Geology Program Review

2011-2012

1. Program Description

A. Description

This program presents a study of the earth and its physical, chemical and biological forces at work.

B. Program Student Learning Outcomes - Successful students in the program are able to:

1. Students will Identify Key Geologic Processes at Work for Various Levels of Detail for Both Subsurface and Surface (Geomorphologic) Activity
2. Students will Summarize Geologic Events and Activities in their Proper Sequence

C. College Level Student learning Outcomes

1. Critical Thinking and Problem Solving
2. Communication
3. Information Competency

D. Estimated Costs (Required for Certificate of Achievement ONLY)

	Cost
Enrollment Fees	
Books	
Supplies	
Total	

E. Criteria Used for Admission

F. Vision

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

G. Mission

Ventura College, one of the oldest comprehensive community colleges in California, provides a positive and accessible learning environment that is responsive to the needs of a highly diverse student body through a varied selection of disciplines, learning approaches and teaching methods including traditional classroom instruction, distance education, experiential learning, and co-curricular activities. It offers courses in basic skills; programs for students seeking an associate degree, certificate or license for job placement and advancement; curricula for students planning to transfer; and training programs to meet worker and employee needs. It is a leader in providing instruction and support for students with disabilities. With its commitment to workforce development in support of the State and region's economic viability, Ventura College takes pride in creating transfer, career technical and continuing education opportunities that promote success, develop students to their full potential, create lifelong learners, enhance personal growth and life enrichment and foster positive values for successful living

and membership in a multicultural society. The College is committed to continual assessment of learning outcomes in order to maintain high quality courses and programs. Originally landscaped to be an arboretum, the College has a beautiful, park-like campus that serves as a vital community resource.

H. 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

I. Degrees/Certificates

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

We intend to offer the needed classes for students to prepare for the Transfer Model Curriculum finalized in Geology by the State Academic Senate last year. This standardized curriculum coordinates class from CCs with CSU 4 year (B.S.) Geology degrees. Presently, the department lacks a full time (FT) Geology faculty to complete the preparation to meet these requirements. The department is presently run by several part time instructors and one FT who teach one or two sections in Geology. Ventura College last had a FT Geologist about 1993 when a retirement occurred in our area.

J. Program Strengths, Successes, and Significant Events

Geology classes serve a large number of students for whom the physical science requirement may be a barrier to college completion. We have relatively high retention rates and very high enrollment in all of these classes *(e.g. enrollment in the 3 Physical Geology lecture classes, 3 Geology lab classes and Oceanography are near or over capacity).* We normally overloaded our classes to help students complete their schedules.

K. Organizational Structure

President: Robin Calote
Executive Vice President: Ramiro Sanchez
Dean: David Oliver
Department Chair:

Instructors and Staff

Name	**Luke Hall**
Classification	Professor
Year Hired	1991
Years of Work-Related Experience	12 years of job experience with Ventura County Water Resources Dept. and 15 years part time at VC prior to full time teaching in 1991.
Degrees/Credentials	A.A., B.S., M.S. *plus life time CC 'Earth Science' credential*

Name	
Classification	
Year Hired	
Years of Work-Related Experience	
Degrees/Credentials	

Geology Program Review

2011-2012

2. Performance Expectations

A. Program Student Learning Outcomes - Successful students in the program are able to:

1. Students will Identify Key Geologic Processes at Work for Various Levels of Detail for Both Subsurface and Surface (Geomorphologic) Activity
2. Students will Summarize Geologic Events and Activities in their Proper Sequence

B. Student Success Outcomes

1. The program will increase its retention rate from the average of the **program's** prior three-year retention rate. The retention rate is the number of students who finish a term with any grade other than W or DR divided by the number of students at census.
2. The program will increase its retention rate from the average of the **college's** prior three-year retention rate. The retention rate is the number of students who finish a term with any grade other than W or DR divided by the number of students at census.
3. The program will increase the student success rates from the average of the **program's** prior three-year success rates. The student success rate is the percentage of students who receive a grade of c or better.
4. The program will increase the student success rates from the average of the **college's** prior three-year success rates. The student success rate is the percentage of students who receive a grade of C or better.
5. Students will complete the program earning certificates and/or degrees.

C. Program Operating Outcomes

1. The program will maintain WSCH/FTEF above the 525 goal set by the district.
2. Inventory of instructional equipment is functional, current, and otherwise adequate to maintain a quality-learning environment. Inventory of all equipment over $200 will be maintained and a replacement schedule will be developed. Service contracts for equipment over $5,000 will be budgeted if funds are available.

Geology Program Review

2011-2012

D. Courses to Student Learning Outcomes Map

Course to Program-Level Student Learning Outcome Mapping (CLSLO)

I: This program-level student learning outcome is **INTRODUCED** is this course.

P: This program-level student learning outcome is **PRACTICED** in this course.

M: This program-level student learning outcome is **MASTERED** in this course.

Leave blank if program-level student learning outcome is not addressed.

Courses	PLSLO #1	PLSLO #2
GEOL V02	I	I
GEOL V02L	I	I
GEOL V03	I	P
GEOL V07	I	P
GEOL V11	I	I
GEOL V21	I	I
GEOL V88		
GEOL V89		

