2013-2014

Section I – Accomplishments and Status of 2012 Program Review Report

A. Last Year's Initiatives

GEOG1301 - GIS software maintenance fee Funded. Ongoing coverage of GIS Software Maintenance

GEOG1302 – Separate Geosciences Department

Needs Funding (carrying forward). VP of Business Services said this was possible, but we'll need to have this worked out at Division, Campus and District Levels.

GEOG1303 - Update Physical Geography Lab Course

Needs Funding (carrying forward). We have done planning and a reorganization of the labs, but now need help purchasing equipment to allow students to begin doing the hands-on exercises.

GEOG1304 - Update SCI 113 computers (5 plus add one)

Needs Funding (carrying forward). The foundation may be providing funding for a new machine, but the other five still need to be updated.

GEOG1305 - Full computer count for GIS Lab Was funded by a foundation EEG.

GEOG1306 - SCI 116 Lecture Hall repair/update
Seats were replaced, but lighting still needs work

GEOG1307 - Geography Field Trip Development

Needs Funding (carrying forward). We had this low last year, but as we offer more field trips we are ready to move toward multi-day trips and need some funding to carry this out.

B. Updates/accomplishments pertaining to any of the Student Success or Operating Goals from last year's report.

We are continuing to make our Physical Geography Labs more hands-on which we think will help students understand the concepts at a deeper level which we hope will help with achievement. The data for the last year show's an increase of student success in Geography from 66% on the three year average to 70%. This may be a function of the use of SI tutors last year and emphasis on more thorough study guides.

Section II - Description

A. Description of Program/Department

Geography is a dynamic discipline that it is concerned with where things are located on the surface of the Earth, why they are located where they are, and how places are similar and/or different. Geographers further examine our interactions with the environment and how physical and cultural landscapes change through time. There are two main branches of geography: physical geography, which focuses on the

2013-2014

processes that drive Earth's climate, create landforms, and govern the distribution of plants and animals; and human geography, which focuses on cultural phenomenon such as population, development, agriculture, language and religion. In addition to these main branches, Geographic Information Systems (GIS) is an integrating technology of various geospatial technologies (including digital mapping, spatial database management, remote sensing imagery, global positioning systems and route finding) that utilize cartographic, geographic, and discipline specific techniques and knowledge to support decision making and analysis in a wide array of career fields. Geography students are trained to examine the spatial organization of physical features and human activities at a variety of spatial scales from local to global. A background in geography is a necessity for careers involving business, economics, planning, education, history, international relations, cartography, conservation, GIS, demography, transportation, tourism and others.

Degrees/Certificates

Program's courses are designed to articulate to UC and CSU for transfer students.

Proficiency Award: GIS – Basic Competency.

An AA-T in Geography has been submitted to our Curriculum Committee with a hope that the degree will be in place as soon as we get State level approval.

B. Program/Department Significant Events (Strengths and Successes), and Accomplishments

An AA-T in Geography has been submitted.

Our newest faculty member has settled in well and is adding a lot to our department. He has instituted a guest lecture series for our students (Geo Talks) and has added additional field trip opportunities for our students.

We continue to offer our annual GIS Day conference which serves over 120 participants. We will hold our 15th conference this November.

In the GIS area we are implementing course management software in which each students computer work can be accessed from an instructor tablet and can be displayed for learning purposes.

C. 2013-2014 Estimated Costs/Gainful Employment – for Certificates of Achievement ONLY

	Cost		Cost		Cost		Cost
Enrollment		Enrollment					
Fees		Fees					
Books/		Books/					
Supplies		Books/ Supplies					
Total		Total		Total		Total	

D. Criteria Used for Admission

There are no prerequisites for any class in the department; however, there are two lab courses that are co-requisites for the lecture.

E. College Vision

Ventura College will be a model community college known for enhancing the lives and economic futures of its students and the community.

2013-2014

F. College Mission

At Ventura College, we transform students' lives, develop human potential, create an informed citizenry, and serve as the educational and cultural heart of our community. Placing students at the center of the educational experience, we serve a highly diverse student body by providing quality instruction and student support, focusing on associate degree and certificate completion, transfer, workforce preparation, and basic skills. We are committed to the sustainable continuous improvement of our college and its services.

G. College Core Commitments

Ventura College is dedicated to following a set of enduring Core Commitments that shall guide it through changing times and give rise to its Vision, Mission and Goals.

