

Ventura College Sabbatical Leave Proposal
Curriculum Enhancement Project for Spring 2014
Submitted by Cari Lange
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Instructor's Sabbatical Leave Status

Full-time hire date: August 2007

Part-time district hire date: May 2005

Previous Sabbaticals: 0

Background of Sabbatical Project

The hiring of a full time instructor specifically for the biological side of the Anthropology Department in 2007 was done with the stated intention that this person would be responsible for the development of traditional anthropology laboratory curriculum and forensic science curriculum (as part of an interdisciplinary venture with the Criminal Justice Department). Since being hired full time in 2007 I have been able to develop the initial curriculum and content for three new courses, oversee the implementation of a new laboratory facility, order and secure funding for basic equipment and supplies, have more than doubled the existing osteological and fossil cast collection of Ventura College, and continually work on the refinement and enhancement of these curriculum.

Biological Anthropology Laboratory (ANTH V01L) was offered in the traditional setting for the first time ever at Ventura College in the Spring 2008 semester. It augments the Biological Anthropology Lecture course (ANTH V01), and is a standard course offering at most colleges and universities. The ANTH V01L course fulfills the VC life science lab requirement and transfers to the University level. These lab classes are regularly at maximum enrollment, and serve 17% more students per section than other life science labs.

The Introduction to Forensic Science cross listed lecture course ANTH/CJ V35 was first offered in Fall 2008. The applied laboratory portion was added in Spring 2011. The forensic science classes are unique course offerings to VC within our district, and often attract students from both Moorpark and Oxnard campuses. Both the lecture and lab courses are a component of the local and TMC AA degree in Criminal Justice. The CTE division has intentions to expand the forensic science offerings at VC to make this a full career and/or transfer track curriculum.

From 2007 to present I have been extensively involved with the design and implementation phases of MCE 223-226, which was designated within the original building plans to be a 100% dedicated anthropology suite. My personal level of involvement in this project went as deep as meeting with the Heery contractor team on a bi-weekly basis to provide specific feedback on the requirements for the rooms and laboratory on an infrastructural level. For the first time at Ventura College, there are now adjacent facilities for Biological and Cultural Anthropology and a dedicated laboratory space allowing for a united anthropology department and immersive atmosphere for students. My involvement in facilities oversight continues as the anthropology laboratory is in the process of being equipped and brought up to code to also serve as a fully modern forensic science lab facility.

While the development and expansion of the Biological Anthropology and Forensic Science programs and facilities has seen great progress in the last six years, there are still areas of deficiency. Principally, there is a large disconnect between existing laboratory manuals and support materials and what can actually be done in our existing lab facility and utilizing our particular collection of cast materials, supplies, and equipment. There currently is no laboratory manual in publication for either biological anthropology or forensic science that is fully compatible with our programs. Most existing lab manuals include superfluous activities and/or activities that simply are infeasible given our facility and materials.

The purpose of my sabbatical leave is to develop two laboratory manuals; one for use in Biological Anthropology Lab and the other in Introduction to Forensic Science Lab. These projects will continue to fulfill my ultimate goal at Ventura College of developing and continually strengthening Biological Anthropology and Forensic Science offerings. These two original laboratory manuals and workbooks will be specifically designed to best utilize the facilities, cast collection, and equipment at Ventura College, to provide a cost effective resource for students, and to better appeal to the learning modalities of our student population. Furthermore, it will provide me the opportunity to improve my skills in topic research, writing, and teaching methodologies.

Purpose of Sabbatical Project

The purpose of this sabbatical project is twofold: (1) to develop a publication quality laboratory manual and workbook specific to Biological Anthropology Laboratory courses at Ventura College, and (2) to create a uniform and comprehensive collection of activities for use in the Introduction to Forensics Science lecture and laboratory classes.

Components of Sabbatical Project

- Creation of Laboratory Manual/Classroom Materials

The focus of my sabbatical project is to develop two original activity manuals; one for use with Biological Anthropology Laboratory courses (ANTH V01L) and one for the Introduction to Forensic Science Laboratory (ANTH/CJ V35L). Both these courses are part of award and/or degree track programs and have strong enrollment numbers.