Geology Program Review
2011-2012

3. Operating Information

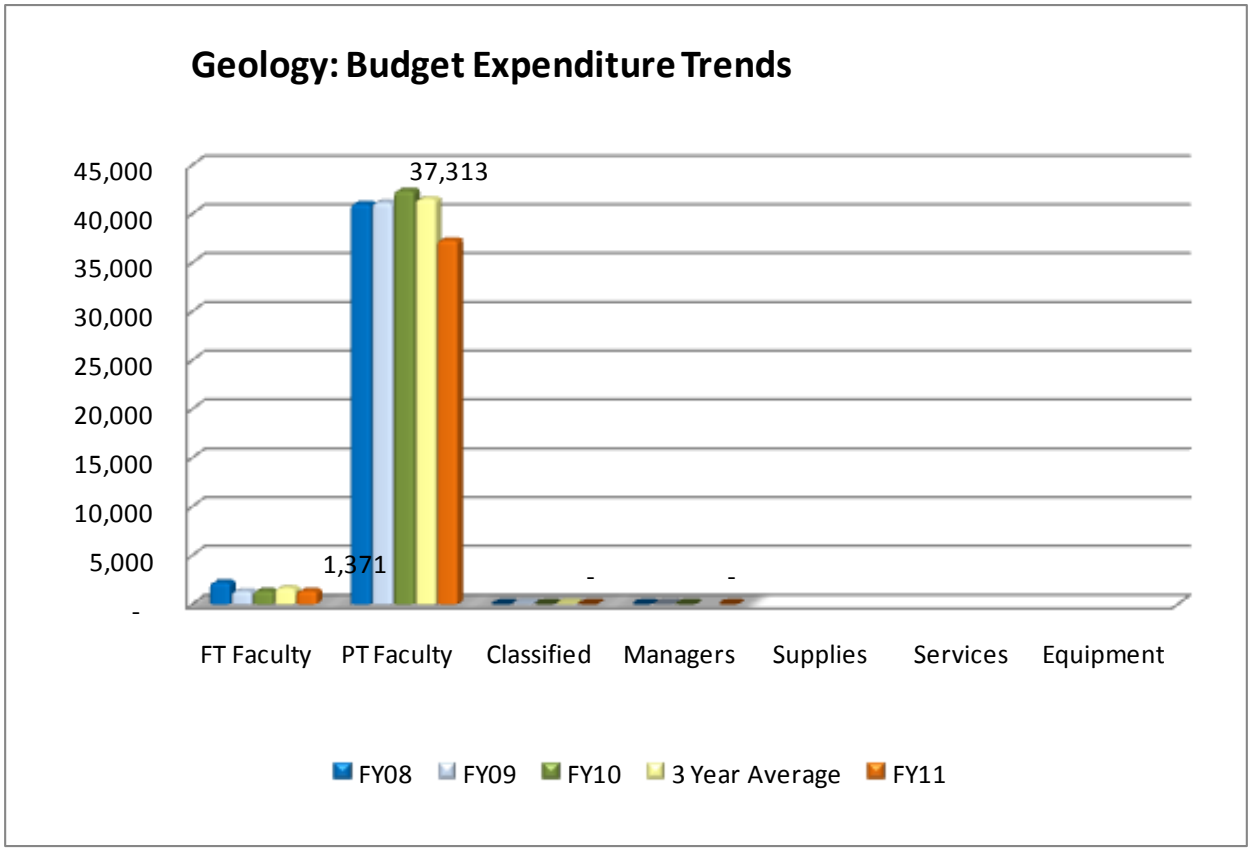
A1: Budget Summary Table

To simplify the reporting and analysis of the Banner budget detail report, the budget accounts were consolidated into nine expense categories. The personnel categories include employee payroll expenses (benefits). The "3 Year Average" was computed to provide a trend benchmark to compare the prior three year expenses to the FY11 expenses. The "FY11 College" expense percentages are included to provide a benchmark to compare the program's expenses to the overall college expenses.

Category	Title	FY08	FY09	FY10	3 Year Average	FY11	FY11 Program	FY11 College
1	FT Faculty	2,239	1,358	1,364	1,654	1,371	-17%	12%
2	PT Faculty	41,030	41,186	42,380	41,532	37,313	-10%	-10%
3	Classified	-	108	-	108	-	-100%	-1%
6	Managers	-	11	-		-		-8%
7	Supplies	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	24%
8	Services	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	-17%
9	Equipment	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	-42%
	Total	**#N/A**	**#N/A**	**#N/A**	**#N/A**	**#N/A**	**#N/A**	**0%**

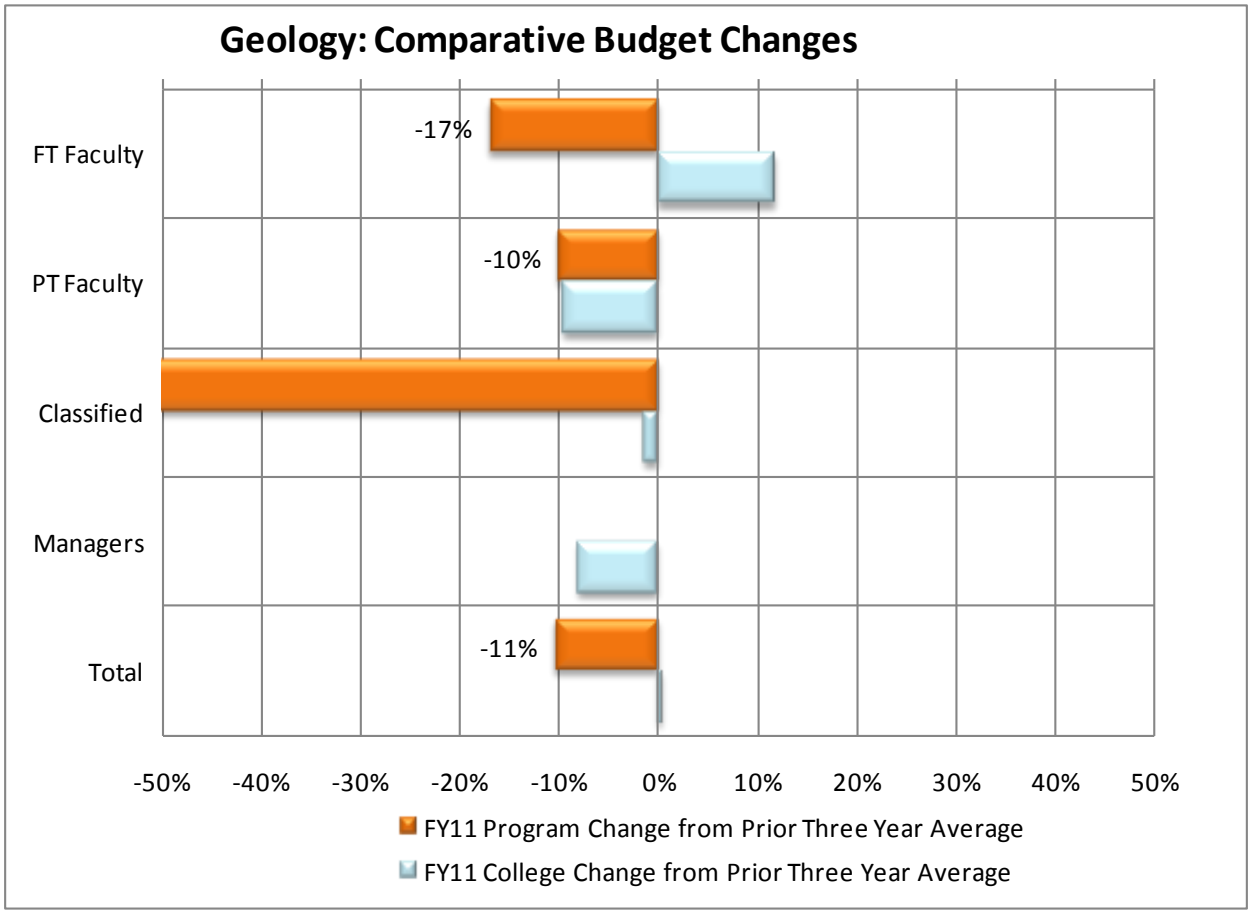
A2: Budget Summary Chart

This chart illustrates the program's expense trends. The data label identifies the FY11 expenses (the last bar in each group). The second-to-last bar is the program's prior three year average.



A3: Comparative Budget Changes Chart

This chart illustrates the percentage change from the prior three year average expense to the FY11 expenses. The top bar for each budget category represents the program's change in expenses and includes the data label. The second bar represents the college's change in expenses.



A4: Budget Detail Report

The program's detail budget information is available in *Appendix A – Program Review Budget Report*. This report is a PDF document and is searchable. The budget information was extracted from the District's Banner Financial System. The program budget includes all expenses associated to the program's Banner program codes within the following funds: general fund (111), designated college equipment fund (114-35012), State supplies and equipment funds (128xx), and the technology refresh fund (445). The *Program Review Budget Report* is sorted by program (in alphabetical order) and includes the following sections: total program expenses summary; subtotal program expenses for each different program code; detail expenses by fund, organization and account; and program inventory (as posted in Banner). To simplify the report, the Banner personnel benefit accounts (3xxx) were consolidated into employee type benefit accounts (3xxx1 = FT Faculty, 3xxx2 = PT Faculty, 3xxx3 = Classified, etc.).

