# **ANTH 167**

# **Archaeological Lab methods**

# Section 1

# **Contact Information**

**Instructor:** Dr. Marco Meniketti

Office Location: 404N Clark Hall

**Telephone:** 408-924-5787

Email: marco.meniketti@sjsu.edu

Office Hours: T/Th 3:00-4:30

or by appointment

**Class Days/Time:** T/Th 10:30-11:45

Classroom: Integrative Anthropology Laboratory WSQ4

# **Course Web pages:**

# http://www.sjsu.edu/people/marco.meniketti/courses/ArchLab

Course materials such as syllabus, handouts, notes, assignment instructions, etc. can be found on my faculty web page at http://www.sjsu.edu/people/firstname.lastname. You are responsible for regularly checking with the messaging system through MySJSU (or other communication system as indicated by the instructor) to learn any updates.

# **Course Description**

General laboratory procedures practiced by archaeologists, including artifact processing, analysis of historic and prehistoric materials, and report writing. Forms of analysis may include use wear patterns, forensic comparisons, artifact identification, and basic statistics.

## **Prerequisites:**

Students must have completed ANTH 13 (Introduction to Archaeology or equivalent course meeting the instructor's criteria).

#### **Required Texts:**

Archaeological Laboratory Methods, 5<sup>th</sup> edition. Sutton and Arkush. Kendall/Hunt Publishing 2009.

#### **Supplemental readings:**

Several case studies and supplemental works, some out of print, will be made available as pdfs on the course webpage.

# **Additional resources**

Cronyn, J.M.

1990 The Elements of Archeological Conservation. Rutledge, London

Drennan, Robert

1996 Statistics for Archaeologists. Plenum Press, New York.

Miller, G., Jones, O., Ross, L., and T. Majewski

1991 Approaches to Material Culture Research for Historical Archaeologists. The Society for historical Archaeology

Renfrew, C. and Bahn, P.

2007 Archaeological Essentials: Theories, Method and Practice. Thames and Hudson, London.

Student folios and bibliographies housed in the IAL.

The objective of this course is to give students a basic understanding of social and cultural processes affecting civilizations of the Americas before the arrival of Europeans. Developments in architecture, mathematics, science, art, and religion will be highlighted.

The focus of this course will be on theory and hands-on skills associated with analysis of archaeologically recovered materials and artifacts. While archaeologists tend to have specialized skills or training in artifact classes or materials (such as lithics or ceramics) all archaeologists must have working knowledge of how to process every class of artifact that might be encountered during field work. This course stresses fundamentals such that students are trained in recording and reporting basic information about artifacts and are made aware of the kinds of specialized laboratory analyses are possible.

## Laboratory Applications

Students will gain hands-on experience with techniques used in archaeological analysis, including photography, computer stratigraphy illustration, and analysis of nominal variables of artifacts.

## Artifact Analysis

Students will learn and apply a range of methods for analysis of artifacts, archaeological site plans, microscopic analysis, and identification.

## Basic Experimentation

Students will engage in independent research related to special problems in archaeological analysis and conservation. This will require outside readings and library/web research

#### Research Activity Reporting

Reporting sites and artifact description is an essential part of archaeological writing and a professional responsibility.

## **Course Learning Outcomes**

At the conclusion of this course students will:

CLO 1 demonstrate competence with basic analysis of ceramics, historical artifacts, botanicals, and hair. CLO2 develop introductory skills with archaeological illustration through photography, hand drawing, and computer illustration formats.

CLO3 demonstrate basic competence in artifact identification and background analysis. Students will identify at least five resources for analytics.

CLO 4 demonstrate competence with archaeological technologies: Digital Theodolite, Total Station, microscreening, microscopy, and digital illustration: Adobe Illustrator or Photoshop.