- Academic Study/Literature Review/Laboratory Research

In order to fulfill the first phase of the project, I will engage in extensive literature review and seek academic study in order to strengthen my knowledge in laboratory practices, techniques, and applications in both biological anthropology and forensic science. I will also conduct and perform numerous laboratory experiments in order to choose, troubleshoot, and refine the activities to be included in the final laboratory manuals.

Value of Sabbatical Project to VCCCD and Ventura College

Developing a publication quality laboratory manual for Biological Anthropology can provide recognition to the district and the college. Creating a uniform and comprehensive collection of activities for use in the Introduction to Forensics Science lecture and laboratory classes will improve the quality of these

classes. In addition, many of these activities can be adapted for use in other disciplines (Criminal Investigation in the Criminal Justice program for instance) at Ventura College as well as anticipated additions of forensics classes in the future. By strengthening the curriculum in forensic science, Ventura College will potentially attract students from throughout the district to this truly unique career track educational opportunity.

Value of Sabbatical Project to Ventura College Students

My intended project of developing two laboratory manuals will have a direct, tangible, benefit to Ventura College students.

Our students are negatively impacted by the fact that there are not fully compatible laboratory manuals on the market for either Biological Anthropology or Forensic Science classes taught at Ventura College. Using one of the currently published lab manuals for these courses creates several issues that impact students and negatively affect learning: ineffective use of our existing cast collection, outdated core lessons, an unjustified number of superfluous activities, necessary modification of curriculum to match published lab activities, piecemealed activities lacking a cohesive theme and voice, lesson explanations written at a level unsuitable for our student population, and steep price point for the majority of current lab manuals in these fields.

- Fully Utilize Ventura College's Existing Fossil Cast Collection, Materials, and Equipment

It is simple fact that no one mass produced laboratory manual can fully utilize any existing laboratory's particular collection of cast materials, supplies, and equipment. It is assumed that products will be purchased to match the published activities and any "extra" casts, materials, and equipment that may already exist in a college's collection are unnecessary or unimportant. It is my feeling that this is a great disservice to the program and to students. Over many decades, Ventura College's Anthropology program has amassed a wonderfully varied collection of important fossil casts. It is one of the finest collections I have ever seen at any college or university. When these casts are not worked into laboratory activities students are losing out on the very learning experience that these pieces were purchased for. Compiling a collection of activities designed around Ventura College's current collection will greatly enhance the overall learning experience and expand knowledge by introducing students to a much wider variety of fossil casts than they would otherwise encounter when using only the mass marketed workbooks.

- Avoid Outdated and Superfluous Laboratory Activities and Design Lessons Most Appropriate for Our Student Population

Many of the current laboratory manuals are "beefed up" with activities that are simply not pertinent to the curriculum. These lessons tend to be special interest topics of the principle authors or are added in to appeal to niche instruction. Typically these are the lessons that receive the most attention from the authors and are the first to be updated. These activities are typically written to appeal to the professionals in the field, and are often times above the level appropriate for community college curriculum. These types of lessons can be rather intimidating to students, many of whom are new to the sciences and lack the required basic fundamental laboratory skills necessary to properly execute such specialty experiments.

The focused attention to special interest topics creates a situation where the most basic, fundamental lessons are often the ones that are outdated. This issue is particularly apparent in the Introduction to Forensic Science Laboratory class where specialty topics abound, and the most fundamental lessons are

often given only cursory treatment. For example, in the popular adoption, Forensic Science Laboratory Manual and Workbook by Kubic and Petraco, there are 39 lessons and experiments detailed. Of those, only 13 are core lessons; and four of the experiments to accompany those core lessons are antiquated. While the special interest activities can pique interest, they come at a cost to the more critical core lessons that are of greater value to students at the community college level.

By creating a dedicated collection of activities, I can ensure students will be getting the maximum educational value from the most critical lessons. Lessons and activities can be easily updated when technology changes or we get a new piece of equipment or materials. Perhaps most importantly, by creating my own laboratory manual I can design lessons and activities at the level appropriate for our student population. Students will be aided by core lessons, fundamental procedures, and pertinent activities that are current and accessible.

