Sample Syllabi

Overview

Preparing a good course outline or syllabus is a difficult task. There are many advantages in having a thorough and well-developed course syllabus (Harris, 1993), including developing enthusiasm for the course, conveying the course’s intellectual content, stating positive and attainable goals, conveying opportunities for success through the grading policies, specifying assignments, indicating how learning is regularly assessed, and demonstrating the desire of the teacher to help the student. A good syllabus contains the essentials of the course. Typically, the syllabus is distributed to the students during the first class meeting (or at least very early in the course). The syllabus helps the student understand what the professor expects and is, in a sense, a contract between the student and professor.

While universities may have specific information that is required in a syllabus, a good syllabus contains most of the following categories of information (modified from S. Ledlow, handout from Arizona State University Faculty Development Program):

Instructor information

Name

Office location, office phone, and e-mail address

Office hours

Course information

Course title

Semester course is being offered

Time and day(s) of class

Room number for class

Credits

Course description

Prerequisites or corequisites

Readings

Titles and authors of required books and articles

Titles and authors of optional books and articles

Titles and authors of books placed on library or electronic reserve

Cost and location of any professional publishing packet used by the instructor

Assignments

Kinds of papers, length, due dates

Reading assignment due dates

Weight of each assignment in grade

Makeup rules for assignments (if allowed)

Exams

Nature of exams

Dates exams administered

Makeup policy for exams (if allowed)

Weight of exams in grade

Disability accommodations (e.g., “If you need disability accommodations in this class, please see me as soon as possible. Information regarding disability is confidential.”)

Classroom policies

Attendance and tardiness rules

Academic integrity

Grading criteria

Use of computers and calculators

Supplies

Other important information

Course outline

Course calendar

Class goals and learning outcomes

Recording of class (allowed or not)

Special requirements for college or department

Withdrawal dates

Whether the course is writing intensive (if so, writing center information)

Cooperative learning activities (general nature)

Subject-to-change notice

Cell phone policy

We believe that the more complete a syllabus is, the easier it is for students to know what to expect to complete assignments. Additionally, the instructor won’t need to repeat information and remind students of policies, assignments, and other course related information as often.

The two course syllabi we have included are ones that we have used to teach our own research methods classes. The first syllabus is designed to help students understand research methods and prepare to do research and complete a thesis. The second syllabus is designed to help students become critical readers of research who understand methodology and can then use this information in their professional practice or to go on to other research classes and experiences.

While these syllabi are somewhat different, there are many similarities in the approach to teaching research methods. For example, in both classes there is attention to using the library; to reading research and presenting it to others; and to introducing students to the field of physical activity and the many subdisciplines. There are multiple assignments and learning experiences, and there is a high expectation for understanding the material. In

addition, in both classes a variety of learning experiences is used to help students process the material and ask questions about it, including preparing to do research.

We encourage you to use some or all of one or both syllabi as you plan and develop your course. In most cases you will adapt the syllabus to your own situation and make changes each time the course is taught. We do this ourselves and believe a little experimenting in class can have strong payoffs.

Syllabi

Sample Syllabus 1

BBSR 5582
Research Design in Movement Science and Education
Fall 2011

Professor:

Class meeting: Monday, 7:00-9:00

Required texts:


Other references of interest:


Supplementary materials: Supplementary materials will be used in class and posted on ClassWeb. Please print these materials and bring them to class so that you have access to them when needed. For each session, the name of the file is listed to assist you in having the material with you in class.

Course goals: This course provides you with an overview of research methods. Specifically, the course prepares you to read, understand, and evaluate research; retrieve research; and develop research-related skills for further graduate education.

Accommodations for documented disabilities: The College will make reasonable accommodations for persons with documented disabilities. Students are encouraged to contact the Office of Access and Services for Individuals with Disabilities for information about registration (166 Thorndike Hall). Services are available only to students who are registered and submit appropriate documentation. As your instructor, I am happy to discuss specific needs with you as well.

