Experimental Psychology
Psychology 465-003 (CRN:26201)
Winter 2014

Arlo Clark-Foos, Ph.D.

**Lab/Lecture**
- Location: 1018 CB
- Time: MW, 3:00 - 4:15 PM

**Instructor**
- Office: 4056 CB
- Office Hours: T, 10 - 12, & By Appointment
- Email: acfoos@umd.umich.edu

  * Older editions are also acceptable texts.
  - Traditional Hard Cover Book (New:$114.33), ISBN : 9780078035159
  - Loose Leaf Text (put in your own 3-ring binder; $80.33, ISBN : 9780077606428

**Course Website (also on CTools):** [http://www-personal.umd.umich.edu/~acfoos/Courses/465.html](http://www-personal.umd.umich.edu/~acfoos/Courses/465.html)

**Library Resources:** [http://libguides.umd.umich.edu/psychology](http://libguides.umd.umich.edu/psychology)

**Course Overview:** Psychology uses statistical evidence to test the claims/hypotheses made by researchers. This course focuses on developing your understanding of statistics, experimental design, and their effective use in psychological research. Mastering this skill set enables one to provide stronger arguments to either support or refute a claim based on research findings. Understanding basic statistics should prove valuable to all citizens in their personal lives by enabling one to better separate fact from fiction or distortion.

**Course Objectives:**
- Demonstrate an understanding of the philosophy, principles, and methods of scientific research.
- Demonstrate an understanding of quantitative, experimental research techniques.
- Show the ability to conduct research using techniques and apparatus appropriate to experimentation in psychology.
- Evaluate the quality (e.g., internal and external validity, reliability, and ethical soundness) of particular research methods.
- Evaluate and interpret research and communicate research findings.

**Disability Services**
The University will make reasonable accommodations for persons with documented disabilities. Students need to register with Disability Resource Services (DRS) every semester they are enrolled for classes. DRS is located in Counseling & Support Services, 2157 UC. To be assured of having services when they are needed, students should register no later than the end of the add/drop deadline of each term.

**Academic Integrity**
The University of Michigan-Dearborn values academic honesty and integrity. Each student has a responsibility to understand, accept, and comply with the University’s standards of academic conduct as set forth by the Code of Academic Conduct ([http://www.umd.umich.edu/policies_st-rights/](http://www.umd.umich.edu/policies_st-rights/)), as well as policies established by the schools and colleges. Cheating, collusion, misconduct, fabrication, and plagiarism are considered serious offenses. Violations will not be tolerated and may result in penalties up to and including expulsion from the University. Disciplinary action will be taken in cases of plagiarism. At the instructor’s discretion, the penalty may be a grade of zero on the assignment up to and including recommending that the student be expelled from the University. It is the sole responsibility of the student to understand and follow academic guidelines regarding plagiarism.

**Attendance**
There is no attendance policy in this course. Please keep in mind, however, that some content on exams is lecture based.
Psychology Program Goals
This class is designed to teach you content unique to this course (Cognitive psychology) as well as any skills necessary to conduct yourself as a professional in the field. Doing so will allow you to attain the goals we, as psychology faculty, have set out for you as a psychology student.

<table>
<thead>
<tr>
<th>Knowledge Base of Psychology:</th>
<th>Demonstrate a familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.</th>
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<tbody>
<tr>
<td>Research Methods in Psychology:</td>
<td>Understand and apply basic research methods in psychology, including research design, data analysis, and interpretation; demonstrate information competence and the ability to use research databases and statistical software packages.</td>
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<tr>
<td>Critical Thinking Skills in Psychology:</td>
<td>Respect and use critical and creative thinking, skeptical inquiry, and, when possible, the scientific approach to solve problems related to behavior and mental processes.</td>
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<tr>
<td>Application of Psychology:</td>
<td>Understand and apply psychological principles to personal, social, and organization issues; includes personal development.</td>
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<tr>
<td>Ethics and Psychology:</td>
<td>Demonstrate ability to weigh evidence, tolerate ambiguity, act ethically, and reflect other values that are the underpinnings of psychology as a discipline.</td>
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<tr>
<td>Writing/Presentation Skills:</td>
<td>Demonstrate ability to communicate effectively in a variety of formats.</td>
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<tr>
<td>Cultural and Diversity Awareness:</td>
<td>Recognize, understand, and respect the complexity of sociocultural and international diversity.</td>
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<tr>
<td>Career Planning and Development:</td>
<td>Emerge from the major with realistic ideas about how to implement psychological knowledge, skills, and values in occupational pursuits in a variety of settings.</td>
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Drop/Add
It is your responsibility to be aware of the drop/add dates for this course. The instructor will not grant withdrawal requests made after that date unless extenuating circumstances are presented (i.e., failing due to lack of effort does not qualify).