- Student Success
- Respect
- Integrity
- Quality
- Collegiality
- Access

- Innovation
- Diversity
- Service
- Collaboration
- Sustainability
- Continuous Improvement

H. Organizational Structure

President: Greg Gillespie

Executive Vice President: Dean: Dan Kumpf

Department Chair: Steve Palladino

Faculty/Staff:

Name	William Budke
Classification	Associate Professor
Year Hired	2004
Years of Work-Related Experience	Years in the Environmental Remediation and Soil Analysis industry
Degrees/Credentials	A.A., B.A, M.S.

Name	Philip Clinton
Classification	Professor
Year Hired	2012
Years of Work-Related Experience	2nd year at VC, but immediately prior had 8 years full-time
	experience at Palo Verde College in Blythe, CA. He also helped
	manage the Science Division. Before and during his time there he
	taught at various colleges and did environmental remediation work.
Degrees/Credentials	B.S., M.S.

Name	Steve Palladino	
Classification	Professor	
Year Hired	1999	
Years of Work-Related Experience	11 years prior educational experience	
Degrees/Credentials	B.A., M.A.	



2013-2014

Section IIIa - Data and Analysis

A. SLO Data

Provide highlights of what you learned last year in your assessments and discussions. Students display a lack of understanding of major geomorphic features and their relationships pertaining to the role water plays. By incorporating activities that allow the student to gain familiarity with both concepts and details aids in student learning. A majority of those students with numerous absences showed a substantially lower of understanding, and many received sub-par scores as a result of being absent from class more often. Many students lack the scientific vocabulary or are language learners, making the material more difficult to understand. Additionally, many students did not purchase the textbook and therefore rely solely on lecture material to be successful. Assessments given just after covering the section material showed that students are not retaining the knowledge for quizzes and/or exams. Perhaps this is due to the amount of time students are not dedicating to studying outside the class to become more familiar and retain the information necessary to be successful.

Provide highlights of some of the changes made as a result of the assessments and discussions. Incorporation of activities for in-class and out-of-class have been implemented in several classes. Additionally, in-the-field activities/studies have been offered to allow students hands-on experiences in hope that they will retain the knowledge by doing, rather than being passive learners as typical of lecture format sessions. Use of advanced software programs linked directly with text materials is available to students who are struggling to grasp certain concepts or topics. Increasing the number of reminders to students that in order to be successful and to better understand lecture content they must prepare before the lecture sessions and be able to participate in discussions. Enforcement of absence policies could be applied more frequently to encourage students to attend classes.

How did the changes affect student learning – or how do you anticipate that they will? Although it is very early to observe changes to student behavior and assessment results, there has been an increase in knowledge retention by utilizing out-of-class activities and field studies. Additionally, student feedback on the software applications has been favorable for those students not able to easily grasp scientific concepts or topics. As a whole, the department believes the changes made as described above should have a positive effect on student learning.

Based on what you learned, what initiatives requiring resources could you develop (or have you developed) to improve student learning? Explain briefly. Initiatives need to be entered in more detail in Section V. As a department, we are finding students prefer to "do" learning, rather than be passive learners. This is especially true in the laboratory courses, where students are required to participate in "hands-on" learning activities. The department has been working to improve the number of labs that have a large "hands-on" component to encourage student learning. Incorporation of additional tools/equipment (yet to be purchased) will allow the instructors to create interactive and exciting experiments designed to spark student interest and encourage learning. An increase in Field Study programs will provide real-world experiences for students and



2013-2014

show to them the potential career paths they may proceed down to become geographers or scientists in other fields. Furthermore, the experience reinforces concepts and topics discussed during lectures and labs, allowing students a second chance to absorb the material and be successful in their coursework.

What are the most significant initiatives not requiring resources you could (or have developed) to improve student learning? Explain briefly. Initiative(s) need to be entered in more detail in Section V. Structuring activities around core concepts that students complete as an individual, group member, or as a whole class. Rearranging the lecture material to more directly correspond with the textbook readings will allow students a certain level of consistency and also providing a second round of reviewing to become more familiar with core concepts and topics.

Comment on the status of your SLO rotational plan, mapping, and other TracDat work. The SLO rotational plan has been developed and implemented as of Fall 2012. All SLOs have been mapped to ISLOs and will be linked to the assessments. TracDat is up to date, with the one exception of rubrics. Rubrics will be developed and inputted into TracDat in the Spring 2014 semester.

B. Performance Data

1. Retention – Program and Course

We consistently have reasonable high retention (average % in high 80s) for all of our classes and program as a whole.

