**Suggested Syllabi for Research Methods Core Concepts and Skills for Psychology v2.1 by Paul Price.**

There are many ways to structure a course in research methods for psychology students, and the best way will depend on several factors. These include the length of the course, the number of units, the format (e.g., Is there a separate lab?), the place of statistics in the curriculum (e.g., Is it a prerequisite?), and the type of assignments (e.g., Do students do a semester-long research project?). The sample syllabi presented here assume a lecture section plus some additional time for students to put what they are learning into practice. These samples also assume that students have taken (or are concurrently taking) an introductory statistics course so that the focus is on *using* statistics in the context of doing empirical research. However, these sample syllabi should be easily adaptable to a variety of course structures and approaches.

**15-Week “Iterative” Syllabus**

This is essentially my own syllabus. It starts with a unit that constitutes an overview of the research process and then “circles back” with more detailed units on study design and measurement/statistics. One reason for this is that students do a semester-long research project, which they need to start early in the semester. The overview unit provides the background they need to conceptualize their research question, review the research literature, and start planning their studies.

My course has a separate lab section, in which students learn and practice technical skills (using PsycINFO, Excel, and Qualtrics) and develop their research projects. I generally assign textbook sections that provide practical advice on things like identifying research questions (Section 2.2), putting ethics into practice (Section 3.3), and strategies for psychological measurement (Section 5.4) for the lab rather than the lecture. Certainly, this material could be incorporated into a lecture-only course, but this would probably require dropping some topics (e.g., single-subject research).

|  |  |  |  |
| --- | --- | --- | --- |
| **Week** | **Topic** | **Textbook Reading** | **Activities / Assignments** |
| **Part I: Overview of Psychological Research** | | | |
| 1 | Psychology and Science; Writing in APA Style | Chapter 1; Section 11 | Students read and write about three “seed articles” and choose one to become the basis of their research projects. |
| 2 | Basic Concepts; Descriptive Statistics Review | Chapter 2; Section 12.2 |
| 3 | Statistical Relationships Between Variables; Correlational Research | Sections 7.1–7.2 |
| 4 | Correlation and Causation; Simple Experiments | Sections 6.1 |
| 5 | Research Ethics; **Midterm 1** | Chapter 3 | Research Question |
| **Part II: Study Design** | | | |
| 6 | Between-Subjects vs. Within-Subjects Experiments | Section 6.2 |  |
| 7 | Quasi-Experiments; Internal and External Validity | Section 7.3 |  |
| 8 | Complex Experiments; Factorial Designs | Chapter 8 | Introduction Section |
| 9 | Single-Subject Research | Chapter 10 |  |
| 10 | Case Studies and Qualitative Research; **Midterm 2** | Section 7.4 | Method Section |
| **Part III: Measurement and Statistics** | | | |
| 11 | Psychological Measurement; Reliability and Validity of Measurement | Chapter 5 | Students collect their research project data. |
| 12 | Inferential Statistics; Null Hypothesis Testing | Section 13.1 |
| 13 | Specific Null Hypothesis Tests | Section 13.2 |  |
| 14 | Publication, Replication, Meta-Analysis, and Open Science | Chapter 14 | Results and Discussion Section |
| 15 | Conference-Style Presentations; **Midterm 3** |  | Posters/Talks |
| 16 | **Final Exam** |  | Final APA-Style Paper |

Note: Additional assignments generally include completing an online survey consisting of several standard psychological measures (e.g., Rosenberg Self-Esteem Scale), writing short summaries of the seed articles, creating an APA-style reference list on a topic of the student’s choosing (with or without a short summary of what the research shows), doing a correlational study based on data from the online survey and writing a simplified APA-style manuscript, and creating a new self-report questionnaire to measure a psychological construct.

**15-Week “Approaches to Research” Syllabus**

This is an alternative syllabus where the bulk of the course is organized according to several distinct approaches to doing empirical research. It still begins with an overview of basic concepts but then proceeds to cover naturalistic observation, correlational research, survey research, and so on (with the order being somewhat arbitrary). This organization is often associated with students’ completing an assignment, lab activity, or mini-project for each research approach.

|  |  |  |  |
| --- | --- | --- | --- |
| **Week** | **Topic** | **Textbook Reading** | **Activities / Assignments Due** |
| **Part I: Overview of Psychological Research** | | | |
| 1 | Psychology and Science; Writing in APA Style | Chapter 1; Chapter 11 |  |
| 2 | Basic Concepts; Descriptive Statistics Review | Chapter 2; Sections 12.1–12.2 |  |
| 3 | Research Ethics | Chapter 3 |  |
| 4 | Psychological Measurement | Chapter 5 |  |
| **Part II: Research Approaches** | | | |
| 5 | Correlational Research; Naturalistic Observation | Sections 7.1–7.2 |  |
| 6 | Survey Research | Chapter 9 | Naturalistic Observation Project |
| 7 | Between-Subjects Experiments | Chapter 6 |  |
| 8 | Within-Subjects Experiments |  |  |
| 9 | Factorial Experiments;  **Midterm Exam** | Chapter 8 | Correlational Study |
| 10 | Quasi-Experiments | Section 7.3 |  |
| 11 | Single-Subject Research | Chapter 10 | Experimental Project |
| 12 | Meta-Analysis | Section 14.2 |  |
| 13 | Case Studies and Qualitative Research | Section 7.4 |  |
| 14 | Publication, Replication, Open Science | Sections 14.1 and 14.3 | Qualitative Study Project |
| 15 | Conference Style Presentations |  | Posters/Talks |
| 16 | **Final Exam** |  |  |

Note: Coverage of each approach might include the details of analyzing data using that approach. In this case, the relevant sections of Chapters 12 and 13 can be also be assigned as needed.

**10-Week Syllabus**

This 10-week syllabus focuses on the core of the quantitative approach—dropping topics such as survey research, single-subject research, case studies, and qualitative research.

|  |  |  |
| --- | --- | --- |
| **Week** | **Topic** | **Textbook Reading** |
| 1 | Psychology and Science; Basic Concepts | Chapter 1; Section 2.1 |
| 2 | Reading Psychological Research;  Writing in APA Style | Sections 2.2–2.3; Chapter 11 |
| 3 | Research Ethics | Chapter 3 |
| 4 | Psychological Measurement | Chapter 5 |
| 5 | Correlational Research;  **Midterm Exam** | Sections 7.1–7.2 |
| 6 | Experimental Research: Between-Subjects Designs | Chapter 6 |
| 7 | Experimental Research: Within-Subjects Designs |  |
| 8 | Factorial Designs | Chapter 8 |
| 9 | Quasi-Experimental Research | Section 7.3 |
| 10 | Publication, Replication, and Open Science | Chapter 14 |
| 11 | **Final Exam** |  |