Late Assignments
Please note that a strict policy will be adopted regarding extensions, late papers, missed exams, etc.: all will be heavily penalized (i.e., 10 points removed for every day, or part of day, that an assignment is late) unless a clear and pressing case can be made for medical reasons. Moreover, you may not submit work for this course that has been submitted, or is to be submitted, for credit in another course (some exceptions to this rule exist and you should consult the instructor(s) if you have any doubt).

Make-Up Exams
Make-up exams will not be given. The only way you may take an exam at another time is with a preapproved excuse or a documented medical emergency. Should a make-up exam be necessary because of a medical emergency, an alternative (typically essay based) version of the exams will be used.

Religious Observances
If there is an academic requirement stated on this syllabus that conflicts with a religious observance for your faith, you must notify me in writing no later than the end of the add/drop deadline. Upon receipt of your written notification, we can discuss a reasonable accommodation.

University-Sponsored Activities
If your athletic schedule or your schedule for another University-sponsored extracurricular activity will interfere with your participation in this class in any way, please bring me a letter from the director of the relevant program, specifying the reason and the affected dates, no later than the end of the add/drop deadline. Upon receipt of your official written notification, we can discuss a reasonable accommodation.
Grading: There will be three closed-book, closed-note exams. Each exam will be worth 15% of your total grade (150 points each). The last exam might be taken before finals (time permitting) and will not be cumulative. These exams will consist of some weighting of multiple-choice, fill-in-the-blank, and short essay questions. The exams will cover material presented in lectures and in the book but heavily weighted towards lecture. Note that some material will come from both book and lecture, but some will come from lecture only and some will come from book only. I generally try to have a review before each test and I will announce the date and time of these in class. In addition to exams and a quiz, you will complete a group research project (more information later) consisting of a four article summaries, a proposal, and a final presentation.

<table>
<thead>
<tr>
<th>Group Mini Assignment</th>
<th>50 points</th>
<th>5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Proposal</td>
<td>150 points</td>
<td>15%</td>
</tr>
<tr>
<td>Research Presentation</td>
<td>100 points</td>
<td>10%</td>
</tr>
<tr>
<td>Exam 1</td>
<td>200 points</td>
<td>20%</td>
</tr>
<tr>
<td>Exam 2</td>
<td>150 points</td>
<td>15%</td>
</tr>
<tr>
<td>Exam 3</td>
<td>150 points</td>
<td>15%</td>
</tr>
<tr>
<td>Article Summaries (4)</td>
<td>200 points</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1000 points</td>
<td>100%</td>
</tr>
</tbody>
</table>

I will usually round up, for example from 79.5% to 80%, but do not count on it. As a general principle, I will never work harder for your grade than you do. Students who have poor attendance and participation should not expect me to “make up” points for them. Students who have done all that is in their power to do their best can be assured that will be carefully considered in making any borderline decision. I try to apply consistent standards and treat students fairly, as well as fulfill my responsibilities to UMD in making difficult decisions about grades.

Submitting a paper to turnitin.com
In order to submit a paper, you will need to create a turnitin account if you do not have one already. The login website is: [http://turnitin.com/login_page.asp](http://turnitin.com/login_page.asp). I will check your papers for plagiarism prior to grading. We will follow university policies with regard to academic honesty. The rules are simple: do not take someone else’s ideas without giving them credit, do not cut and paste from websites or other sources, and do not use previous papers on similar topics. If you plagiarize, you will receive an E in the course and you will be reported to the Dean’s office. If you have any questions about what is and is not plagiarism, please don’t hesitate to ask.