2. Success - Program and Course

Our program average % is 69% which is a bit higher than previous years. Courses vary; the multi-section courses are at or over the average. A few of the courses, primarily GIS have a low success rate. This can in part be attributed to non-traditional students, who don't complete all the assignments due to professional or personal conflicts. Since they are not seeking a degree, they don't seem to mind getting a low grade. In our key courses, the ethnic/racial group that has the lowest success rate campus wide, African American, appears to do a bit better in our core courses than the campus average for that group.

3. Program Completion – for "Programs" with Degrees/Certificates Only N/A

C. Operating Data

1. <u>Demographics - Program and Course</u>

Our courses have a majority (54%) Hispanic, which is a bit higher than the college at a whole. African American is 5% also a bit higher than the campus. Our male-female ratio is fairly close, but there a more males than females.

2. Budget

In the past 4 years our budget has gone down 30% at the same time we have offered the same number of sections and served the same number of students. We have not received a departmental budget for the past couple years and it is creating a backlog of supply and equipment needs in our department.



2013-2014

3. Productivity - Program and Course

Our WSCH for 2013 is 623 (exact same as our 3-yr average). This is well over the district 525 goal. Our Geog 1 sections are at 146% of WSCH. This more than makes up financially for a couple low enrolled GIS courses! I think we should not be determining a courses fate based on the WSCH for that class alone, but instead the discipline WSCH should be taken into account. If some courses are very high and a couple are low, that should be OK.

D. Resources

1. Faculty

Our full department (GEOG, GIS, ESRM) has a FTE of 6.18, with most of that in GEOG, but GEOL having a FTE of 1.25 needs a full-time instructor. Right now we are under 50% staffed.

2. Classified Staff

We have about 20% of the time of a lab tech we share with Physics. The full budget for that staff person must be accounted for in the Physics Program Review since its not in our budget.

3. Inventory

We are asking for new measurement and laboratory devices and supplies to make our lab program more hands-on. We have reviewed our stock and have identified new items (or increased quantities) we want to acquire for teaching purposes.

4. Facilities or other Resource Requests

No new rooms. We are asking for upgrades/repairs to classrooms we use (SCI 116, SCI 106). We are also asking for computers in SCI 113 to be put on an update cycle (5 are overdue for update). We are also asking for sun shields (sail tarps) to be installed in the 1st floor breezeway of the SCI building (over our offices that on sunny, warm days hit 90+ degrees!)

5. Combined Initiatives

Not sure, perhaps our initiative to re-establish overnight field trips.

E. Other Program/Department Data

N/A

<u>Section IIIb – Other Program Goals and Initiatives</u>

A. Other Program Goals

We are trying to turn SCI 106 into a innovative space for computer supported instruction. Most of the being of this effort was started with a Foundation EEG from last year (and initiative GEOG1407). We bring up planning for future computer furniture which may support a better instructional environment. This is also a test bed environment for some instructional innovations that will take place in the new Viz Hall in the Applied Sciences Center (breaking ground soon).

<u>Section IV – Program Vitality (Academic Senate Approved Self-Evaluation)</u>

We evaluated ourselves as a 20 which puts us on the upper half of the middle category. We are short a supply/equipment budget that would help us improve our labs which may improve student retention and success a bit which would bump us up into the top category on this self-evaluation.

2013-2014

Section V - Initiatives

Begin listing your initiatives here, including any you are carrying forward from prior years. Please note that every program/department needs to include initiatives that do not require resources. You may copy and paste this section

A. Initiative: Restore Department Budget

Initiative ID: GEOG1401 (new)

We need \$500 a year for supplies/materials and another \$500 to replace/add equipment for our labs. (This will help us to begin to make up for the last few low/\$0 years.) This will join funds provided by a successful initiative from last year's (2012-2013) Program Review to set aside funds to cover the annual maintenance cost of our key GIS software.

Link to Data: Budgets from the last few years.

Expected Benefits: This initiative will restore our ability to buy supplies and replace worn out equipment. It will also support our move to a more robust hands-on lab program.

Goal: To have the resources to maintain a safe, complete, up-to-date, and robust lab program for our student so they can appreciate how our Earth works.

