

Research Methods

Instructor: Matthew Hayes, Ph.D.

Email: hayesm@winthrop.edu (the best way to reach me)

Office Hours: W 12:00-1:50; T 2:20-3:20; & by appointment

Office: Kinard 120

Office Phone: 803-323-2628

Class meeting times: Lecture – MW 2:00 - 3:15 in Kinard 102

Lab – T 3:30 - 5:20 in Kinard 116 (section 002)

Lab – T 12:30 - 2:20 in Kinard 116 (section 003)

Welcome. Welcome to PSYC 302. This 4-credit class is the second in the series of two skills courses that define what it means to be a practitioner of psychological science. You probably have not taken a course quite like this one before. This course will help you develop the core skills and abilities used by professionals in the field in which you are majoring. You will not be memorizing a lot of names, theories, and dates. You may find this a welcome change. Some of you might find this a little disorienting or confusing at first. A few of you may decide to become professional psychologists while others may decide to quit psychology and be wealthy instead. However, those of you who complete this course will truly be imminent psychologists.

You will be working closely with me and with other students in this class, and I encourage you to cooperate rather than compete in this class. If you have found an article that everyone is looking for, please share it with your classmates. There is too much to do in psychology and in this class to compete with one another.

This course is very demanding. You are NOT expected to know the material presented in this course before it is presented either in class, textbook, or other assigned resource. Nor are you expected to understand everything JUST BECAUSE it has been presented. You ARE expected to read the assigned materials and complete assignments before coming to class, engage the material, ask questions about things you don't understand, and participate in class activities and discussions by sharing relevant comments, ideas, and opinions. I will push you hard and grade you hard, but the course is set up to reward improvement. I am here to help you get that A or B if I can. This course will be more edifying and enjoyable for everyone if you actively participate in both lab and in class. If you find yourself getting lost, come see me. This course can be a lot of fun, even though it is a lot of work.

The techniques and methods you will learn in this class are critical to all branches of psychology. Those who feel, for example, that clinical psychologists and therapists do not need this training are simply wrong. Though they may not actually conduct research (although many do), they are very good at evaluating the current research and various claims made by their field. As you will see, this training is even useful on a day-to-day level like evaluating product claims on television.

My main purpose in this class is to guide your exploration of psychology as a science. This class is difficult. It requires a lot of thinking and writing. I will be there to help as you learn the material, synthesize it, and apply it. You should be ready to interact with me, not just in class, but while completing your research project as well. My secondary purpose is to assess your progress. If your goal is to do well in this class and you put in the effort, I will be here to help you achieve that goal.

Student Learning Goals in PSYC 302

Student Goals in the General Education Program

PSYC 302 builds on the Winthrop University's general education program. In PSYC 302, students study the scientific methods used in psychological research and develop writing skills appropriate both for the discipline and for other settings. Thus, PSYC 302 helps students continue their progress toward several of Winthrop's University Level Competencies (ULCs).

ULC Competency 1: Winthrop graduates think critically and solve problems.

Winthrop University graduates reason logically, evaluate and use evidence, and solve problems. They seek out and assess relevant information from multiple viewpoints to form well-reasoned conclusions. Winthrop graduates consider the full context and consequences of their decisions and continually reexamine their own critical thinking process, including the strengths and weaknesses of their arguments.

ULC Competency 2: Winthrop graduates are personally and socially responsible.

Winthrop University graduates value integrity, perceive moral dimensions, and achieve excellence. They take seriously the perspectives of others, practice ethical reasoning, and reflect on experiences. Winthrop graduates have a sense of responsibility to the broader community and contribute to the greater good.

ULC Competency 4: Winthrop graduates communicate effectively.

Winthrop University graduates communicate in a manner appropriate to the subject, occasion, and audience. They create texts – including but not limited to written, oral, and visual presentations – that convey content effectively. Mindful of their voice and the impact of their communication, Winthrop graduates successfully express and exchange ideas.

Department of Psychology Student Learning Goals

PSYC 302 also addresses several department of psychology student learning goals:

- **Goal 2.** Scientific Inquiry and Critical Thinking.
- **Goal 3.** Ethical and Social Responsibility in a Diverse World.
- **Goal 4.** Communication
- **Goal 5.** Professional Development.