College policy on Incompletes: The grade of Incomplete is to be assigned only when the course attendance requirement has been met, but for reasons satisfactory to the instructor, the granting of a final grade has been postponed because certain course assignments are outstanding. If the outstanding assignments are completed within one calendar year from the date of the close of term in which the grade of Incomplete was received and a final grade submitted, the final grade will be recorded on the permanent transcript, replacing the grade of Incomplete, with a transcript notation indicating the date that the grade of Incomplete was replaced by a final grade.

If the outstanding work is not completed within one calendar year from the date of the close of term in which the grade of Incomplete was received, the grade will remain as a permanent Incomplete on the transcript. In such instances, if the course is a required course or part of an approved program of study, students will be required to re-enroll in the course, including repayment of all tuition and fee charges for the new registration and satisfactorily complete all course requirements. If the required course is not offered in subsequent terms, the student should speak with the faculty advisor or program coordinator about the options for fulfilling the degree requirement. Doctoral students with six or more credits with grades of Incomplete included on their program of study will not be allowed to sit for the certification exam.

E-mail notices: Teachers College students have the responsibility for activating the Columbia University Network ID (UNI), which includes a free Columbia email account. As official communications from the College — e.g., information on graduation, announcements of

closing due to severe storm, flu epidemic, transportation disruption, etc. — will be sent to the student’s Columbia email account, students are responsible for either reading email there or for utilizing the mail forwarding option to forward mail from their Columbia account to an email address which they will monitor.

**Tentative Course Schedule**
(Read the listed readings *before* the class session for which they are listed.)

*NOTE:* Chapter numbers from Thomas, Nelson and Silverman (2011) that are *italicized* (chapters 8, 9, 14) should be read for general concepts and not for computation.

**September 12**
Introduction to course
The language of research and inquiry
Why we do research
What’s worth knowing?
Questions and answers

**September 19**
Research reports
Who does research?
Ethical considerations in research
When to believe what you read

**Readings**
Locke, Silverman, & Spirduso, chapters 1 to 4
Thomas, Nelson, & Silverman, chapter 5
Review one or more of these ethics codes:
American Educational Research Association: Code of Ethics
http://www.aera.net/Portals/38/docs/About_AERA/CodeOfEthics(1).pdf

American Psychological Association: Ethical Principles of Psychologists and Code of Conduct
(specifically see section 8 on research and publication)

Society for Neuroscience: Responsible Conduct Regarding Scientific Communication
http://www.sfn.org/Member-Center/Professional-Conduct/Guidelines-for-Responsible-Conduct-Regarding-Scientific-Communication

September 26
Retrieving information

Readings
Thomas, Nelson, & Silverman, chapter 2
Supplementary material: litsearch

October 3
Style and form for research and graduate papers
Taking notes: The 12-step forms
Explaining research to others

Readings
Locke, Silverman, & Spirduso, chapters 7, 8, 11, 13
Supplementary material: aparefs, apaheadings

October 10
Overview of research methods
Matching questions and methods
Statistics: A beginner's guide

Readings
Locke, Silverman, & Spirduso, chapters 5, 6, 10, appendix B
Thomas, Nelson, & Silverman, chapter 6

Supplementary material: empirical research, statistics

**Assignment due**

Literature search assignment

**October 17**
Reading research critically

**Readings**

Locke, Silverman, & Spirduso, chapters 9, 12

Supplementary material: quant reports, qual reports

**Assignment due:** Reading assignment 1 (quantitative research report)

**October 24**
Getting good data: Reliability, validity, trustworthiness, credibility, and other issues

Sampling, administration, and measurement issues

**Readings**

Thomas, Nelson, & Silverman, chapter 11, pages 329-338

Supplementary material: relvaldefs, threats

**Assignment due**

Reading assignment 2 (qualitative research report)

**October 31**
Descriptive research designs and techniques

Epidemiological research

**Readings**

Thomas, Nelson, & Silverman, chapters 15, 16, 17

**Assignment due**

Explanation assignment 1

November 7
Correlational research designs

Readings
Thomas, Nelson, & Silverman, pages 303-304, chapter 8
Supplementary material: statistics