A5: Interpretation of the Program Budget Information

The program shows a change in FT vs. PT faculty over the last three years due to one FT *(Hall)* who normally teaches one Geology class each semester and can pick up a second *(or a third)* class when the schedule requires. The bulk of Hall's teaching load is in Geography as is his master's degree. The data above clearly shows that the program is maintained mostly by PT instructors.

Other factors also account for changes including release time for department head and changes in assignment as two part timers (PT) who switch between Geography labs and Geology labs. The Geology program really needs a dedicated full time Geologist to look after the daily details of this program.

The supply budget for Geology is shared with Geography/GIS and shows up on that Program Review document.

B1: Program Inventory Table

This chart shows the inventory (assets) as currently posted in the Banner Financial System. This inventory list is not complete and will require review by each program. Based on this review an updated inventory list will be maintained by the college. A result of developing a complete and accurate inventory list is to provide an adequate budget for equipment maintenance and replacement (total-cost-of-ownership). The college will be working on this later this fall.

Item	Vendor	Org	Fund	Purchased	Age	Price	Perm Inv #	Serial #
No equipment inventory in the Banner Asset system								

B2: Interpretation of the Program Inventory Information

The above equipment list provided by Banner is incomplete and does not accurately reflect the program's holdings.

The majority of resources within the program are rock and mineral specimens. Many have been in the department for decades (and are still used), many were collected in the field by previous faculty decades ago and a few have been purchased recently to complete collections actively used in the classroom. More work *(purchasing and some sorting)* is needed to bring the active classroom collections up to date.

There is no accurate inventory of supplies due to the lack of a FT Geologist to undertake this task. The value of existing collections would be difficult to assess since it is not electronic gear or types of equipment normally associated with other science programs. It is certainly time to migrate the Geology program into instructional modes that are more equipment-focused. However, due to a lack of experienced, FT faculty to oversee this change, this has not occurred.

Geology Program Review

2011-2012

C1: Productivity Terminology Table

Sections	A credit or non-credit class. Does not include not-for-credit classes (community education).
Census	Number of students enrolled at census (typically the 4th week of class for fall and spring).
FTES	Full Time Equivalent Students A student in the classroom 15 hours/week for 35 weeks (or two semesters) = 525 student contact hours. 525 student contact hours = 1 FTES. Example: 400 student contact hours = 400/525 = 0.762 FTES. The State apportionment process and District allocation model both use FTES as the primary funding criterion.
FTEF	Full Time Equivalent Faculty A faculty member teaching 15 units for two semesters (30 units for the year) = 1 FTE. Example: a 6 unit assignment = 6/30 = 0.20 FTEF (annual). The college also computes semester FTEF by changing the denominator to 15 units. However, in the program review data, all FTE is annual. FTEF includes both Full-Time Faculty and Part-Time Faculty. FTEF in this program review includes faculty assigned to teach extra large sections (XL Faculty). This deviates from the district practice of not including these assignments as part of FTEF. However, it is necessary to account for these assignments to properly produce represent faculty productivity and associated costs.
Cross Listed FTEF	FTEF is assigned to all faculty teaching cross-listed sections. The FTEF assignment is proportional to the number of students enrolled at census. This deviates from the practice of assigning load only to the primary section. It is necessary to account for these cross-listed assignments to properly represent faculty productivity and associated costs.
XL FTE	Extra Large FTE: This is the calculated assignment for faculty assigned to extra large sections (greater than 60 census enrollments).The current practice is not to assign FTE. Example: if census>60, 50% of the section FTE assignment for each additional group of 25 (additional tiers).
WSCH	Weekly Student Contact Hours The term "WSCH" is used as a total for weekly student contact hours AND as the ratio of the total WSCH divided by assigned FTEF. Example: 20 sections of 40 students at census enrolled for 3 hours per week taught by 4.00 FTEF faculty. (20 x 40 x 3) = 2,400 WSCH / 4.00 FTEF = 600 WSCH/FTEF.
WSCH to FTES	Using the example above: 2,400 WSCH x 35 weeks = 84,000 student contact hours = 84,000 / 525 = 160 FTES (see FTES definition). Simplified Formulas: FTES = WSCH/15 or WSCH = FTES x 15
District Goal	Program WSCH ratio goal. WSCH/FTEF The District goal was set in 2006 to recognize the differences in program productivity.

Geology Program Review
2011-2012

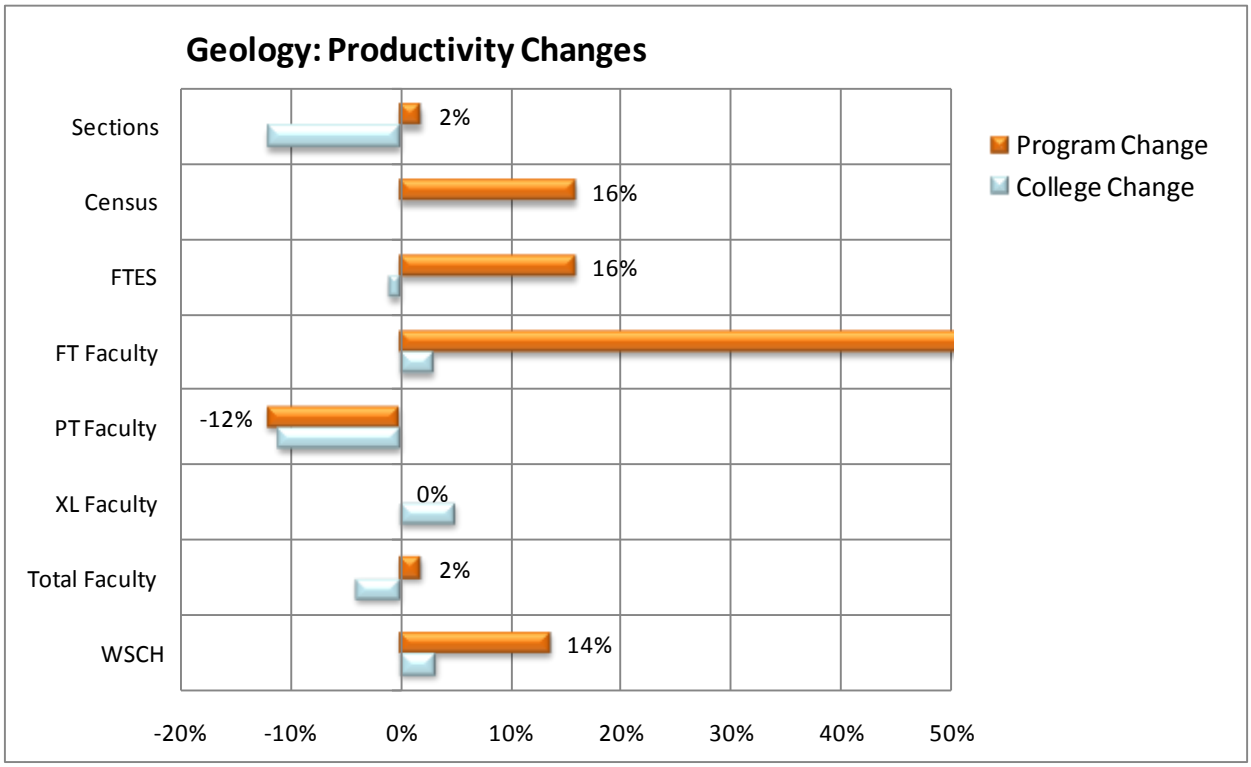
C2: Productivity Summary Table

This table is a summary of the detail information provided in the *Program Review Productivity Report*. The "3 Year Average" was computed to provide a trend benchmark to compare the results of the prior three years to the FY11 results. The "FY11 College" percentages are included to provide a benchmark to compare the program's percentages.