Course Learning Outcome	Instruction	Assessment
CLO 1 Demonstrate competence	Hands-on lab working with	Completed lab; written lab
with analysis of archaeological	archaeological materials from lab	reports assembled in portfolio;
materials	collections, report writing,	accurate representation.
	resource compilations	
CLO 2 develop skills with	Hands-on lab working with	Completed lab; written lab
archaeological illustration	archaeological materials from lab	reports assembled in portfolio;
	collections, use of camera,	accurate representation.
	computer, and hand formats.	
CLO 3 Demonstrate competence	Hands-on lab working with	Completed lab; written lab
in artifact identification	archaeological materials from lab	reports assembled in portfolio;
	collections, textual and on-line	accurate representation.
	research.	Term project.
CLO 4 Demonstrate competence	Hands-on lab working with field	Completed lab; written lab
with archaeological technologies	and lab equipment. Use of lab	reports assembled in portfolio;
	computers and software.	accurate representation.

#### **Course Requirements**

The class is a mixture of lecture, discussion, lab work and independent study. Independent projects will require students to use library and internet resources as well as carry out long term lab experiments. Lab work is mandatory and students may miss only one lab session unexcused without penalty.

## **Portfolio**

All students will engage in several hands-on labs throughout the semester. Each lab assignment will have its own brief written summary. All materials associated with each lab assignment will be compiled in a portfolio of work to be presented for evaluation at the conclusion of the semester.

#### Lab Work

As this is a lab course there will be multiple opportunities to participate in lab analysis of artifact materials. The material used in class is drawn from active and on-going research. Thoughtful care should be taken with the artifacts. Students will be assigned tasks each week depending on available materials and analytical equipment. Students can expect to spend weeks doing repetitive and often tedious lab tasks. There will be no make-up for labs (*substitute work may be available for students having valid and documented medical excused absences*). Because materials and equipment are limited, it may be necessary to spread the lab work out over several classes. This means individuals will likely be working on different tasks. One page write-up due at completion of lab.

Conservation problems will be semester long discussion and will highlight issues connected to the semester-long research problem.

#### Annotated Bibliography and exemplary case study.

Students will compile bibliography of a minimum twenty (20) references over the semester relevant to one of the various topics covered during the course. Six of these sources will have a critical comprehensive annotation. Each reference should center on case studies associated with lab analysis of archaeological materials. It may be necessary to extend your reach beyond the SJSU library.

## Workload:

Students should anticipate and schedule minimally six hours of each week for work outside class. It is the policy of SJSU that for each contact hour there be two hours of associated course work outside class per credit hour. Therefor students in a three credit course will have six hours of outside work. This may consist of readings, exam preparation, library research, report writing, and lab completion time other than during scheduled class time.

## Final Exam:

The final exam is based on practical skills and problem-based analysis. Most aspects of the exam may be hands-on. The exam will be open-note. May 20<sup>th</sup>, 9:45-12:00

Library liaison

Silke Higgins: Silke.Higgins@sjsu.edu

Martin Luther King Library

# **Course Requirements and Assignments**

Lectures are an important aspect of instruction. Material not covered in the readings or text, videos, and supplementary information are provided during lectures which cannot adequately be made up. It is therefore essential that students make every effort to attend class for a more comprehensive learning experience. Attendance is not graded; however, we conduct hands-on group activities in the lab which cannot be made up that count in the student's overall participation grade. Students should plan to spend six hours each week on assignments, particularly on completion of lab assignments.

## **Assessments:**

There will eight labs each with an associated summary write-up, a twenty-item annotated bibliography and a term portfolio. There will also be a Final Exam. There will be one artifact assignment lasting the entire semester. The Final Exam is comprehensive encompassing the entire course and will be open note. Objective questions are included. Conceptual understanding and application of knowledge through problem solving and analysis is the principal objective of the course and will be targeted by assessment. Several labs and semester projects may span multiple weeks until completion. Others will be completed quickly with set deadlines. Be flexible, but careful time management is essential for successful completion of labs exercises. What this means is that in many cases students will be finishing particular labs at very different times.

Archaeology is interdisciplinary. The goal of these assessments is to provide students with the broadest range of opportunity to demonstrate mastery and competence based on their personal strengths and to reach as many different interests as feasible within the context and constraints of the course.