Student Learning Outcomes in PSYC302

The successful student in PSYC 302 will:

- Understand and apply basic research methods in psychology, including research design, data analysis, and interpretation (Dept of Psychology Goal 2). Students will be able to:
 - Come up with an idea for a research project
 - Critically evaluate existing research related to that idea
 - Design a study to investigate that idea
 - Conduct that study
 - Analyze the data
 - Evaluate and interpret the data
- Students will respect and use critical and creative thinking, skeptical inquiry, and, when possible, the scientific approach to solve problems related to behavior and mental processes (Dept of Psychology Goal 2). Students will be able to identify underlying questions, evaluate potential alternative explanations, and design experiments to investigate those questions.

- Students will demonstrate information competence and the ability to use computers and other technology for many purposes (Dept of Psychology Goal 2). Students will use computers to search the literature, write papers, prepare a poster to aid in oral presentation of research, and conduct statistical analyses of data.
- Students will be able to apply ethical standards to psychological research (Dept of Psychology Goal 3).
- Students will be able to communicate effectively in a variety of formats (Dept of Psychology Goal 4). Consistent with an intensive writing course, students will complete a substantial report that summarizes their research in writing. Students will also present their research orally and be able to effectively answer questions about that research.

Writing requirements. Teaching you technical writing and the basics of APA style make up a large part of this course. Some of you will find this format very difficult or confusing and I have yet to meet someone who wouldn't benefit from additional writing assistance. I am happy to answer questions and help with drafts of papers, but some of you may prefer to get additional help from other places (while avoiding unintentional plagiarism). The Winthrop University Writing Center is an excellent resource that can help you improve the clarity and power of your writing. The Writing Center is located in 242 Bancroft and offers 30 and 60 minute sessions (they accept walk-ins, but you can call 323-2138 or [click here](#) to make an appointment). To get the most out of your session at the Writing Center, have a draft of your paper ready along with a specific question or issue you want to address. They are especially helpful for issues related to developing a thesis, improving flow, and incorporating references into your paper.

This course can be taken in partial fulfillment of the intensive writing requirement at Winthrop. To meet this requirement, you will need to write a minimum of 16 pages. The majority of the writing will result in an 11-16 page write-up of a project your group has designed. You will write this manuscript in stages, receiving feedback from me throughout the semester, and submitting a fully revised paper at the end of the semester. You will also complete several writing assignments totaling at least 5 pages. The writing assignments are discussed in greater detail in the Lab section of the Course Policies, below, and complete instructions, examples, and grading rubrics are presented in the Lab Manual posted on Blackboard. Several of the writing assignments will be based on work you completed as part of a group, **but the written paper must always be your own work unless explicitly stated otherwise in the assignment description**. Copying another's work, even if you change a few words, or submitting the group's work as your own, is plagiarism and will result, minimally, in a failing grade for the assignment and may result in a failing grade for the course, as appropriate.

Course Policies

1. Blackboard. You must access Blackboard for this course. I will post lab materials, study guides, practice problems, additional study materials, and other goodies via Blackboard. Announcements posted on Blackboard are official amendments to the syllabus. It is your responsibility to check Blackboard regularly (at least every day) and ensure that you receive any announcements, messages, and other materials. If you registered late you will need to contact me as soon as possible to ensure that you are able to access Blackboard.

Internet access. Internet access is available free to students in most dorms, in the library, and select other locations on the Winthrop campus. If email communication is needed, your Winthrop email address will be used, though you can configure it to deliver to another email address (hotmail, gmail, yahoo, etc.). Info about Blackboard and university email is available from Information Technology (323-2400; helpdesk@winthrop.edu).

2. **Turnitin.** You will submit all written lab assignments to Turnitin unless otherwise noted on the assignment description. You will **not** need to submit printed copies of these papers. I will provide feedback and grades via Turnitin. You will be able to submit papers, see grades, and view feedback from Blackboard.
3. **Attendance.** Attendance will be recorded for every lecture and lab. While attendance in lecture is not required, it is necessary for you to fully understand the material in class. You will be expected to complete the readings and Entry Ticket assignments before coming to class. That way lecture topics will make more sense and you'll have the opportunity to ask questions while the reading is on your mind. **If you do miss a particular lecture, it is your responsibility to read the relevant chapter(s) covered for that day. I do not share my slides/notes with students, so, if you miss please contact a classmate to get the missed notes.**

PSYC 302 Buddy #1 (name, number, email): _____

PSYC 302 Buddy #2 (name, number, email): _____

Because lab will be based mostly on group work and others will be depending on you, attendance in lab is mandatory.