Title	FY08	FY09	FY10	3 Year Average	FY11	Program Change	College Change
Sections	13	14	14	14	14	2%	-12%
Census	374	482	489	448	520	16%	0%
FTES	37	48	49	45	52	16%	-1%
FT Faculty	0.30	0.30	0.18	0.26	0.40	55%	3%
PT Faculty	0.88	0.95	1.08	0.97	0.85	-12%	-11%
XL Faculty	-	-	-	-	-	0%	5%
Total Faculty	1.18	1.25	1.25	1.23	1.25	2%	-4%
WSCH	470	576	588	549	624	14%	3%

C3: Comparative Productivity Changes Chart

This chart illustrates the percentage change from the prior three year average productivity to the FY11 productivity. The top bar for each budget category represents the program's change in productivity and includes the data label. The second bar represents the college's change in productivity.



C4: Interpretation of the Program Productivity Information

The C2 table and C3 Graphs above for Geology indicate that the program offerings *(sections)* have remained relatively constant over the prior three year average, while the census number has increased from the mid-to-high 400s to over 500. The WSCH/FTEF ratio has been trending upwards for each of the three years shown reflecting an active department-wide intent to increase productivity overall.

The teaching load *(total faculty load)* has stayed in the 1.2 range for many years, yet there has not been a FT Geologist on staff for about 20 years. We feel that course offerings and productivity would further increase if the program was under the tutelage of a FT dedicated faculty member who could:

1. re-institute field programs *(especially for the Geology lab classes which had extended field trips regularly offered prior to 20 years ago)*
2. offer additional classes *(kept active in the curriculum)*
3. coordinate transfer communications with local 4-year colleges/universities
4. promote the program to the college community

Geology Program Review
2011-2012

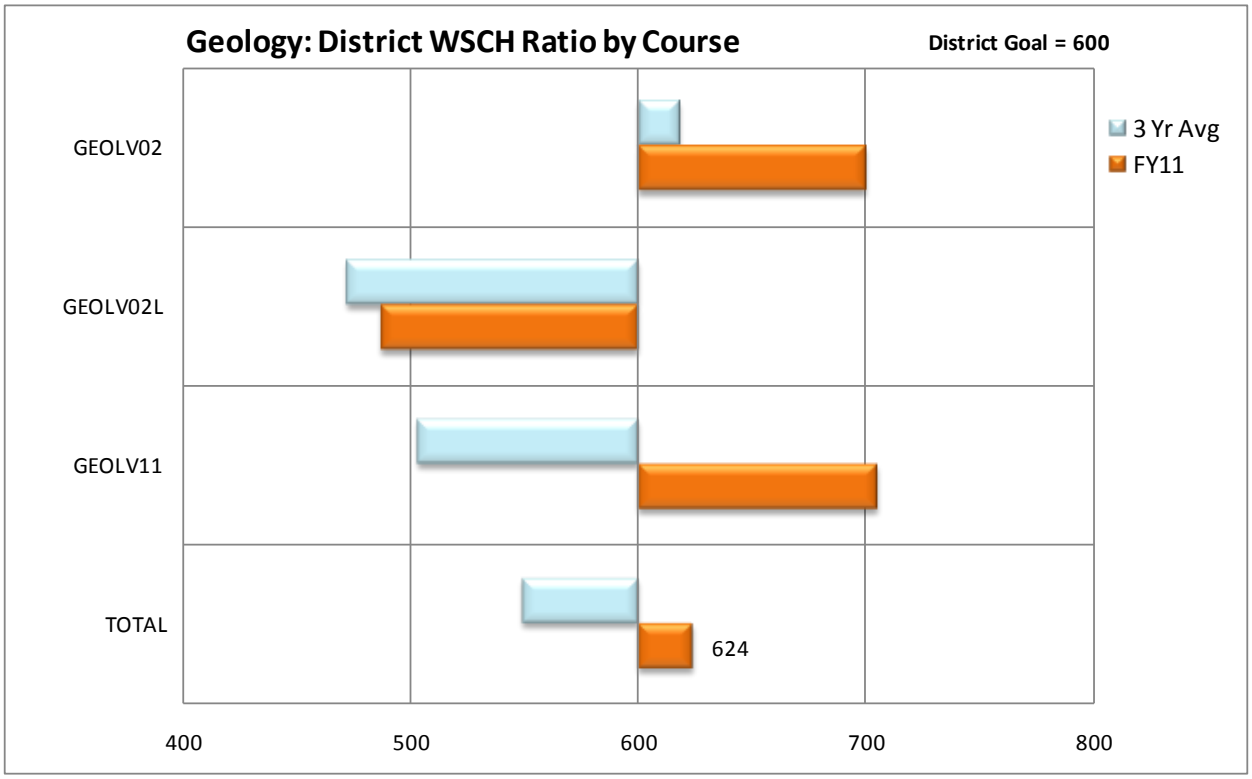
D1: District WSCH Ratio Productivity Table

This table shows the District WSCH ratio (WSCH/FTEF) for each course by year for this program. Courses not offered during FY11 (last year) or without faculty load (independent study) are excluded. Because these are ratios, the combined average is computed using total WSCH and total FTEF (not the average of ratios). The formula used in this table distributes FTEF to all cross-listed sections (proportional to census enrollment) but does not include the associated faculty costs of extra large assignment.
District WSCH Ratio = WSCH / (PT FTE + FT FTE).

District WSCH Ratio: Weekly Student Contact Hours/(FT FTE+PT FTE)									
Course	**Title**	**FY08**	**FY09**	**FY10**	**3 Yr Avg**	**FY11**	**Change**	**Dist Goal**	**% Goal**
GEOLV02	Physical Geology	543	673	640	618	700	13%	600	117%
GEOLV02L	Physical Geology Laboratory	424	490	493	472	487	3%	600	81%
GEOLV11	Introduction to Oceanography	383	488	638	503	705	40%	600	118%
TOTAL	**Annual District WSCH Ratio**	**477**	**577**	**587**	**549**	**624**	**14%**	**600**	**104%**

D2: District WSCH Ratio Productivity Chart

This chart illustrates the course level District WSCH ratio. The top bar shows the program's three year average. The second bar shows the program's FY11 WSCH ratio. The axis represents the District WSCH ratio goal set in 2006. The program's (or subject's) total WSCH ratio is shown as the TOTAL at the bottom of the chart.