Class/section ID: 7465181
Password: expumd
Policies on Incomplete Grades for CASL from the Registration and Records website:
A student whose coursework for the term (other than final examination) is incomplete in a minor way may, upon completion and approval of the I Contract Form, be granted the privilege of completing the work within a four-month period for the College of Arts, Sciences beginning on the first day of classes of the immediately following term. If granted this privilege, a grade of I will be recorded. Failure to complete the required work within the specified time, or the denial of this privilege by the instructor, will result in a grade of E for the final grade. In extenuating circumstances an extension beyond the stated period may be requested by means of a petition that has been endorsed by the instructor and approved by the Academic Standards Committee. However, such arrangements for completing the work must be made within the above stipulated time period. Failure to complete the required work within the specified time will result in a grade of I being automatically treated as an IE and counted in the student's grade point average. The I will remain on the transcript even after the official final grade is assigned.

Policies on Incomplete Grades from the CASL website:
I (Incomplete) and X (Missed Final Exam) Guidelines
It is possible to be granted an I (Incomplete) in situations where a student has completed most of the work for a course, but something unforeseen happens near the end of the term which prevents the student from completing the course. The student must consult with the instructor, explain the circumstances, and provide documentation if requested. If the instructor agrees, together the student and the instructor will complete an Incomplete Contract. The completed contract must be turned in by the instructor to CASL Advising (1039 CB) or to Registration and Records (1169 UC). The X mark can be recorded in situations where the final exam is the only thing that is missed. This might occur if illness or some other unforeseen circumstance prevents you from taking your final exam. If this should occur, be sure to contact your instructor immediately. If the instructor agrees, you may make arrangements to take a make-up exam within five weeks. CASL students do not have to complete an Incomplete Contract for courses in which an X is recorded.

The deadlines for completion of I and X marks will be established by the academic unit to which the course belongs, not the unit to which the student belongs. For example, if a COB student is granted an Incomplete in SOC 200, a CASL course, it is the CASL deadline (4 months) that would be the default. Likewise, if a CASL student is granted an Incomplete in a CECS course, it is the CECS deadline (5 weeks) that would be the default.

Courses in which I or X marks have been recorded must be completed and have final grades officially recorded by their respective deadlines; otherwise, they will automatically be converted to IE or XE grades and will count in the GPA as failing grades.

Emergency Preparedness
The Provost has made several requests of both students and faculty in order to maintain safety at the University of Michigan Dearborn campus. She is asking that we (you):
- Program 911 into your cell phones.
  - You should also program Public Safety’s phone number (313) 593-5333
- Register for the campus Emergency Alert System at: http://umemergencyalert.umd.umich.edu/
- Identify a “buddy” in the class to facilitate mutual assistance and to provide rapid and effective assistance to people in case of an emergency
- Know two ways to exit the building and where students are expected to go in the event of an evacuation: http://www.umd.umich.edu/fileadmin/env-health-safety/public/files/Site_Assm_Areas_2011.pdf
- For those needing assistance in an evacuation, see:
  - Go to the restroom in the event of severe weather. See: http://www.umd.umich.edu/691921/
If someone is shooting a gun, remain as calm as possible; barricade yourself in the room; turn off all lights and devices that emit sounds; hide from sight and remain still and quiet.
Topic Outline

Module I
• Introduction to psychological research (Ch. 1)
  • Group Mini Assignment: Inattentional Blindness or Gesture Experiments
• Scientific Method (Ch. 1)
• What is a good research question and where does it come from? (Ch.2)
  • Group Activity: Evaluate Research Questions for IV/DV, Hypotheses, etc.
• Ethics in Research (Ch. 3)
  • Research Group: Evaluate Ethics of Hypothetical and Proposed Research Projects
• APA Style References & APA Style Writing (Handout & Appendix A)
  EXAM 1 (February 10th)