4. **Make-Up & Late Paper Policy.** Because of the exam structure, there will be no need for make-up exams. However, if you have a documented excuse (car accident, doctor's note, etc.) you may complete make-up exams on **Study Day (Tuesday, April 26)**. You must contact me no later than the end of class on **Monday, April 25** to sign up for any make-up exams.
Late papers. Late written assignments (those listed on the Course Calendar, below) will not be accepted without documentation of an excused absence (severe illness, family tragedy, religious holy day, etc.). You must provide documentation for any absence to be excused. Technical difficulties related to personal computers and/or connection to the Winthrop system, Blackboard, or Turnitin do not constitute a valid excuse unless they affect the entire system. Late homework assignments or other assignments not listed on the Course Calendar will not be accepted late without documentation of a valid excuse.
5. **Disabilities statement:** Winthrop University is dedicated to providing access to education. If you have a disability and require specific accommodations to complete this course, contact the Office of Disability Services (ODS) at 323-3290. Once you have your official notice of accommodations from the ODS, please inform me as early as possible in the semester." If you have questions, or need more information about Winthrop's policies and services for students with disabilities, contact ODS, at 323-3290.
6. **Statement about academic misconduct and consequences.** As noted in the Student Conduct Code, "Responsibility for good conduct rests with students as adult individuals." Any form of academic misconduct, including cheating and plagiarism, will not be tolerated and will result in a failing grade for the assignment and/ or the entire course as appropriate. You are expected to do your own work and give credit to others as appropriate when you include it in your own work. The policy on student academic misconduct is outlined in the "Student Conduct Code Academic Misconduct Policy" online <http://www2.winthrop.edu/studentaffairs/handbook/StudentHandbook.pdf> and advice for avoiding plagiarism may be found at <http://www2.winthrop.edu/wcenter/handoutsandlinks/dontplag.htm> . All students are bound by the Student Conduct Code at Winthrop, which contains information about academic misconduct and may be found at www.winthrop.edu/studentaffairs/Judicial/judcode.htm .
7. **Syllabus change policy.** If we need to make modifications to the syllabus, I will post them on Blackboard and/or announce them in class.

- 8. Technology use and classroom behavior policies.** I expect everyone to behave appropriately in class and show respect for one another. Please come to class on time, retain private conversations for outside of class. The policy regarding the appropriate use of wireless technology adopted by the College of Arts and Sciences applies to this course. In short, this policy states that electronic devices (cell phones, laptops, etc.) are set to their non-disruptive setting (silent or, preferably, off). Laptops and similar devices may be used for note-taking and approved class-related activities only. Other uses – including web surfing, game playing, social networking, and checking email – reduce engagement and disrupt the class. **Disruptive and/or disrespectful behavior (such as texting) will be met, minimally, with a request to leave the class and being counted as absent day and may result in the loss of technology privileges.**

Resources

Required Texts. You will need to have a copy of each of the following:

Beins, B. C. (2013). *Research Methods: A tool for life* (3rd ed.). Upper Saddle River, NJ: Pearson Education. ISBN: 9780205899531

This book is also available electronically at <http://www.mypearsonstore.com/bookstore/research-methods-a-tool-for-life-0205899536>

American Psychological Association (2001). *Publication Manual of the American Psychological Association* (6th ed.). Washington, DC: American Psychological Association. ISBN: 1-4338-0562-6

Recommended Texts. A statistics book will be very helpful when you are completing your final project. If you have sold yours, you may want to buy it back.

Academic Success Center. Winthrop's Academic Success Center is a free resource for all undergraduate students seeking to perform their best academically. The ASC offers a variety of personalized and structured resources that help students become effective and efficient learners. The services available to students are as follows: peer tutoring, academic skill development (test taking strategies, time management counseling, and study techniques), group and individual study spaces, and academic coaching. The ASC is located in University College on the first floor of Dinkins Hall, Suite 106. Please contact the ASC at 803-323-3929 or success@winthrop.edu. For more information on ASC services, please visit www.winthrop.edu/success.

Writing Center. Writing is a skill that benefits from practice and feedback. I have yet to meet someone who could not benefit from additional writing practice and help. The Winthrop University Writing Center is an excellent resource that can help you improve the clarity and power of your writing. The Writing Center is located in 242 Bancroft and offers 30 and 60 minute sessions (they accept walk-ins, but call 323-2138 or [click here](#) to make an appointment). To get the most out of your session at the Writing Center, have a draft of your paper ready along with a specific question or issue you want to address. They are especially helpful for issues related to developing a thesis, improving clarity and flow, and using references to support for your assertions.