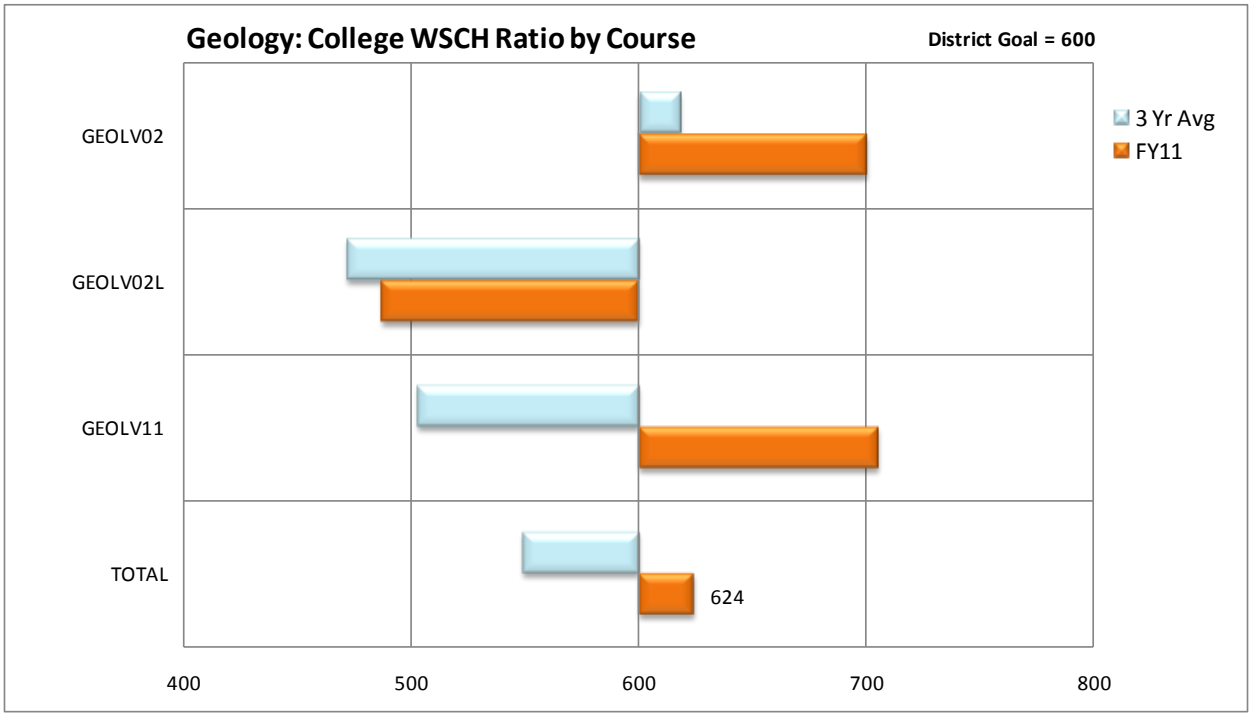
Geology Program Review
2011-2012

D3: College WSCH Ratio Productivity Table

This table shows the College's WSCH ratio (WSCH/FTEF) for each course by year for the program. Courses not offered during FY11 (last year) or without faculty load (independent study) are excluded. Because these are ratios, the combined average is computed using total WSCH and total FTEF (not the average of ratios). The formula used in this table includes the associated faculty costs of extra large sections. Faculty teaching extra large sections are paid stipends equal to 50% of their section FTE assignment for each group of 25 students beyond the first 60 students (calculated in this table as XL FTE). This College WSCH Ratio is a more valid representation of WSCH productivity. The College WSCH Ratio will be used in the program review process.
College WSCH Ratio = WSCH / (PT FTE + FT FTE + XL FTE)

College WSCH Ratio: Weekly Student Contact Hours/(FT FTE + PT FTE + XL FTE)									
Course	**Title**	**FY08**	**FY09**	**FY10**	**3 Yr Avg**	**FY11**	**Change**	**Dist Goal**	**% Goal**
GEOLV02	Physical Geology	543	673	640	618	700	13%	600	117%
GEOLV02L	Physical Geology Laboratory	424	490	493	472	487	3%	600	81%
GEOLV11	Introduction to Oceanography	383	488	638	503	705	40%	600	118%
TOTAL	**Annual College WSCH Ratio**	**477**	**577**	**587**	**549**	**624**	**14%**	**600**	**104%**

D4: College WSCH Ratio Productivity Chart
This chart illustrates the course level College WSCH ratio. The top bar shows the program's three year average. The second bar shows the FY11 WSCH ratio. The axis represents the District WSCH ratio goal set in 2006. The program's (or subject's) total WSCH ratio is shown as the TOTAL at the bottom of the chart. The computation used for the College WSCH Ratio includes XL FTE (extra-large sections) and the assignment of FTEF to all cross-listed sections (proportional to census enrollment).



D5: Productivity Detail Report

The program's detail productivity information is available in *Appendix B – Program Review Productivity Report*. This report is a PDF document and is searchable. The productivity information was extracted from the District's Banner Student System. The productivity information includes all information associated with the program's subject codes. The *Program Review Productivity Report* is sorted by subject code (alphabetical order) and includes the following sections: productivity measures and WSCH ratios by course by year.

D6: Interpretation of the Program Course Productivity Information

For some unexplained reason the District Goal is listed above as 600 when the number should be 525. Even with this error in data calculation, the program shows very good percentages toward satisfying the Districts 525 Goal. The accompanying graph, as a result, also shows incorrect and erroneous data since it is based on the same faulty assumption.

The four lecture sections *(three GEOL V02 and one GEOL V11)* all show notable increases over the three year period. The three lab sections are limited to 24 students so they will not stack up well against larger capacity lecture sections. Nonetheless, lab classes are normally overfilled at the beginning of the semester beyond the required 24 students.

Geology Program Review
2011-2012

E1: Student Success Terminology

Census	Number of students enrolled at Census (typically the 4th week of class for fall and spring). Census enrollment is used to compute WSCH and FTES for funding purposes.
Retain	Students completing the class with any grade other than W or DR divided by Census Example: 40 students enrolled, 5 students dropped prior to census,35 students were enrolled at census, 25 students completed the class with a grade other than W or DR: Retention Rate = 25/35 = 71%
Success	Students completing the class with grades A, B, C, CR or P divided by Census Excludes students with grades D, F, or NC.