Module II
• Variables & Control (Ch. 4)
  • Research Group: Identify IV, DV, Operational Definitions, and Hypotheses
• Measurement (Ch. 5)
  • Research Group: How do you plan to measure your behaviors?
• Observational Methods (Ch.6)
  • Research Group: Finalizing plan to collect data and writing proposal
  SPRING BREAK (2/24 & 2/26)
• Survey Research (Ch. 7)
  ……..Your Research Proposal is Due around this time (3/3) in the semester………..
• Experimental Design (Ch. 8)
  • Research Group: If project has been approved, start collecting data
• Conducting Experiments (Ch. 9)
  • Research Group: Collecting data
  EXAM 2 (March 17th)

Module III
• Understanding Research Results: Description & Correlation (Ch. 12)
• Understanding Research Results: Statistical Inference (Ch. 13)
• Generalizing Results (Ch. 14)
  EXAM 3 (April 2nd)
  ………………………….Final Research Paper (4/16) ……………………………

This syllabus is a general plan for the course. Deviations to this plan may be necessary and will be announced by the instructor.
UM-D Writing Center

The Writing Center offers support in all stages of the writing and research process. Consultants are not editors, but experienced readers able to offer students guidance on a range of issues relevant to improving their communication effectiveness. Consultants can help students in many ways, including understanding assignment goals; formulating an approach to an assignment; developing confidence for new writing tasks; considering audience, purpose, and context; developing a focus/thesis; articulating and organizing ideas; discussing supporting evidence and whether additional evidence is needed; generating revision strategies; identifying and using appropriate resources; improving control of grammar and mechanics; and becoming more skilled in using APA, MLA, Chicago, and other documentation styles. Let me know how helpful this service is for you.

Drop-in sessions are sometimes available, but it is best to make an appointment. During midterms and finals, consulting sessions are by appointment only.

Contact information for the Writing Center:

Phone: 313-593-5543
Website: http://www.casl.umd.umich.edu/writ_center/

Online Resources

General Links
- Paul Cozby’s additional textbook resources: http://methods.fullerton.edu/framesindex.html
- Library Research Guide (UMD): http://libguides.umd.umich.edu/psychology
- Advice on Designing Scientific Posters: http://www.swarthmore.edu/NatSci/cpurrin1/posteradvice.htm
- Creating a Psychology Research Poster: http://www.muhlenberg.edu/main/academics/psychology/Posters.html

APA Style Citations & Writing
- Purdue Online Writing Lab (OWL): http://owl.english.purdue.edu/owl/resource/560/01/
- APA Style Lite for College Papers by Dr. Abel Scribe: http://www.docstyles.com/apacrib.htm

Statistics
- StatsCrunch (Data analysis on the web): http://www.statcrunch.com/
- Correlation and Regression Help: http://cs.wellesley.edu/~cs199/lectures/35-correlation-regression.html
- Online $t$ Test Calculator: http://www.graphpad.com/quickcalcs/ttest1.cfm
Research Proposal & Presentation
Important Dates

I strongly encourage working in groups on this assignment; however, the option to work independently is available. You must, however, meet with me individually to receive approval to work alone BEFORE the first due date listed below.

1/22………..Research topic/idea & group members submitted
Turn in a list of your group members (up to 2 total) and a tentative research topic. Please try your best to be specific about what you intend to study and how you intend to study it.

1/29………..Research topic/idea & group members finalized
Turn in a final list of group members and a very specific, approved, research idea.

1/29 & 2/3…Structured Article Summary for first and second research articles
Turn in a structured summary of the first research article you have read for your research proposal. Each member of the group will turn in THEIR OWN summaries of four unique research articles so check with your group to make sure you are not overlapping.

2/12 & 2/17.. Structured Article Summary for third and fourth research articles

3/3…………Research Proposal Submitted
Turn in a final copy of your completed research proposal, consisting of the following APA style manuscript sections: Title Page, Abstract, Introduction, Proposed Methods, and References. Your title page should be in APA format, listing all authors. The abstract should be less than 250 words and should summarize the background and importance of your research proposal. The introduction should be a thorough review of the background literature, emphasizing how your proposed idea fills a gap in research. This proposal should be modeled after a grant proposal; that is, it should stress why your research idea is important and deserving of others’ time. Finally, include a complete APA style references section.