All papers and reports must be typed, dbl spaced, 12 pt type, plus appropriate citations in American Antiquity format. In addition to mechanical aspects (spelling, grammar, proper citations, etc) synthesis papers and term projects are assessed based on original thinking, conceptual clarity, and accuracy. To the degree that these are subjective categories, they are consistent with the standards of professional peer reviewed journals across disciplines. Obviously, you are not expected to write at the level of professionals, but you can be expected to adhere to professional practice and improve your academic skills repertoire. Portfolios will not be accepted after the deadline.

Intentional plagiarism will result in an automatic failing grade. Failure to take the final exam will result in an F grade regardless of other completed work.

## **Assessments**

Labs 8 x 10 pts (80 pts) 26% Term research (30 pts) 10% Lab Portfolio (60 pts) 20% Annotated Bibliography (30 pts) 10% Final Exam (100 pts) 34% Total: 300 pts

65% of assignments must be submitted to receive a passing grade.

Grades will be based on score percentages. 96-00% A+; 93-95 A; 90-91 A-; 86-89% B+; 81-85% B; 78-80 B-; 75-77% C+; 70-74% C; 66-69% C-; 61-65% D; below 60% F

<u>Earning an A</u>: All assignments must be completed, on time, and demonstrate thorough mastery of conceptual as well as critical content. Assignments will exhibit thoughtful and critical analysis, conceptual

synthesis, and originality. Papers will be carefully proofed for grammatical and typographical errors and exhibit exemplary writing appropriate to the discipline. Seminar responsibilities achieved. Assignments must be of consistently high quality in terms of content and execution. Examinations will score in the 90% and above range. Projects complete and original or innovative.

Earning a B: All assignments must be completed, on time, and demonstrate general comprehension of conceptual as well as critical content. Assignments will exhibit thoughtful analysis and effort should be made at conceptual synthesis. Seminar responsibilities achieved. Papers will be carefully proofed for grammatical and typographical errors and exhibit very few writing problems. Assignments must be of good quality in terms of content and conform to standards appropriate to the discipline. Exams may score in the 85% and above range. Projects complete and original.

Earning a C: At least 80% of assignments must be completed, on time, and demonstrate general understanding of critical content. Knowledge of basic conceptual material should be demonstrated. Seminar responsibilities achieved. Assignments will exhibit careful effort with minimal errors in content. Papers will likely contain grammatical and typographical errors and exhibit general writing problems. Citation standards incorrect. Exams may score in the 75% and above range. Projects complete but of average quality as measured by content and scope.

Earning a D: Failure to turn in assignments in a timely manner or to complete no more than 60% of assignments. Only basic knowledge of conceptual material. Critical analysis not demonstrated. Assignments exhibiting a lack of careful or thoughtful effort and several errors in content. Failure to achieve seminar responsibilities or at barely acceptable effort. Minimal engagement in class projects. Papers will likely contain grammatical and typographical errors and exhibit general writing problems. Citation standards ignored. Exams may score below 75% range. Project partial completed a basic level.

Earning an F: Failure to turn in assignments in a timely manner or to complete and submit more than 60% of assignments. Basic knowledge of conceptual material and critical analysis not demonstrated. No evidence of general skills or course content acquired. Assignments exhibiting a lack of careful or thoughtful effort and significant errors evident in content. Papers will likely contain serious grammatical and typographical errors along with general writing problems, especially in word usage. Citation standards wrong. Exams may score below the 60% range. Final project possibly incomplete, late, or absent. Any intentional plagiarism will automatically result in a failing grade. Missing final exam will result in an F.

Grade I: Special circumstances (personal circumstances preventing student from academic completion of the course). Attendance below acceptable levels to have earned an I will in some instances be assigned an F grade per University policy. An Incomplete can not be given to avoid a F grade.

# **Classroom Protocol**

All lectures and handouts are copyrighted, including exams, and may not be distributed without written consent by the instructor.