November 14
Causal-comparative, experimental, and quasi-experimental research designs

Readings
Thomas, Nelson, & Silverman, pages 338-348, 351-352, chapter 9
Supplementary material: statistics

Assignment due
Explanation assignment 2

November 21
Repeated measures and multivariate research designs
Supplementary material: statistics

November 28
Qualitative research
Interpretive qualitative research

Readings
Thomas, Nelson, & Silverman, chapter 19
Locke, Silverman, & Spirduso, review chapters 10 & 12
Supplementary material: qual reports

Assignment due
Reading assignment 3 (research review)

December 5
Critical qualitative research

Mixed methods research

Readings
Thomas, Nelson, & Silverman, chapter 20
Thomas (1993) recommended

December 12
Research synthesis: Meta-analysis

Single subject designs

Readings
Thomas, Nelson, & Silverman, pages 348-351, chapters 3, 4, 14, 21

Supplementary material: single subject

December 19
Planning research: Considerations and resources

Recap and review

Class evaluation

Supplementary material: single subject, 20 steps

Assignment due

Take-home exam

Assignments and Evaluation

There are four types of assignments with a total of seven assignments for the course. The assignments are organized to follow the class readings, lecture, and discussion. They reinforce and apply material that is the focus of the readings and class sessions. They are due on the dates listed. You will receive a grade reduction if the assignment is not turned in on

time, and you have not received prior approval for late submission. The assignments are as follows:

**Literature search**

For this assignment you will complete a literature search using three or more electronic databases (e.g., ArticleFirst, Proquest Dissertations & Theses Global, ERIC, Medline, Web of Science). With your CUNIX ID and password, you have free access to these indices through the Columbia LibraryWeb (http://clio.columbia.edu/databases#) and their use will be demonstrated on September 26. The literature search should focus on a topic of interest. As you conduct the search, you should experiment using different keywords and indices. The report of the search should be typed (double-spaced) and include the following information:

- Which indices were searched
- Focus of the search
- Review each index searched and provide the following:
  - Keywords that were used for each index
  - Strategies, including changes that you employed to find appropriate citations
- Summary of what you found and what you learned about the indices
- Attachments (first page of list of citations for each database searched)

This assignment will represent 10% of the final class grade and is due on October 10.

**Research reading assignments**

You will read and take notes, using the 12-step forms in Locke, Silverman, and Spirduso (2010), for three different types of research reports (quantitative, qualitative, and research review). You may select the article to read, or articles can be recommended. For this assignment you should read each article as many times as necessary so that you understand it. You also should read or reread the appropriate section or chapter in Thomas, Nelson, & Silverman (2015) about the methodological approach used in the paper. You will turn in the following to complete this assignment:

- The completed appropriate 12-step form from Locke, Silverman, and Spirduso (2010). The completed 12-step form should be typed. Electronic copies of these forms are

available in MS Word on ClassWeb to make it easier to complete the assignment on your computer.

- A flow chart of the research design for the quantitative and qualitative reports (step 6 on the 12-step forms).
- A copy of the research report.

It is important that the articles you choose reflect the type of report at which the assignment is directed. Please check with me, before doing the assignment, if you have any doubt. Articles and 12-step forms that are submitted and are not the correct type of report for the assignment will be returned ungraded. You will have the opportunity to redo the assignment for a reduction in grade. Please check with me to make sure you’ve selected an appropriate report!

Each reading assignment will represent 10% of the final class grade. They are due on October 17 (quantitative report), October 24 (qualitative report), and November 28 (research review).

