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

Department of Justice, Law and Society

A. Protocol

Course Name: Advanced Methods in Archaeology

Course Number: ANT 445

Credits: 3

Prerequisites: ANT 290 and ANT 400

Maximum Class Size: 30

B. Objectives of the Course:

Upon completion of this course the student will be able to:

- 1. Explain how certain types of technology can be used to identify archaeological remains
- 2. Explain how certain types of technology can be used to analyze archaeological remains
- 3. Explain the connections between research design, theory and methodology
- 4. Develop a proposal for analyzing a set of curated archaeological materials
- 5. Analyze a set of curated archaeological materials using one type of technology discussed in class

C. Catalog Description:

An advanced course for the study of applications of technology to the study of archaeological remains such as geophysical reconnaissance, GIS, microscopic study of use-wear patterns on bone and stone tools, aerial photography, and other analytical techniques for the study of specific categories of archaeological remains. This course allows the student to acquire hands-on experience that is not available in any other course.

D. Outline of the Course:

- I. Introduction to the subject matter of the course
 - A. Seminar requirements
 - II. Types of archaeological remains
 - A. Historical sites
 - B. Prehistoric sites
 - III. Purpose of archaeological analysis

Classification

- A. Functional analysis
- B. Hypothesis testing
- IV. Connections between research design, theory and methodology
 - A. What is research design
 - B. Role of theory in research design

- C. Role of Methodology in research design
- V. Hypothesis testing and statistical analysis in research
 - A. Formulation of an hypothesis for testing
 - B. Selection of statistical measures for testing the hypothesis
- VI. Dating techniques
 - A. Relative methods
 - a) Seriation
 - b) Stratification and Stratigraphy
 - B. Chronometric methods
 - a) Radiocarbon dating
 - b) Dendrochronology
- VII. Geophysical applications
 - A. Aerial photography
 - B. Ground penetrating radar
 - C. Magnetometer
 - D. Resistivity
- VIII. GIS examination for modeling settlement patterns
 - A. Environmental reconstruction
 - B. Site Catchment analysis
- IX. Analysis of site stratification
 - A. Site formation processes
 - a) Primary disposal
 - 1. Secondary disposal
 - 2. Defacto disposal
 - b) Erosion formation processes
 - 1. Alluvial
 - 2. Coluvial
 - 3. Deposition
 - X. Microscopic examination of use-wear patterns
 - A. bone tools
 - B. stone tools
 - a) chipped stone
 - b) ground stone
 - C. shell tools
- XI. Identification of archaeological patterns using artifact frequency
 - A. Sherd to projectile point ratios
 - B. Historic artifact patterns
- XII. Identification of historical artifacts and the usage of archival information
 - A. Material composition
 - B. Function
 - C. Historical records
- XIII. Report Writing

E. Teaching Methodology (face to face or classroom):

A variety of teaching methodologies may be used in teaching this course. They include, but are not limited to: lecture, PowerPoint images, assigned readings, case studies, multi-media

presentations, group discussions, and guest speakers. Emphasis will be placed on engaging the learner for involvement and active participation in the learning process.

Quality Matters™ Statement – The online course follows the standards of the Quality Matters™ rubric.

F Text

Balme, Jane and Alistair Paterson, editors, *Archaeology in Practice: A Student Guide to Archaeological Analyses*, Blackwell Publishing, 2006.

- G. Assessment Activities (face to face or classroom). Individual instructors may customize different activities.
 - 1. Performance assessment tasks
 - 2. Weekly assignments and reports
 - 3. Exams and/or quizzes
 - 5. Individual/Group projects
 - 6. Case studies
 - 7. Research Reports
 - 8. Article/Book Critiques
- H. Accommodations for Students with Disabilities:

Accommodations for Students with Disabilities

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.

Office for Students with Disabilities

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://www.calu.edu/current-students/student-services/disability/index.htm

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

American Antiquity Journal

American Journal of Archaeology

Current Anthropology Journal

Reference books on prehistoric artifact typology and artifact identification

Reference books on historic artifact typology and artifact identification

Additional Information for Course Proposals

J. Proposed Instructors:

Anthropology faculty members in the Department of Justice, Law & Society with the appropriate background in Archaeology.

K. Rationale for the Course:

The course offers students an advanced laboratory/research course for discussing methodological issues, and to show them how different kinds of archaeological materials are used to answer research questions.

L. Specialized Equipment or Supplies Needed:

No specialized equipment or supplies are needed.

M. Answer the following questions using complete sentences:

1. Does the course require additional human resources? (Please explain)

The course does not require additional human resources. Faculty within the department can teach this course.

2. Does the course require additional physical resources? (Please explain)

The course does not require additional physical resources.

- **3.** Does the course change the requirements in any particular major? Yes, the course will be a requirement in a revised undergraduate Anthropology curriculum.
- 4. Does the course replace an existing course? (If so, list the course and attach a Course Deletion sheet) The course does not replace an existing course
- 5. How often will the course be taught? The course will be taught not less than every third semester
- 6. Does the course duplicate an existing course in another Department or College? (If the possibility exists, indicate course discipline, number, and name)

 The course will not duplicate an existing course in another department or College
- **7.** What is the recommended maximum class size for this course? ? It is a recommended that no more than 35 students may enroll in this class.
- 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. This course is only taught within the Anthropology curriculum.
- 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. No, this course will not be considered as a General Education Course.
- 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.