- Students are <u>encouraged</u> to ask questions before, during, and after class and to take full advantage of scheduled office hours or make appointments to discuss topics of interest.
- The instructor will make every reasonable effort to provide timely and constructive feedback to students concerning performance throughout the semester.
- The instructor will be available through regular office hours, through email, and by appointment.
- Students should expect to actively participate individually, through group work, class discussions, and in Q&A sessions.
- Students are expected to keep track of assignments, grades and readings.
- Missed exams may be made-up <u>only</u> if a student provides appropriate documentation for legitimate cause for missing scheduled exam dates (funeral, medical emergency, family crisis; per university policy). Absolutely no make-up will be given for reasons of course overloads, or personal time. Make-

up exams will be by scheduled appointment in my office and will include oral discussion section. Late research projects will not be accepted. Late assignments will be given a grace period of one class cycle (the next class) and a reduced score. Late assignments will not be accepted beyond the grace period. Assignments will not be accepted during finals week.

- Exam dates will not be altered. If you have a conflict with a scheduled exam date please make arrangements in advance (at least two weeks). The sooner the better.
- You <u>may not</u> leave the room during an exam. The instructor will interpret this as a completed exam and it will be collected without further opportunity to continue.
- The instructor reserves the right to adjust the syllabus content as deemed necessary to facilitate the highest achievement and performance of the class or to introduce new elements that may arise. Archaeology is an active science. New information becomes available weekly that may impact our course material.
- To receive a passing grade for this course you must complete and submit <u>at least 2/3 of the</u> assignments with sufficient scores and complete the Final Exam.
- Extra credit assignments will not be provided as substitutes for missing regular assignments.
- Academic integrity and ethics will be upheld at all times. Plagiarism is intellectually dishonest and a form of theft. It will not be tolerated.
- All lectures are copyrighted. The use of recording equipment of any kind; tape, film, or digital, is forbidden without written consent from the instructor. This is not usually a problem. Students must agree not to use lectures in unauthorized formats or non-educational purposes.
- All written projects should conform to the citation and reference standards of <u>American Antiquity</u> (SAA). Examples are provided for use on my faculty webpage.
- Students are expected to attend class. Participation is a vital element in a social science environment and attendance is foundational to academic success. Attendance does not count toward your grade, but will impact your learning. Attendance will be monitored informally.
- Please turn off your cell phones as a courtesy and in respect for fellow students and the instructor.
- Please: Food or drinks are not allowed in the lab.
- It will be assumed that you have read and understand all policies and course criteria.
- Texting in class is <u>unacceptable behavior</u>. You will be asked to leave the room as this is a disturbance for the instructor and your classmates.

# Departmental Goals\_\_\_\_\_

Learn about the goals of the anthropology department and how it can benefit your education.

Goals <a href="http://www.sjsu.edu/anthropology/departmentinfo/goals/index.html">http://www.sjsu.edu/anthropology/departmentinfo/goals/index.html</a>

## **Credit Hours**

Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of forty-five hours over the length of the course (normally 3 hours per unit per week with 1 of the hours used for lecture) for instruction or preparation/studying or course related activities including but not limited to internships, labs, clinical practica. Other course structures will have equivalent workload expectations as described in the syllabus.

University P	olicies
•	

Here are some of the basic university policies that students must follow.

# General Expectations, Rights and Responsibilities of the Student

As members of the academic community, students accept both the rights and responsibilities incumbent upon all members of the institution. Students are encouraged to familiarize themselves with SJSU's policies and practices pertaining to the procedures to follow if and when questions or concerns about a class arises. See <a href="University Policy S90-5">University Policy S90-5</a> at <a href="http://www.sjsu.edu/senate/docs/S90-5.pdf">http://www.sjsu.edu/senate/docs/S90-5.pdf</a>. More detailed information on a variety of related topics is available in the <a href="SJSU catalog">SJSU catalog</a>, at <a href="http://info.sjsu.edu/web-dbgen/narr/catalog/rec-12234.12506.html">http://info.sjsu.edu/web-dbgen/narr/catalog/rec-12234.12506.html</a>. In general, it is recommended that students begin by seeking clarification or discussing concerns with their instructor. If such conversation is not possible, or if it does not serve to address the issue, it is recommended that the student contact the Department Chair as a next step.