Research explanation assignments

Students will form groups of three to complete these assignments outside of class. Each member of the group will select a research report and explain it to the other members of the group. Explanations should be 12 to 15 minutes and include one or more handouts to assist in communicating the material. For the second explanation, you should select another research report that uses a method different than the one selected for the first report. After your group has met, you will submit a report that includes the following:

- The appropriate 12-step form
- A method flow chart
- The outline of the presentation
- Handouts for those listening to your explanation
- A short (2 to 3 pages double-spaced) analysis of the explanation you did. The report should have each of the following elements: (a) what went well; (b) what did not go well; (c) what you would need to know or do to explain the report better; and (d) what you would change if you were going to explain the report to another group. Please include all four elements in both explanation reports.

Each explanation will represent 14% of the final class grade. They are due on October 31 and November 14.

**Final exam**

There will be a take-home final exam that reinforces the material in the class. The exam will cover the semester but have its strongest emphasis on the material covered in class sessions listed on the syllabus from October 26 to December 7. The exam must be typed and will be available in electronic form on ClassWeb so that it is easier to complete.

As you prepare to take the final exam, you should review your class notes and relevant readings. The Thomas, Nelson, and Silverman (2015) book, in particular, provides resources for answering the questions. The results of this exam will show whether you’ve mastered the material and can discuss it intelligently. Therefore, you may wish to discuss answers with me or other students as you work on the exam. **The final written answers, however, should be your own.**

The take-home exam will represent 32% of the final class grade. To permit you sufficient time to review your notes and readings and prepare your answers, the exam will be distributed on November 21 and is due on December 19.

In addition to completing the assignments, you will be expected to attend each class session and participate in discussions and class activities.

Sample Syllabus 2

Department of Kinesiology  
Iowa State University  
Kines 501—Research Methods (3 semester credit hours)  
Course Outline

**Purpose:** An introduction to the basic aspects of reading, evaluating, and writing research. Topics include problem selection, literature review, instrumentation, methodology, statistical issues, and types of research in physical activity.

**Prerequisites:** Graduate standing.

**Intended audience:** Required for MS students and PhD students (if not previously taken or as a review)

Course instructor:

Office:

Phone:

E-mail:

Course overview: I use a combination of approaches to assist your learning. These include reading assignments and discussion of the reading, learning activities that provide practical experience in research methods, analyses of research examples, and homework preparing various elements of a research proposal. You are encouraged to ask questions about the assigned reading, followed by discussion and learning activities. **This means you must read the material before the class!** Be prepared to be called on at random regarding the readings.

Classroom policies: You should understand the following issues:

1. Attendance is taken each class. No penalties occur for class absence. However, because of the nature of class activities, students who do not attend regularly are nearly always unsuccessful in this class.
2. Assignments are due at the scheduled date. Late assignments will be penalized unless prior permission of the instructor has been granted. The penalty for a late assignment is at least 50% of the value of the assignment. Late assignments will be accepted up to one week after the due date; after that the assignment is graded at 0 points.
3. You will need a computer account number for e-mail and other purposes.
4. All assignments must be typed. **Sentence construction and spelling count.**
5. Graduate students are expected to maintain the highest standards of academic integrity (i.e., plagiarism and research misconduct will be penalized; see attachment to course outline).
6. Bring your textbook, course outline, and a calculator (one that can perform basic functions—add, subtract, multiply, divide, square root. One with a memory function is also helpful) to **every class.**

Objectives: Upon completion of this course, you will be able to do the following:

1. Plan and evaluate research that includes the following:
   a. Selecting a problem
   b. Locating and using appropriate references
   c. Critiquing research studies
   d. Using American Psychological Association style

2. Plan and carry out analyses for the following:
   a. Descriptive data
   b. Differences among and between groups
   c. Relationships among and between variables

3. Interpret statistical analyses, tables, and summaries typically presented in research reports.

4. Design and interpret analytical, descriptive, epidemiological, experimental, qualitative, and mixed-methods research.

5. Understand basic measurement constructs such as validity, reliability, scales of measurement, field tests, and laboratory tests.

6. Use written and verbal forms for research reporting with special considerations of styles for theses and dissertations.