E2: Student Success Summary

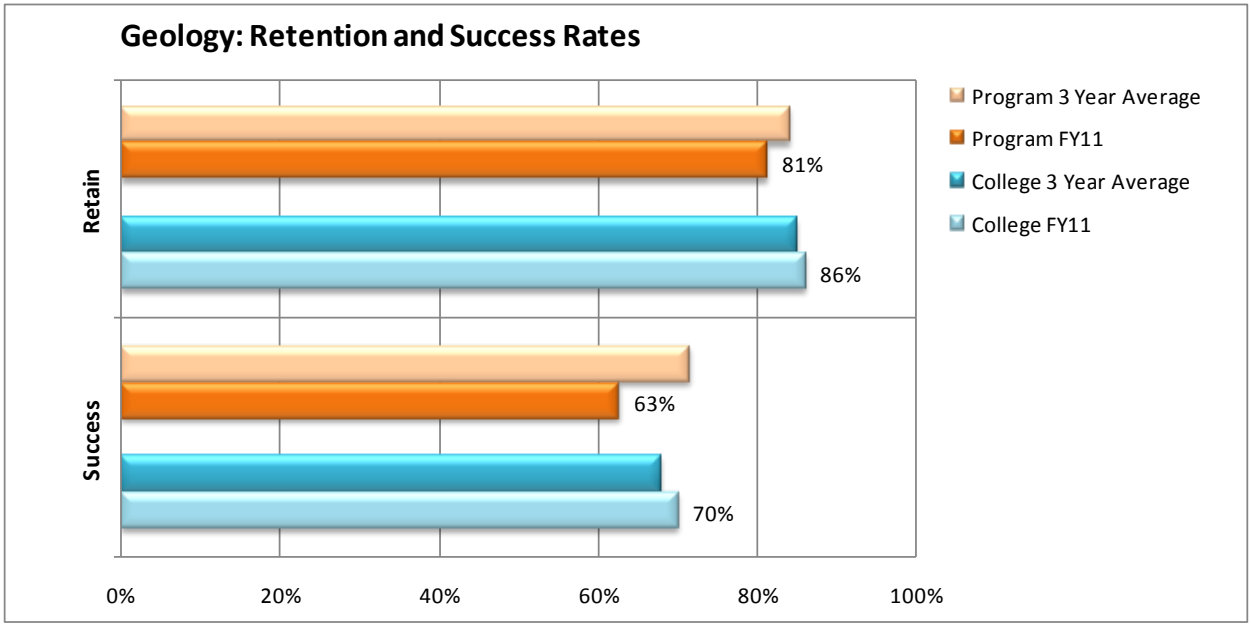
The following two tables summarize the detail information provided in the *Appendix C - Program Review Student Success Report*. The first table shows the number of students. The second table shows the percentage of students. Both tables show the distribution of student grades by year for the program (subject). They show the number of students who were counted at census, completed the class (retention), and were successful. The "3 Year Average" was computed to provide a trend benchmark to compare the prior three year expenses to the FY11 success measures. The "College" success percentages are included to compare the results of the program to the results of the college.

Subject	Fiscal Year	A	B	C	P/CR	D	F	W	NC	Census	Retain	Success
GEOL	FY08	126	91	55	2	9	30	58	-	371	313	274
GEOL	FY09	118	121	91	2	24	23	91	-	470	379	332
GEOL	FY10	119	111	102	-	31	50	61	-	474	413	332
GEOL	3 Year Avg	121	108	83	1	21	34	70	-	438	368	313
GEOL	FY11	102	115	103	-	39	56	96	-	511	415	320

Subject	Fiscal Year	A	B	C	P/CR	D	F	W	NC	Census	Retain	Success
GEOL	FY08	34%	25%	15%	1%	2%	8%	16%	0%		84%	74%
GEOL	FY09	25%	26%	19%	0%	5%	5%	19%	0%		81%	71%
GEOL	FY10	25%	23%	22%	0%	7%	11%	13%	0%		87%	70%
GEOL	3 Year Avg	28%	25%	19%	0%	5%	8%	16%	0%		84%	71%
GEOL	FY11	20%	23%	20%	0%	8%	11%	19%	0%		81%	63%
College	**3 Year Avg**	**33%**	**19%**	**12%**	**5%**	**5%**	**10%**	**15%**	**2%**		**85%**	**68%**
College	FY11	33%	20%	13%	3%	5%	10%	14%	2%		86%	70%

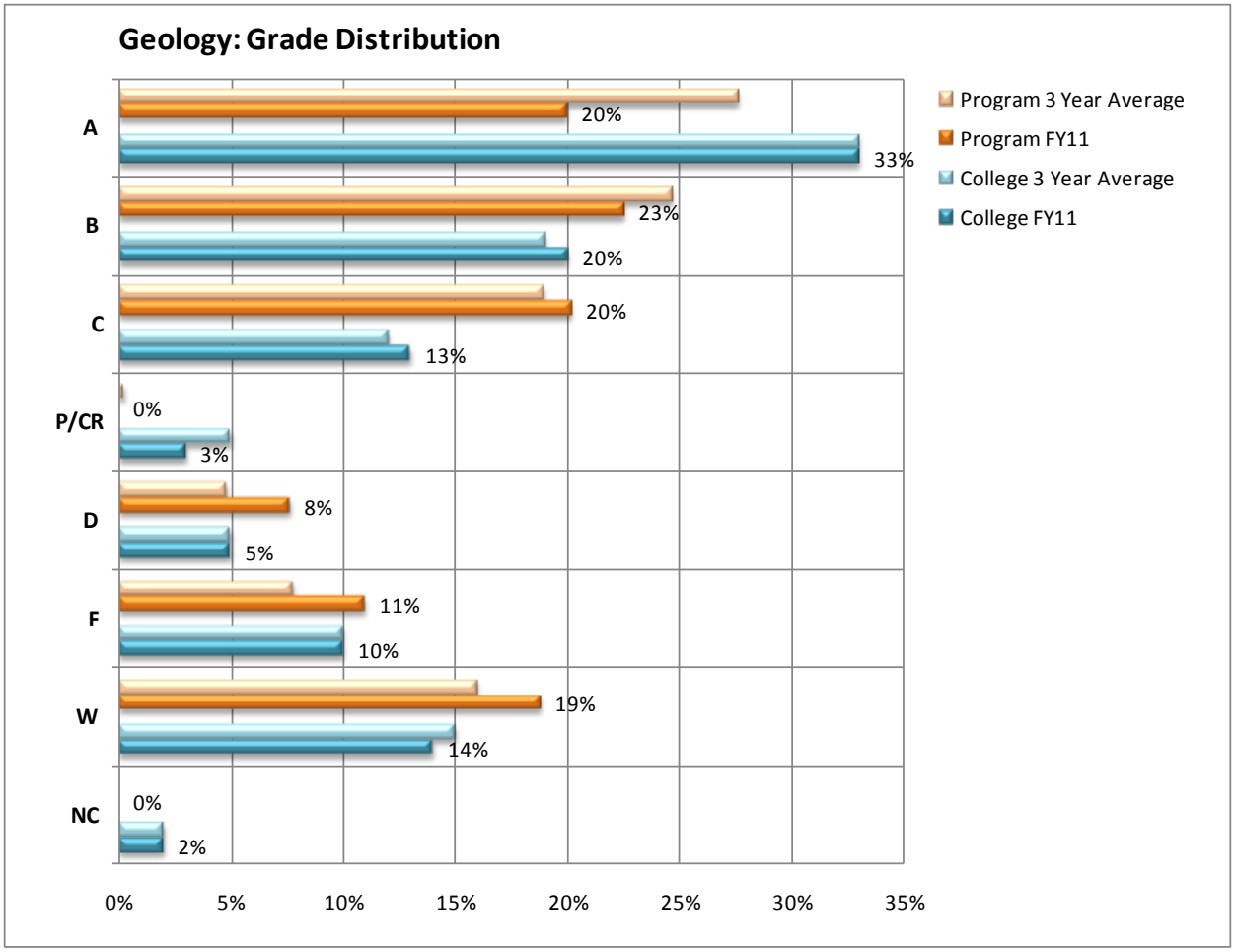
E3: Retention and Success Rates

This chart illustrates the retention and success rates of students who were counted at census. Each measure has four bars. The first bar represents the program's prior three year average percent. The second bar shows last year's (FY11) percent. The third and fourth bars represent the overall college percents.



E4: Grade Distribution

This chart illustrates the program's distribution of grades (by subject). Each grade has four bars. The first bar represents the program's prior three year average percent of grades. The second bar shows last year's (FY11) grade distribution percents. The third and fourth bars represent the overall college distribution percents.



