

California University of Pennsylvania  
Guidelines for New Course Proposals  
University Course Syllabus  
Approved: 2/4/13

Department of Health Science

A. Protocol

Course Name: Methods of Research in Allied Health Sciences

Course Number: ATE 800

Credits: 3

Prerequisites: Formal acceptance into the Graduate Athletic Training Education Program

Maximum Class Size: 20 Traditional; N/A Online

B. Objectives of the Course:

1. Objectives of the course include but are not limited to the following:

- a. Evaluate and solve problems in a scientific fashion
- b. Search the literature and use the many services available at the library
- c. Write in a clear, concise, scientific style
- d. Understand and apply basic tests and measurements to data
- e. Read and critically analyze published research
- f. Appreciate the diverse methodology of research
- g. Develop a problem and limit it to a workable question

C. Catalog Description:

The course studies the basic tenets of scientific research as they apply to the allied health fields. Topical discussions include development and limitation of a research problem, research methodology, basic principles of tests and measurements, the review of the literature and library utilization, and writing the research document.

D. Outline of the Course:

1. Introduction to Research
  - a. Why research?
  - b. The scientific method
  - c. Types of research
  - d. Parts of the research document
2. The Problem
  - a. Defining the problem
  - b. Developing the problem
  - c. Limiting the problem
  - d. Introducing the problem
  - e. Writing the introduction

- f. Writing the title
- 3. The Literature Review
  - a. Finding the literature
  - b. Indexes
  - c. Vulcat
  - d. Wilson Disc
  - e. Other sources
  - f. Writing the review of the literature
  - g. APA style and plagiarism
- 4. Research Methodology
  - a. Designing the research
  - b. Developing hypotheses
  - c. Selection and protection of subjects
  - d. Instrumentation
  - e. Procedures
  - f. Critical analysis of research design
  - g. Writing the design and procedures
- 5. Types of Research
  - a. Meta-analysis
  - b. Descriptive research
  - c. Experimental research
  - d. Creative research
- 6. Tests and Measurements
  - a. Introduction to statistics
  - b. Measures of central tendency
  - c. Parametric tests
  - d. Non-parametric tests
  - e. Applying statistics to the data
  - f. Computers and their applications
- 7. The Process
  - a. Proposal
  - b. Defense
  - c. Strategies for success

E. Teaching Methodology:

The proposed course will use lecture-discussion and question and answer format. Class will have at least 1-2 sessions in the library.

F. Text

Thomas, Nelson, Silverman. *Research Methods in Physical Activity*. 6<sup>th</sup> ed. Champaign, IL: Human Kinetics, 2010.

G. Assessment Activities:

- 1) Students will be assessed on their writing ability; specifically their writing of Chapter 1 (Introduction) and Chapter 2 (Literature Review) of a research topic of their choice. Examinations will measure the students' retention of classroom discussions and lectures. The final assessment will be an oral presentation about their research topic.

- 2)
- 3)
- 4)

**5) BIBLIOGRAPHY**

- 6)
- 7) Biles, C. (1995). Statistics, a health sciences orientation. Dubuque : WC Brown.
- 8)
- 9) Bluman, A. (1992). Elementary statistics. Dubuque : WC Brown.
- 10)
- 11) Currier, Dean P. (1990). Elements of research in physical therapy. Baltimore : Williams & Wilkins.
- 12)
- 13) DeRoy, E. & Gitlin, L. (1994). Introduction to research. St. Louis : Mosby Publishers.
- 14)
- 15) Gelfand, H. (1992). Mastering APA style : student's workbook and training guide. Washington, DC : American Psychological Association.
- 16)
- 17) Issac, S. & Michael, W. (1990). Handbook in research and evaluation for education and the behavioral sciences. San Diego : Edits Publishers.
- 18)
- 19) Kish, Leslie. (1987). Statistical design for research. New York, NY: Wiley.
- 20)
- 21) Manly, Bryan F. (1992). The design and analysis of research studies. Cambridge, NY : Cambridge University Press.
- 22)
- 23) Mann, Thomas. (1987). A guide to library research methods. New York, NY: Oxford University Press.
- 24)
- 25) Matzen, Robert D. (1987). Research made easy : a guide for students and writers. New York, NY: Bantam Books.
- 26)
- 27) Norman & Streiner. (1994). Biostatistics, the bare essentials. St. Louis : Mosby Publishers.
- 28)
- 29) Research methods in library and information studies. (1990). London. Weimer, R.C. (1993). Statistics. Dubuque : WC Brown.