Grading

Your grade will be the combination of your performance on Quizzes and Exams (45%), Lab (40%), and participation and homework assignments (15%). Your final course grade will be determined as follows*:

A \geq 92%; **A-** 91.99%-90%;
B+ 89.99%-88%; **B** 87.99%-82%; **B-** 81.99%-80%;
C+ 79.99%-78%; **C** 77.99%-72%; **C-** 71.99%-70%;
D+ 69.99%-68%; **D** 67.99%-62%; **D-** 61.99%-60%;
F < 60%

***Note:** You must earn a passing grade (C-) on the Final Paper to earn a passing grade in the course; otherwise, a D+ is highest grade you can earn in the course.

Lecture (Exams; 40% of your grade). There will be three midterm exams and a final exam. The material in this class is all related, so while the midterm exams will not be cumulative per se, you will need to understand earlier concepts to do well on later exams.

Final exam: There will be a cumulative final exam during the scheduled final exam time. This course is designed to reward improvement. Consequently, your grade for the lecture portion of the course will be the better of: (Exam1 + Exam2 + Exam3 + 2 * Final Exam) / 5 **or** your grade on the final exam. This means that you can't do worse on the class portion than you do on the final exam. It also means that your final exam can effectively replace poor midterm exam grades. *One final note about the final exam.* Any student arriving for the final after the first student has left will not be permitted to take the final and will receive a grade of 0 for the final exam portion of their course grade except under exceptional, documented circumstances. You must contact me ASAP if you have a legitimate reason for missing the final exam.

Lab (40% of your grade). Your lab grade will be composed of your grade on several written assignments and your final project. Written assignments will all relate to the final project you or your team will conduct and are worth different amounts as listed on the Course Calendar. Complete instructions for written assignments are presented in the Lab Manual and must follow the style guides found in the APA Publication Manual: 1" margins, 12 pt. Times New Roman (or equivalent) font. **If you fail to follow the assignment instructions you may be required to rewrite and resubmit your paper,** earning late submission penalties as appropriate. The written assignment is due at 9 am on the day indicated on the Course Calendar unless otherwise indicated on the assignment instructions. For each writing assignment, submit an electronic version (Microsoft Word [.doc or .docx] or Rich Text Format [.rtf] only) online to Turnitin via Blackboard; you will not need to submit a printed copy unless specifically indicated in the assignment. **All written assignments must be your own work, even if you complete the project as part of a group unless specifically noted in the assignment description. Presenting someone else's work, or your group's work, as your own is plagiarism.** It is your responsibility as a student to be familiar with Winthrop's policies on academic integrity and academic misconduct. These materials can be found in the Student Affairs Handbook, Section V, available online at: <http://www.winthrop.edu/studentaffairs/handbook/studenthandbook.pdf>. If you are unsure if a particular situation involves plagiarism or other fraud, please stop by and see me.

Final project. Your research team of 2 to 4 students will conduct a research project on a topic you develop with me. Your team will research the topic, collect the data, and present the findings to your classmates and the department. You will be evaluated on both the poster and on how well you present your work orally. Your group will produce one poster but each member must write his/her own paper.

Participation & Entry Ticket Assignments (20% of your grade). Prior to every lecture (excluding exam days) you will need to complete an "entry ticket" assignment, these assignments will be used as the basis for lecture and in-class activities. If you do not complete the activity prior to class, you will not be granted admission into

class for the day nor will you receive any participation points for the day. You will be allowed two personal days (including excused and/or unexcused absences) in which not completing the assignment and/or missing class will not harm your grade. I recommend that you only use these free days in situations of sickness or other emergencies. **Beyond these two free days, all other absences/missed homework assignments will harm your course participant grade.** Entry tickets will be checked for completion prior to the beginning of class. You may be required to submit them online and/or bring printed copies to class. If you are late or have not completed the assignment you will not be able to participate in the day's activity and therefore you may be asked to leave class.

In addition, class attendance will be taken during every lab and lecture. This course is highly dependent on your interactions with your classmates and me and, thus, attendance is essential to success in the course. In addition to attendance, course participation will be determined by the quality (not only quantity) of your interactions/discussions during the lecture and lab. There will also be in-class assignments during some labs/lectures, your performance on these in-class assignments will also be accounted for in your participation grade.

Extra Credit. Any extra credit will be announced in class and/or on Blackboard. You must be present or respond according to the instructions (for online opportunities) to earn it. Extra credit may include participating in research. There will be non-participation options for any experiment participation extra credit opportunity.

