposals Due (12th) |
| Oct 17 – 19 | Data Collection  
_you must receive my approval before you can start collecting data.  
All group members must share data collection responsibilities. Failure to do so will result in a loss of points from your Final Research Project. |
| Oct 24 – 26 | Data Collection/Analysis |
| Oct 31 – Nov 2 | Data Collection/Analysis  
Enter Data and Run Analyses (step-by-step screenshots illustrating how to enter data and run analyses in SPSS can be found on Canvas; all team members should enter and analyze the data together during class time)  
Work on Results and Discussion Section (see examples on Canvas) |
| Nov 7 – 9 | Data Collection/Data Analysis  
Results and Discussion  
Enter Data and Run Analyses  
Work on Results and Discussion Section |
| Nov 14 – 16 | Creating an Oral Presentation  
_Draft of Results and Discussion Due (14th) for peer-editing  
_Draft of Results and Discussion Due (16th)  
Work on Final Paper |
| Nov 20 – 24 | Thanksgiving Break 😊 |
| Nov 28 – 30 | Presentations  
Work on Final Paper  
You may submit your Final Research Project early |
| Dec 5 – 7 | _Final Research Projects Due (5th)  
Presentations |
| Dec 11 | Final Exam Time: Monday 10 – 12  
Optional Class Meeting |

I will do my best to present the material as clearly as possible. If anything is unclear, please ask me to clarify the information. The TA and I will review your work thoroughly. If you do not
understand my comments, please come see me so I can try to explain them more clearly. I will be available during my office hours (and am more than willing to make a separate appointment with you) to answer any questions that you may have.

Please Note: This syllabus is subject to change. I reserve the right to change the nature, number, and weights of the course requirements. Any changes will be announced in class and posted on Canvas. Depending on how long it takes to discuss each topic, changes may or may not be made to this tentative schedule.

Other Policies and Resources

The Writing Center
Because this course is designated as a “Writing Intensive” (WI) course, we will work to improve your writing skills. One way that you can improve these skills is to take advantage of the services offered by the Writing Center. The Writing Center is located in the Student Success Center. The Center is comprised of a group of graduate students and faculty who work closely with instructors and students of WI courses to offer assistance with many aspects of research and writing. Our course is assigned a Writing Intensive (WI) Tutor who is specifically available to you whenever possible. Students may make an appointment with our assigned WI tutor or another WI tutor, or submit a paper to the Online Writery. You can learn more about the writing center by visiting: https://writery.missouri.edu/. At the end of the semester, the instructor will collect non-personal data from the Writing Center regarding usage. Use of the Writing Center’s services is recommended but not required.

Respect Others
Disrespectful behavior of any kind (for example, text messaging, searching the web, talking to friends during class, being rude to others) will not be tolerated and may result in the lowering of your grade. You will receive one warning. After the initial warning, you will receive a 5 point penalty for each occurrence thereafter.

Academic Honesty
Academic honesty is fundamental to the activities and principles of the University. All members of the academic community must be confident that each person’s work has been responsibly and honorably acquired, developed, and presented. Any effort (e.g., cheating on an exam, copying someone’s homework assignment, plagiarizing, writing someone else’s name on an in-class activity) to gain an advantage not given to all students is dishonest whether or not the effort is successful. The academic community regards academic dishonesty as an extremely serious matter. Consequences for such a breach may include academic sanctions from the instructor, including failing the course for any violation, to disciplinary sanctions ranging from probation to expulsion. When in doubt about plagiarism, paraphrasing, quoting or collaboration, please ask me.

For Students with Disabilities
If you anticipate barriers related to the format or requirements of this course, if you have emergency medical information to share with me, or if you need to make arrangements in case the building must be evacuated, please let me know as soon as possible. If disability related accommodations are necessary (for example, a note taker, extended time on exams, captioning),
please register with the Office of Disability Services (http://disabilityservices.missouri.edu), S5 Memorial Union, 882-4696, and then notify me in person and via email of your eligibility for reasonable accommodations. If you have flexible attendance and need to miss a class, it is your responsibility to email me prior to your absence. Only notification prior to your absence will enable you to complete an in-class activity (as long as it is completed within 3 days of the initial activity). For other MU resources for students with disabilities, click on "Disability Resources" on the MU homepage.

Notice of Nondiscrimination
The University of Missouri System is an Equal Opportunity/ Affirmative Action institution and is nondiscriminatory relative to race, religion, color, national origin, sex, sexual orientation, age, disability or status as a Vietnam-era veteran. Any person having inquiries concerning the University of Missouri-Columbia's compliance with implementing Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, the Americans With Disabilities Act of 1990, or other civil rights laws should contact the Assistant Vice Chancellor, Human Resource Services, University of Missouri-Columbia, 130 Heinkel Building, Columbia, Mo. 65211, (573) 882-4256, or the Assistant Secretary for Civil Rights, U.S. Department of Education. For more information, see: http://diversity.missouri.edu/resources/equity.html.

Intellectual Pluralism
The University community welcomes intellectual diversity and respects student rights. Students who have questions or concerns regarding the atmosphere in this class (including respect for diverse opinions) may contact the Departmental Chair or Divisional Director; the Director of the Office of Students Rights and Responsibilities (http://osrr.missouri.edu/); or the MU Equity Office (http://equity.missouri.edu), or by email at equity@missouri.edu.

Electronic/Digital Recording
Lectures may NOT be recorded on video or cell phones. You may NOT take pictures during class. That is, you may not take pictures of the lecture slides, your classmates, your TA, and/or your professor during class. My lectures are protected by state common law and federal copyright law. Course materials prepared by the instructor, together with the content of all lectures and review sessions presented by the instructor, are the property of the instructor. Video and audio recording of lectures and review sessions without the consent of the instructor is prohibited. University of Missouri System Executive Order No. 38 lays out principles regarding the sanctity of classroom discussions at the university. The policy is described fully in Section 200.015 of the Collected Rules and Regulations. In this class, students may not make audio or video recordings of course activity, except students permitted to record as an accommodation under Section 240.040 of the Collected Rules. All other students who record and/or distribute audio or video recordings and photographs of class activity are subject to discipline in accordance with provisions of Section 200.020 of the Collected Rules and Regulations of the University of Missouri pertaining to student conduct matters. Those students who are permitted to record are not permitted to redistribute audio or video recordings of statements or comments from the course to individuals who are not students in the course without the express permission of the faculty member and of any students who are recorded. Students found to have violated this policy are subject to discipline in accordance with provisions of Section 200.020 of the Collected Rules and Regulations of the University of Missouri pertaining to student conduct matters.