H. Accommodations for Students with Disabilities:

**Accommodations for Students with Disabilities**

Students with disabilities:

- Reserve the right to decide when to self-identify and when to request accommodations.

- Will register with the Office for Students with Disabilities (OSD) each semester to receive accommodations.
- Might be required to communicate with faculty for accommodations which specifically involve the faculty.
- Will present the OSD Accommodation Approval Notice to faculty when requesting accommodations that involve the faculty.

Requests for approval for reasonable accommodations should be directed to the Office for Students with Disabilities (OSD). Approved accommodations will be recorded on the OSD Accommodation Approval notice and provided to the student. Students are expected to adhere to OSD procedures for self-identifying, providing documentation and requesting accommodations in a timely manner.

Contact Information:

- Location: Azorsky Hall – Room 105
  - Phone: (724) 938-5781
  - Fax: (724) 938-4599
  - Email: osdmail@calu.edu
- Web Site: <http://sai.calu.edu/osd>

- I. Supportive Instructional Materials, e.g. library materials, web sites, etc.

Additional Information for Course Proposals

- J. Proposed Instructors:

- K. Rationale for the Course:

- L. Specialized Equipment or Supplies Needed:

- M. Answer the following questions using complete sentences:

1. Does the course require additional human resources? (Please explain)
2. Does the course require additional physical resources? (Please explain)
3. Does the course change the requirements in any particular major? (Please explain)
4. Does the course replace an existing course in your program? (If so, list the course)
5. How often will the course be taught?
6. Does the course duplicate an existing course in another Department or College? (If the possibility exists, indicate course discipline, number, and name)

- N. If the proposed course includes substantial material that is traditionally taught in another discipline, you must request a statement of support from the department chair that houses that discipline.

- O. Please identify if you are proposing to have this course considered as a menu course for General Education. If yes, justify and demonstrate the reasons based on the categories for General Education. The General Education Committee must consider and approve the course proposal before consideration by the UCC.

- P. Provide Approval Form (electronically).

## Additional Guidelines

The following are additional guidelines that you must follow which will expedite your course proposal. Failure to follow these guidelines will result in the return of the proposal to the department.

1. Be sure that your proposal is in the correct format (Guidelines for New Course Proposals) and that all questions have been completely answered.
2. Be sure that you have completed and attached the Application to Establish a New Course form and/or the Advisement Sheet Revision form and that the **appropriate signatures** have been affixed. Please send through the process electronically (the preferred method) or by paper. No items will be placed on the agenda until the Chair of the UCC is in possession of these forms.
3. Be sure that you include an updated advisement sheet for any course that is being required by the department or is classified as a restricted elective. In addition, you must include an electronic copy (MS Word or PDF) of the current advisement sheet(s) with your proposal. Be certain that all advisement sheets affected by the proposed course change be included with your proposal.
4. When submitting materials for consideration by the Curriculum Committee, you must provide an electronic copy of each item to be reviewed to the Chairperson.
5. All completed items must be in the hands of the Chairperson of the Curriculum Committee a minimum of one week prior to the next regularly scheduled meeting.
6. Any department requesting a course name change, number change, prefix changes, credit changes, etc. must submit this request on the Application to Establish a New Course Form and submit electronically.
7. New advisement sheets, major proposals, minors, LOCs, Certificates, or changes to advisement sheets will become effective the fall semester following committee approval. **The advisement sheets must also include the committee approval date and the effective date on the advisement page.** Submit this request on the Advisement and /or Program Changes form.
8. New courses will become effective the semester following committee approval.
9. Any references listed must be in the appropriate bibliographic format for the discipline.
10. Online courses should follow the Quality Matters™ rubric and is posted on the UCC website. Be sure that you include the online teaching methodology statement (refer E.2 above) that refers to the Quality Matters™ rubric.
11. All course objectives must follow Bloom's Taxonomy learning domains located on the UCC website.