Course Calendar (a.k.a., a tentative schedule of what we plan to do this semester)

Date	Day	Lecture Topic	Reading Assign.	Lab Topic^	Lab Assignment Due^
Jan 11	Mon	1. Welcome, Introduction, Overview			
Jan 12	Tue			1. Welcome; Standards for Group Work; Project Design; Writing	
Jan 13	Wed	2. Psychology, Science, and Life; Data & Constructs	Ch 1		
Jan 18	Mon	MLK – No class			
Jan 19	Tue			2. Overview of Empirical Articles; Searching the Literature; Project Design;	Research Aricles HW; Research Ideas HW; PsychInfo search HW
Jan 20	Wed	3. Psychology, Science, and Life	Ch 1		
Jan 25	Mon	4. Planning Research: Generating a Question	Ch 3		
Jan 26	Tue			3. Writing an Introduction; Measurement and Sampling; Project Design	Article Search & Summary (1%)
Jan 27	Wed	5. Practical Issues in Planning Your Research	Ch 4		
Feb 1	Mon	6. Measurement and Sampling	Ch 5		
Feb 2	Tue			4. Writing an Introduction; Project Design	1 st Draft Introduction (1%)
Feb 3	Wed	7. Measurement and Sampling			
Feb 8	Mon	8. Measurement and Sampling			
Feb 9	Tue			5. Ethics in Research; Project Design; Writing an IRB Proposal	Introduction (2%)
Feb 10	Wed	9. Ethics in Research	Ch 2		
Feb 15	Mon	10. Exam 1			
Feb 16	Tue			6. Ethics in Research; Writing an IRB Proposal (cont.)	Proof of CITI Training (1%); First Draft of IRB (1%)
Feb 17	Wed	11. Principles of Survey Research	Ch 10		
Feb 22	Mon	12. The Correlational Research Strategy	Ch 11		
Feb 23	Tue			7. Finish IRB Proposal; Plan Data Collection;	Final IRB (1%)
Feb 24	Wed	13. The Correlational Research Strategy			
Feb 29	Mon	14. Experimental Research	Ch 6		
Mar 1	Tue			8. Writing a Methods Section ; Practical Significance & Power;	

Date	Day	Lecture Topic	Reading Assign.	Lab Topic^	Lab Assignment Due^
Mar 2	Wed	15. Experimental Research	Ch 7		
Mar 7	Mon	16. Experimental Research			
Mar 8	Tue			9. NO LAB - Gather data & work on project	Methods section (2%)
Mar 9	Wed	17. Exam 2			
Mar 14	Mon	Spring Break – No Class			
Mar 15	Tue	Spring Break – No Lab			
Mar 16	Wed	Spring Break – No Class			
Mar 21	Mon	18. Statistical Evaluation of Data	Append B		
Mar 22	Tue			10. Data Analysis & Presentation Writing a Results Section Writing a Discussion Section	
Mar 23	Wed	19. Statistical Evaluation of Data			
Mar 28	Mon	20. Non-experiments and Quasi-Experimental Strategies	Ch 9		
Mar 29	Tue			11. Group Meetings with Me to Analyze Data	
Mar 30	Wed	21. Non-experiments and Quasi-Experimental Strategies			
Apr 4	Mon	22. Observational Research Approaches	Ch 12		
Apr 5	Tue			12. Guidelines for Posters & Poster Presentations; Group Work on Poster	Results section (3%)
Apr 6	Wed	23. Observational Research Approaches			
Apr 11	Mon	24. Factorial Designs	Ch 8		
Apr 12	Tue			13. Revising the Final Paper; Group Work on Poster	Discussion section (5%)
Apr 13	Wed	25. Factorial Designs			
Apr 18	Mon	26. Single Subject Designs	Ch 13		
Apr 19	Tue			14. Poster Presentations	Poster & Presentation (8%)
Apr 20	Wed	27. Exam 3			
Apr 25	Mon	28. Review for Final Exam			Final Paper - All sections (including abstract & references) and related materials (15%)
May 2	Mon	Final Exam - 11:30 am; Any student arriving after the first student has finished the exam without a valid excuse (see Make-Up Policy, above) will not be able to take the exam & will receive a grade of 0.			

^ Complete instructions for lab assignments and papers are available in the Lab Manual posted on Blackboard. Assignments are due at 9 am unless otherwise indicated in the assignment instructions. This Course Calendar is my plan for the semester and is not set in stone. We will make changes to the schedule as necessary and will be announced in class and/or posted on Blackboard. Your input is always appreciated.