Performance Indicator: N/A

Timeline: 2014-2015

Funding Resource Category: Supply Funds

Ranking: H

B. Initiative: Unique Department

Initiative ID: GEOG1402 (carried forward from GEOG1302)

For the last 16 years the Geosciences (Geography, Geology, GIS, and now ESRM) and ASTR/ENGR/PHYS have functioned as separate departments, despite being officially a combined department. This has reduced the compensation due the two department chairs. We seek to see this remedied by a separation of the two groupings into separate departments. While this will have to be eventually approved at the district level, the decision to do this will be campus based. The VP for Business Services has indicated that this is possible. Same as GEOL 1402 and ESRM 1401. See GEOL 1402 for cost.

Link to Data: Budget and Divisional records will show that the Geosciences Department doesn't receive the separate distinction as a department, but is unnecessarily linked to PHYS/ASTR/ENGR.

Expected Benefits: It is very difficult without release time for the full year to complete all departmental chair tasks. Those tasks which currently either end up late, are not completed, or are not taken up will be more likely to be successfully carried out. This will benefit various aspects of the program.

Goal: To have a separate department

Performance Indicator: N/A

Timeline: 2014-2015

Funding Resource Category: Staffing Funds

Ranking: H



2013-2014

C. Initiative: Hands-on Lab Equipment

Initiative ID: GEOG1403 (carried forward from GEOG1303)

We are transitioning our Geography Labs to a more hands-on teaching strategy using tools and measuring devices common to the geotechnical professional community. This should both help students get a practical exposure to the concepts they are learning in lecture, but also provide kinetic learners with an opportunity to "do Geography". We plan to implement as many hands-on activities as possible in each of the next few years. To seed this effort (since the \$500 amount requested for equipment as part of our annual departmental budget in initiative GEOG1401 will be too little to get this initiative off the ground, we are asking for a one time seed money amount of \$2500. (We will also seek a Foundation Educational Enhancement grant to help with this expense.) [Note: We have a spreadsheet of equipment we need to accomplish this transition to a more hands-on lab. Just ask for it.]

Link to Data: N/A

Expected Benefits: Student comprehension, excitement, and ultimately retention should improve be doing hands-on exercises with real world sampling equipment and other pertinent equipment.

Goal: Raise student understanding and success in our Physical Geography Labs (10 sections, 225+ students/semester)

Performance Indicator: Uptick in student retention (2%) and significant increase in success

Timeline: 2014-2015

Funding Resource Category: Equipment-non computer

Ranking: H

D. Initiative: Upgrade Lab Room Computers

Initiative ID: GEOG1404 (carried forward from GEOG1304)

The revamped Physical Geography Lab exercises will include some that are computer-based. We have 5 old computers set up in the Physical Geography Lab classroom (SCI 113), but have space for six computers (groups of 4 students can work with each computer, covering the lab enrollment of 24 students) Thus we'd like to update 5 machines to match the new one the Foundation is acquiring for that room (We'd like to have all six of these be part of the regular periodic campus computer refresh cycle.)

Link to Data: Campus equipment inventory

Expected Benefits: Tied to initiative GEOG1403, where we are trying to improve the experience of our Physical Geography Lab students, but these machines will also be used in other courses taught in SCI 113. This will allow students to access data, animation, and do research and computer-based experiments.

Goal: Raise student understanding and success in our Physical Geography Labs (10 sections, 225+ students/semester). Also be used in Human Geography and California Geography for students to access demographic and imagery data.

Performance Indicator: Uptick in student retention (2%) and significant increase in success (5%)

Timeline: 2014-2015

Funding Resource Category: Technology Funds

Ranking: M

2013-2014

E. Initiative: Field Trip Support.

Initiative ID: GEOG1405 (carried forward from GEOG1307)

We are beginning to re-offer field trips, including overnight trips, to our students (Philip Clinton is taking the lead on this effort). To support one overnight trip a semester, we are requesting \$750/semester (\$1500/year). Much of the cost will be covered by student field trip fees, but until these are calibrated and extra expenses (vans, gas, food, reservations, equipment, entry fees, etc.) are determined, this amount is requested to help ensure the success of these field trips.

Link to Data: N/A

Expected Benefits: Geography is a discipline about how people arrange themselves on the surface of the Earth and how they interact with its Physical Environment. The best "lab" for learning about geography is to go observe the spatial arrangements both of the natural world, but also the interactions of humans with these environments. Some of these trips will likely overlap with future Geology offerings, but some will stand alone.

Goal: To see students who participate in the field studies course or other field trips increase their success to enhance understanding from real-world experience and great excitement about the discipline.