E5: Student Success Detail Report

The program student success detail information is available in *Appendix C – Program Review Student Success Report*. This report is a PDF document and is searchable. The student success information was extracted from the District's Banner Student System. The student success information includes all information associated with the program's subject codes. The *Program Review Student Success Report* is sorted by subject code (alphabetical order) and includes the following sections: comparative summary and course detail by term. The following table defines the terminology.

E6: Interpretation of Program Retention, Student Success, and Grade Distribution

Retention rates, success rates and grade distribution data for the geology program is relatively comparable to the campus as a whole. We feel it is important to note that since these classes are science subjects and as such may create a slight higher level of difficulty for many non-science majors that populate our classes. We feel that our efforts to standardize the lesson flow *(order)* between lab and lecture sections may have helped. There is a smaller number of 'A' given out and we feel that this may also be related to the more detailed approach of the science subject matter.

F1: Program Completion – Student Awards

This table shows the number of students who completed a program certificate or degree during the fiscal year. Gender distribution is included. The following chart illustrates this information.

We do not give campus awards in geology, but each year we participate in the Coast Geological Society award program which covers Ventura, Santa Barbara and the northern LA basin college students. The society has selected our geology students nearly every year for several decades to receive a $500 scholarship as part of their transfer to a local 4-year college or university from VC.

F2: Interpretation of the Program Completion Information

Geology Program Review
2011-2012

G1: Student Demographics Summary Tables

This table shows the program and college census enrollments for each demographic category. It also shows the average age of the students. The program FY11 results can be compared to its prior three year average, the college FY11 results, and the college prior three year average.

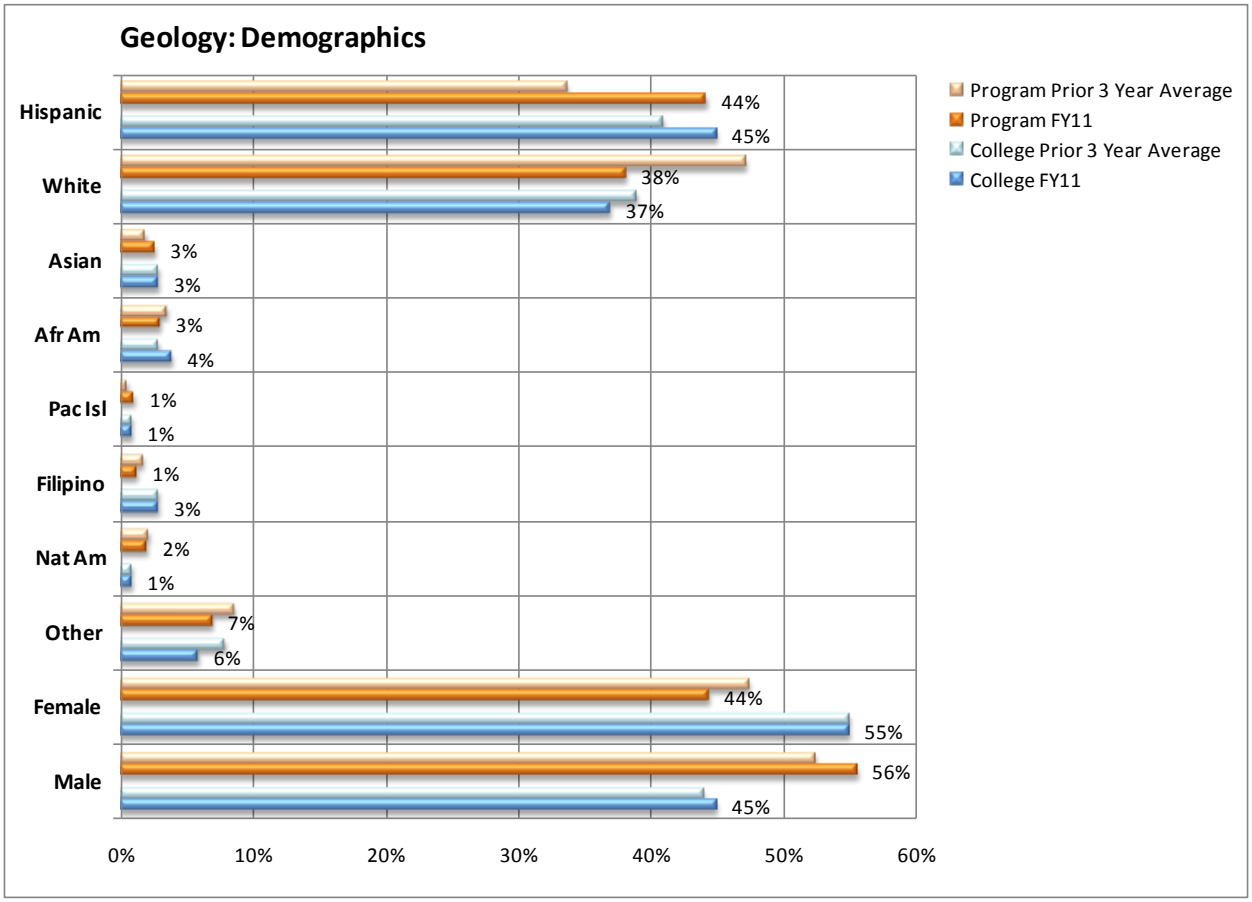
Subject	FY	Hispanic	White	Asian	Afr Am	Pac Isl	Filipino	Nat Am	Other	Female	Male	Other	Avg Age
GEOL	FY08,	132	176	6	12	2	5	6	32	202	169	-	27
GEOL	FY09,	154	211	9	23	2	13	12	46	209	259	2	25
GEOL	FY10,	157	233	11	14	4	5	13	37	213	261	-	24
GEOL	**3 Year Avg**	**148**	**207**	**9**	**16**	**3**	**8**	**10**	**38**	**208**	**230**	**1**	**25**
GEOL	**FY11**	**226**	**195**	**14**	**16**	**6**	**7**	**11**	**36**	**227**	**284**	**-**	**23**
College	3 Year Avg	11,806	11,169	988	1,005	217	827	403	2,302	15,888	12,694	134	27
College	**FY11**	**13,034**	**10,566**	**977**	**1,040**	**196**	**886**	**402**	**1,688**	**15,734**	**13,014**	**40**	**24**

This table shows the program and college percentage of census enrollments for each demographic category.

Subject	FY	Hispanic	White	Asian	Afr Am	Pac Isl	Filipino	Nat Am	Other	Female	Male	Other	Avg Age
GEOL	FY08,	36%	47%	2%	3%	1%	1%	2%	9%	54%	46%	0%	27
GEOL	FY09,	33%	45%	2%	5%	0%	3%	3%	10%	44%	55%	0%	25
GEOL	FY10,	33%	49%	2%	3%	1%	1%	3%	8%	45%	55%	0%	24
GEOL	3 Year Avg	34%	47%	2%	4%	1%	2%	2%	9%	47%	52%	0%	25
GEOL	**FY11**	**44%**	**38%**	**3%**	**3%**	**1%**	**1%**	**2%**	**7%**	**44%**	**56%**	**0%**	23
College	3 Year Avg	41%	39%	3%	3%	1%	3%	1%	8%	55%	44%	0%	27
College	**FY11**	**45%**	**37%**	**3%**	**4%**	**1%**	**3%**	**1%**	**6%**	**55%**	**45%**	**0%**	**24**

G2: Student Demographics Chart

This chart illustrates the program's percentages of students by ethnic group. . Each group has four bars. The first bar represents the program's prior three year percent. The second bar shows last year's (FY11) percent. The third and fourth bars represent the overall college percents.