Course outline:

- Overview of the research process
  o Introduction to research in physical activity
  o Developing the problem and using the literature
  o Presenting the problem
  o Formulating the method
  o Ethical issues in research and scholarship

- Statistical and measurement concepts in research
  o Becoming acquainted with statistical concepts
  o Planning research using power analysis
  o Relationships among variables
  o Differences among groups
  o Nonparametric techniques
  o Measuring research variables

- Types of research
  o Historical research in physical activity
  o Philosophical research in physical activity
  o Research synthesis (meta-analysis)
  o Survey research
  o Other descriptive research
  o Descriptive research in physical activity epidemiology
  o Experimental and quasi-experimental research
  o Qualitative research

- Mixed-methods research
- Writing the research report
  - Completing the research process
  - Ways of reporting research

**Required text:**


**Assignments and exams:**

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<tr>
<th>Assignment</th>
<th>Points</th>
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<tr>
<td>Midterm and final exam (100 points each)</td>
<td>200</td>
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<tr>
<td>Short assignments (10 @ 10 points each)</td>
<td>100</td>
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<tr>
<td>Literature—using Web of Science</td>
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<tr>
<td>Developing the problem and hypotheses</td>
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<td>Ethical issues—whistle blowing</td>
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<td>Planning—evaluating power</td>
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<td>Evaluating follow-ups to ANOVA</td>
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<td>Evaluating nonparametrics</td>
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<td>Measurement—quality of a dependent variable</td>
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<tr>
<td>Meta-Analysis—doing a mini-meta</td>
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<tr>
<td>Evaluating a survey study</td>
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<tr>
<td>Evaluating a qualitative study</td>
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<tr>
<th>Class presentations (2 @ 25 points each)</th>
<th>50 points</th>
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<tbody>
<tr>
<td>Improving a table or figure</td>
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<td>Poster presentation of a study</td>
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<td>Statistical printouts—using SPSS</td>
<td>50 points</td>
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<td><strong>Total</strong></td>
<td><strong>400 points</strong></td>
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**Grading:**

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<tr>
<td>A</td>
<td>370+ points</td>
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<tr>
<td>B</td>
<td>330–369 points</td>
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<tr>
<td>C</td>
<td>300–329 points</td>
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<tr>
<td>F</td>
<td>&lt;300 points</td>
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**Class schedule:** Dates for topics, readings, assignments due, and exams (list below); class begins promptly at ___ and lasts for 3 hours. **Read chapters and other reading assignments before class.**

1. Opening class discussion
2. Introduction to research (chapter 1)
   - Developing the problem and using the literature (chapter 2)
3. Meeting the kinesiology faculty
   - Presenting the problems (chapter 3)
   - Formulating the method (chapter 4)
4. Ethical issues in research (chapter 5)
   - Becoming acquainted with statistical concepts (chapter 6)
5. Planning research using power analysis (chapter 7)

6. Differences among groups (chapter 9)
7. Nonparametric techniques (chapter 10)
   o Measuring research variables (chapter 11)
   o Review for midterm exam
8. **Midterm exam**
9. Historical research in physical activity (chapter 12)
   o Philosophical research in physical activity (chapter 13)
   o Papers from attached reading list
10. Research synthesis (chapter 14)
    o Survey research (chapter 15)
11. Other descriptive research (chapter 16)
    o Descriptive research in PA epidemiology (chapter 17)
12. Experimental and quasi-experimental research (chapter 18)
13. Qualitative research (chapter 19) and mixed-methods research (chapter 20)
   *Thanksgiving holiday (no class)*
14. Completing the research process (chapter 21)
    o Presentation on revising tables and figures
15. Ways of reporting research (chapter 22)
    o Presentation on research poster
    o Review for exam
16. **Final exam**

Assigned readings outside the textbook (research articles related to topics):

**General Readings for All Students**


Specific Area Readings (select 2 from your area)

**Biomechanics**


**Exercise Physiology**


**Exercise and Sport Psychology**


**Motor Behavior**


**Pedagogy**


**Physical Activity and Health Promotion**