Performance Indicator: Timeline: 2014-2015 Funding Resource Category: Supply Funds

Ranking: H

F. Initiative: SCI 116 Remodel

Initiative ID: GEOG1406 (carried forward from GEOG1306)

In SCI 116 the lighting still needs help. One circuit still flickers and the other has had new Bright White LEDs installed that wash out the screen except at low light levels. Short term solution is to find different fixtures for the front two can lights. Longer term solution may be a remodel of the room, with a major re-wiring/fixture replacement effort (this latter upgrade might take place when we are able to occupy the new ASC building in two years?) Link to Data: See maintenance/building records for requests for fixing the lighting issues in this room.

Expected Benefits: Students will have the appropriate lighting to handle various instructor modes of teaching (enhancing the learning experience). Also students will not be confronted with an overly dark room during computer/video presentations so they can safely work their way through the classroom when necessary.

Goal: A minor uptick in success since there will be less instructor time trying to manage malfunctioning lights so there will be more time on task.

Performance Indicator: Timeline: 2014-2015 Funding Resource Category: Facilities Funds

Ranking: R

2013-2014

G. Initiative: Planning Future Furniture/Computer Set up for SCI 106

Initiative ID: GEOG1407 (related to GEOG1305, but separate)

Since GIS, Geography, and ESRM classes are taught in SCI 106 along with some Engineering courses, we need to continue to look into how to best utilize that room. We now have 20 computers, which can support 20 students in computer-based learning mode and 40 students in computer-enhanced mode (lecture class that occasionally uses computers to access information). While the current set up is adequate, students find the two person desks with the one computer on top a bit crowded and have been putting extra chairs up on top of the cabinets in the back of the room. In the future, perhaps when it is time to refresh the machines in that room, we could look into new tables that include a monitor stowing option like in the new MCE 124. (see also ESRM1403)

Link to Data: N/A

Expected Benefits: Students in computer-based courses will have an ergonomically preferable set up so that they are not encumbered in their attempt to learn. At the same we can access their computer monitors for demonstration purposes. In courses that don't regularly use the computers, they will not have computers monitors in their line-of-sight. This should improve the ability for those students to stay focused on the material.

Goal: Student retention and success will go up by 5-10% depending on the course.

Performance Indicator: Timeline: 2015-2016 Funding Resource Category: Facilities Funds

Ranking: L

Section VI - Process Assessment

Instructions: Please answer the following questions:

A. How have the changes in the program review process this year worked for your area?

De-coupling the data from the report makes it a bit cumbersome, but to be honest many of the attempts to link our SLO/PLSO/ISLO efforts to program review are like trying to cram a square peg through a undersized round hole. Much of what we ask for in program review is comprehensive benefiting the overall program as per our experience and do not relate well to specific attempt to improve student success on content learning (vis-à-vis SLOs). Too much of this is busy work that doesn't really lead to any instructional or program improvement. The time spent crossing the "t's" and dotting the "i's" would be better spent supporting faculty, invigorating programs, and working directly with students.

B. How would you improve the program review process based on this experience?

I am very much in favor of a rotational approach to doing program reviews (every 3 years?). Departments with multiple programs could spread the work out (e.g., one program a year) or do them all at once then just do updates in the interim years. If we are going to identify program goals, I'd like to see two types: Learning goals linked to SLO's and General Program Support goals that do not necessarily link to SLO's, but obviously are there to support the learning environment. BUT please to not add new categories to the Program Review. It needs to be even more streamlined (and completed online?)



2013-2014

C. Appeals

After the program review process is complete, your program has the right to appeal the ranking of initiatives (i.e. initiatives that should have been ranked high but were not, initiatives that were ranked high but should not have been), the division's decision to support/not support program discontinuance, or the process (either within the department/program or the division) itself.

If you choose to appeal, please complete the Appeals form (Appendix E) that explains and supports your position. Forms are located at the Program Review VC website.

The appeal will be handled at the next higher level of the program review process.

VII - Submission Verification

Program/Department: Geosciences

Preparer: Steve Palladino

Dates met (include email discussions): Aug. 16th, Sept. 6 and multiple whole department emails and

discussions with faculty.

List of Faculty who participated in the program Review Process: Primarily the three Full-timers, but

input from part-time staff. Everyone got a copy of the resulting draft program review.

X Preparer Verification: I verify that this program document was completed in accordance with the program review process.

☐ Dean Verification: I	verify that I have reviewe	ed this program revi	iew document and f	ind it complete.
Dean may also provide c	omments (optional):			