3/25-3/27…..Results Meetings
Unless otherwise approved, all groups must meet with me individually (during class time) to discuss their results BEFORE the final presentations. The purpose of this meeting is to prevent a group from analyzing (and reporting) their data incorrectly during the final presentation. A sign-up sheet for days/times will be passed out. Expect these meetings to last approximately 30 minutes.

4/7 – 4/16…Group PowerPoint Presentations
All groups will complete a final PowerPoint presentation of their entire project that will last approximately 15 minutes! This presentation should summarize the major components of the research proposal, including brief treatments of background and methods. You should primarily discuss your results and what conclusions might be drawn. Be sure to mention any theoretical implications, drawbacks, or societal applications that result.

4/16……….Final Paper Submitted
For the final paper you need only add a results and discussion section to your existing proposal. Please remember, however, to go back and change your methods to past tense as it is no longer a proposed study at this point. To be clear, you will be turning in an Introduction, Methods, Results, Discussion, and References (as well as Title Page and any possible Appendices for Tables or Figures).

** For students needing assistance in writing, the CASL Writing Center is located in room 3035 CB. They are available to help with any stage of the writing process, including understanding the assignment, correcting grammar, and citing your sources. Any student who visits the Writing Center for any ONE assignment in this class (and can prove it; they will email me at acfoos@umich.edu) will receive10 points added to the final grade for that assignment.
Research Article Summary Guidelines

Complete the following information for each journal article you read. Complete the information for each section of the article before reading the next section; it will help you understand the sections that follow.

REFERENCE
Start by typing the complete reference – in APA style – for this study.

INTRODUCTION
In 3-4 sentences or using bullets, summarize the general findings from each previous study discussed in the introduction. When appropriate, identify the participants, the measures and what was done (describe generally) in each of these previous studies. If later studies in the introduction have similar procedures and findings just say that.

Summarize, in your own words, the hypotheses being tested in the research study you are reading (QUOTATIONS ARE NOT ALLOWED). What were the authors attempting to show? What are the IVs (if a causal study) and DVs of this study?

METHOD
Participants
Who were the participants – describe appropriate characteristics. For example, it may not be important to the study to know where participants are from – skip this information if this is the case.

Measures
What was/were the dependent variable(s)? What tests, scales, or instruments were used to operationally define each DV?

Procedure
Describe, in your own words, what was done to collect data. You should be able to do this in a just a few sentences. Describe any attempts made to control confounds or extraneous variables.

RESULTS AND DISCUSSION
Don’t use numbers here but summarize in words what the authors found. What were the major results? Did they find support for their hypotheses? How do the results relate to the other studies cited in the introduction? How did the researchers interpret the results; what are their overall conclusions? Did they offer any big “whoops” statements – something that went wrong that makes them (or you) hesitate with their conclusions? Do they offer suggestions for future research? Do you have any other interpretations or suggestions for future research?

CONCLUSIONS
In 3-5 sentences, in your own words, what did this study tell you? What were the important conclusions that you might use later? Add anything else that you think is important to know about this research.

APPLICATION
In a final few sentences, describe if and how you will use this study in your proposal. Be as specific as you can at this point. Simply saying “I plan to use this” does not suffice!
This study is being conducted as part of a class exercise for PSYC 465, Experimental Psychology. The instructor is Dr. Arlo Clark-Foos.

- You must be 18 years of age or older to participate.
- All information gathered will be used only in aggregate form. We are not interested in individual responses but only in groups.
- Your responses are confidential and all records of your participation will be deleted once data are analyzed.
- If you do not wish to complete the study, you may stop at any point.
- Your participation should take approximately ________ minutes.

UM Dearborn wants to make sure you are treated in a fair and respectful manner. Contact Director of the Dearborn Research Office (irb-dearborn@umd.umich.edu or 313-593-5468) if you have any questions about how you were treated as a study participant. If you have any questions about the study, please contact Dr. Arlo Clark-Foos (313-583-6341).

If you consent to participate in this study and you understand the information on this form, please sign below.

Signature: ________________________________________ Date: ___________________

Printed Name: __________________________________________________