- Align Lessons and Activities to the Course Outline of Record

Many times employing one of the existing published laboratory manuals necessitates modifying the curriculum to match the workbook's given lab objectives and activities. This can be problematic when attempting to adhere to the Course Outline of Record. This is especially the case in our Introduction to Forensic Science Lab class due to the fact that our course is designed to be a cross listed life science and Criminal Justice offering while the few existing laboratory manuals for this course are written primarily for an Administration of Justice or Crime Scene Investigator type curriculum. Creating lab manuals specific to the targeted courses at Ventura College will ensure that the curriculum being covered will fully align with the Course Outline of Record. This will further strengthen articulation for these courses, ultimately benefitting our students.

- Present Activities with a Consistent Theme and Procedural Methodology

The solution currently employed to ensure that the Course Outline of Record is being met is to use only the few activities that match from the existing published laboratory manuals and then supplementing and/or creating activities from other sources. While avoiding potential articulation issues by doing this, it creates its own set of problems by failing to present students with a unified voice, comprehensive teaching methodology and one consistent overriding theme and procedural methodology. Piecemealed activity plans often confuse students and detract from the actual learning objectives.

Consistent procedure is a critical component of any laboratory science, but is especially important in forensic investigations. By producing a comprehensive lab manual for each of the targeted courses, students will benefit from unified and similarly structured lessons. Overall, learning will be enhanced.

- Help Reduce the High Cost of Laboratory Manuals to Students

This is the most directly significant impact my project will have on students. According to Susan Royer, Ventura College Bookstore supervisor, the most significant factor in if a student purchases required textbooks or not is cost. This means that students are potentially shunning class where the book is required, such as with a laboratory course, based on the price point of that book alone. Other students may delay the purchase of their materials and in doing so are at a disadvantage during the first few weeks of the course. In laboratory classes they may be unable to participate in some activities until the time they can secure the lab workbook. This textbook price barrier, in my opinion, is one of the greatest problems facing our educational system.

The most widely used laboratory manual in Biological Anthropology Laboratory courses, Exploring Physical Anthropology: A Lab Manual and Workbook by Walker-Pacheco, retails for \$59.95. According to the publisher, this is the most widely adopted lab manual for Biological/Physical Anthropology due to its relatively low price point compared to the other standard lab manuals. However, the publisher highly recommends that this manual be used in conjunction with The Photographic Atlas for Physical Anthropology. In fact, the workbook is lacking in photographic details that facilitate student learning, and the secondary book is of great benefit. The abbreviated edition of the photo atlas retails for \$38.95 and the full edition for \$54.95. That puts this option between \$98.90 and \$114.90. <http://www.morton-pub.com/productdetails.cfm?PC=135> (Retrieved 10/27/12).

The other popular adoption choice, D. France's Lab Manual and Workbook for Physical Anthropology, has a list price of \$113.95, but does not require a supplement text. http://www.cengage.com/search/productOverview.do?N=+16&Ntk=P_Isbn13&Ntt=9780495810858 (Retrieved 10/27/12).

While some would argue that even \$114.90 is an average and fair price for a textbook in the sciences, it needs to be noted that these are laboratory workbooks, and as such, students cannot sell the book back at the end of the term. Students bare 100% of the cost of any laboratory manual. This is a very real barrier for many of our students, some of who may decide not to take the course based upon this fact. On top of the high, non-recoupable price, substantial portions of the workbooks are often not usable due to the constraints of available laboratory specimens and casts. As an instructor it is extremely difficult to justify requiring students to purchase a book at this price point when they will only be able to use 70% of it.

With a self-published workbook copied by the campus Canon Center, the cost to the student would be about \$25. This represents potentially more than a 75% savings to each student enrolled in these courses. With the required course materials well within an affordable price range, it will make the class more accessible to those students who may base enrollment decisions on textbook cost, and it will encourage all students to get the course materials right away, allowing them to be fully engaged in the class from day one.

Value of Sabbatical Project to the Instructor

Completion of this project during my sabbatical leave will contribute to my teaching, aid the other instructors of these courses, but most of all be of great benefit to all students taking the targeted courses for many years to come. My goal is to become a more effective instructor and scholar. With this opportunity, I can broaden my contribution to my students, the college, and the disciplines of anthropology and forensic science. This project will allow me to temporarily focus my attention on an area of academics, professional writing, that I have only modest experience. I believe completion of this project will be invaluable in my own personal growth and will greatly enhance my service to Ventura College.

I thank the committee for their time and consideration.
Respectfully yours,

Cari Lange
Associate Professor of Anthropology