# **Dropping and Adding**

Find the procedures and deadlines for adding and dropping classes.

Catalog Policies <a href="http://info.sjsu.edu/static/catalog/policies.html">http://info.sjsu.edu/static/catalog/policies.html</a>.

Add/drop deadlines http://www.sjsu.edu/provost/services/academic\_calendars/

<u>Late Drop Policy</u> http://www.sjsu.edu/aars/policies/latedrops/policy/

# Consent for Recording of Class and Public Sharing of Instructor Material

All students must obtain the instructor's permission if they wish to record lectures or distribute materials from the class.

University Policy S12-7 http://www.sjsu.edu/senate/docs/S12-7.pdf

# **Academic integrity**

Learn about the importance of academic honesty and the consequences if it is violated.

<u>University Academic Integrity Policy S07-2</u> http://www.sjsu.edu/senate/docs/S07-2.pdf

Student Conduct and Ethical Development website

http://www.sjsu.edu/studentconduct/

# Campus Policy in Compliance with the American Disabilities Act

Here are guidelines to request any course adaptations or accommodations you might need.

Presidential Directive 97-03

http://www.sjsu.edu/president/docs/directives/PD\_1997-03.pdf

Accessible Education Center http://www.sjsu.edu/aec

The university provides resources that can help you succeed academically. Just look here.

Academic Success Center http://www.sjsu.edu/at/asc/

Peer Connections website http://peerconnections.sjsu.edu

# ANTH 167 Sec. 1. Spring 2015

# Course Schedule

Week	Date	Topics, Readings, Assignments, Deadlines	
1	Jan 22	Orientation to lab, Definitions, Protocols Readings; S&A Chapter 1,2; handouts Conservation issues	
2	Jan 27/29	Lab 1 Field equipment and survey protocol, field notes, survey technologies Readings: S&A Chapter 3, handouts	
3	Feb 3/5	Lab 2 Archaeological illustration; computer, hand drawing, photography Readings: S&A Chapter 14, Pdf readings Begin Semester Artifact Research project	
4	Feb 10/12	Lab 3 Lithic analysis Readings: S&A Chapter 4-5, Pdf readings Due 24th	
5	Feb 17/19	Lab 3 continued	
6	Feb 24/26	Lab 4 Coarse earthenware ceramics, Carib and Afro-Caribbean, Native American Readings: S&A Chapter 6, Pdf readings  Due 10 <sup>th</sup> Begin hair sample collection	
7	Mar 3/5	Lab 4 continued	
8	Mar 10/12	Lab 5 Historic ceramics, identification, makers marks Readings: S&A Chapter 9, hand-outs, Pdf readings Due 17th	
9	Mar 17/19	Lab 5 Bottles, cans, thimbles and everyday material culture Readings: S&A Chapter 9, Pdf readings Due Apr 2 <sup>nd</sup>	
10	Mar 23-31	Spring Break; Cesar Chavez say (campus closed)	
11	Apr 2	Lab 6 Forensic analysis of hair	
12	Apr 7/9	Lab 6 continued Due 14 <sup>th</sup>	
13	Apr 14/16*	Special topics/problems. *Society for American Archaeology conference Library research workshop	
14	Apr 21/23	Special Topics/problems, Survey technology follow up Readings: Pdf articles Semester Project Due 23 <sup>rd</sup>	
15	Apr 28/30	Lab 8 Conservation problems, Perishables, Plant remains Readings: S&A Chapter 8, 11 Due 7 <sup>th</sup>	
16	May 5/7	Lab 8 continued	
17	May 12	Wrap up unfinished lab work. <b>Portfolios Due 12th</b>	