G3: Student Demographics Detail Report

The program student success detail information is available in *Appendix D – Program Review Student Demographics Report*. This report is a PDF document and is searchable. The student success information was extracted from the District's Banner Student System. The student demographic information includes all information associated with the program's subject codes. The *Program Review Student Demographics Report* is sorted by subject code (alphabetical order) and includes the following sections: comparative summary by year, and detail demographics by term and course.

G4: Interpretation of the Program Demographic Information

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4. Performance Assessment

A1: Program-Level Student Learning Outcomes

Program-Level Student Learning Outcome 1	Performance Indicators
Students will Identify Key Geologic Processes at Work for Various Levels of Detail for Both Subsurface and Surface (Geomorphologic) Activity	
Operating Information	
Analysis – Assessment	

Program-Level Student Learning Outcome 2	Performance Indicators
Students will Summarize Geologic Events and Activities in their Proper Sequence	
Operating Information	
Analysis – Assessment	

Program-Level Student Learning Outcome 3	Performance Indicators
Operating Information	
Analysis – Assessment	

4B: Student Success Outcomes

Student Success Outcome 1	Performance Indicators
The program will increase its retention rate from the average of the **program's** prior three-year retention rate. The retention rate is the number of students who finish a term with any grade other than W or DR divided by the number of students at census.	The program will increase the retention rate by 2% or more above the average of the **program's** retention rate for the prior three years.
Operating Information	
Analysis – Assessment	

Student Success Outcome 2	Performance Indicators
The program will increase its retention rate from the average of the **college's** prior three-year retention rate. The retention rate is the number of students who finish a term with any grade other than W or DR divided by the number of students at census.	The program will increase the retention rate by 2% or more above the average of the **college** retention rate for the prior three years.
Operating Information	
Analysis – Assessment	

Student Success Outcome 3	Performance Indicators
The program will increase the student success rates from the average of the **program's** prior three-year success rates. The student success rate is the percentage of students at census who receive a grade of C or better.	The program will increase student success rate by 2% or more above the **program's** average student success rate for the prior three years.
Operating Information	
Analysis – Assessment	

Student Success Outcome 4	Performance Indicators
The program will increase the student success rates from the average of the **college's** prior three-year success rates. The student success rate is the percentage of students at census who receive a grade of C or better.	The program student success will increase by 5% over the average of the **college's** student success rate for the prior three years.
Operating Information	
Analysis – Assessment	

Student Success Outcome 5	Performance Indicators
Students will complete the program earning certificates and/or degrees.	Increase the number of students earning a certificate to a minimum of 20% of the number of students enrolled in second-year courses.
Operating Information	
Analysis – Assessment	

C. Program Operating Outcomes

Program Operating Outcome 1	Performance Indicators
The program will maintain WSCH/FTEF above the 525 goal set by the district.	The program will exceed the efficiency goal of 525 set by the district by 2%.
Operating Information	
Analysis – Assessment	

Program Operating Outcome 2	Performance Indicators
Inventory of instructional equipment is functional, current, and otherwise adequate to maintain a quality-learning environment. Inventory of all equipment over $200 will be maintained and a replacement schedule will be developed. Service contracts for equipment over $5000 will be budgeted if funds are available.	A current inventory of all equipment in the program will be maintained. Equipment having a value over $5000 will have a service contract. A schedule for service life and replacement of outdated equipment will reflect the total cost of ownership.
Operating Information	
The inventory list is out of date and needs to be reviewed (3B1)	
Analysis – Assessment	

Program Operating Outcome 3	Performance Indicators
Operating Information	
Analysis – Assessment	

Program Operating Outcome 4	Performance Indicators
Operating Information	
Analysis – Assessment	

Geology Program Review
2011-2012

5. Findings

Finding 1

Data in section A and C indicate a need for additional FT faculty in the Geology program. Although we have 3 FT teaching in the combined Geography/Geology/GIS/ESRM programs the FTEF is right about 6. However, as the C2 table shows, the Geology portion of our area relies largely on PT instructors who teach a combined load of up to 1.2 plus FTEF.

One long-time Geography faculty member is credentialed to teach both Geology/Geography and normally teaches one of two classes in Geology. As our program moves forward we need to get FT expertise/assistance in Geology *(i.e. add a full-time faculty member).* This addition would provide for more tutorial support for students, either by increased faculty time *(via increased FT faculty)* or by helping set up student tutoring *(also creating more demand on FT faculty).*

Finding 2

Based on the data for the Geology Program *(along with the data for the Geography and ESRM Programs that also fall under the department heading of Geosciences)* we have well more than enough FTEF to have a full department head release for the full year of one class *(0.2)*. Presently, we are only getting one half this amount of release time *(or one semester a year of 0.2).*

At the time when departments were being formed *(around 1997-1998),* we temporarily had dropped to one faculty member for our entire area *(for one year).* Prior to the 1993 retirement the department had 3 FT *(as well as several PT)* when we were only offering only about half as many sections. By 1997, we were down to only one FT instructor in Geography and were grouped together loosely with Physics/Astronomy/Engineering due to our *temporary* "smallness". We feel this should have only been a *temporary* solution now that we are back to 3 FT and have grown the section by double.

After a delayed retirement replacement in January 1999, our FT was brought back to 2 FT, even when the department's total FTEF was well above 3 *(the contract level for a full class release all year).* In 2004 we finally achieved the replacement of the other FT slot bring the FT instructors in our area to three. Keep in mind that our program offerings have increased dramatically since that time in the early 1990s when we also had 3 FT faculty. Since we are functionally unrelated to Physic/Astron/Eng, we have been doing all the work of a separate department for over a decade, but have had to share the 0.2 release time with those in unrelated programs.

Finding 3

As we prepare the several program reviews for our Geosciences Department *(Geography, Geology, ESRM)*, the distinctions between these related, but very unique disciplines, are evident. It has become apparent that the strong difference between Geography and Geology in methodology, preparation, perspective, supplies/equipment and needs is not understood by many on campus. These two disciplines are distinct like Anthropology and Sociology are different or as Chemistry and Biology are different. Geography deals with the spatial distribution of both physical features and human activities on our planet. This is expressed in the use of maps, geostatistics, Geospatial Technologies, and other methods drawn both from the social sciences and the physical sciences. Geology, on the other hand, is a specific study of the physical Earth *(the materials, processes and history of the planet)*. The emphasis of Geology is on the Earth's composition and processes; it is solely a physical science. Lack of understanding has led to a lack of resources to support Geology. We have rock collections that have no one to oversee. When our current Geography/Geology FT faculty member *(who has an equivalency in Geology)* retires in the not too distant future, we will be left without any FT expertise in the Geology area.

Finding 4

6. Initiatives

Initiative

Hire an additional FT faculty for Geosciences area with expertise in Geology

Initiative ID

GEOL #1 - 2011

Links to Finding 1

Section A1 shows FT faculty expenditures are about equal to the college as a whole. Table D1 shows that the 525 Goal has been exceeded in all Geology classes except for the lab classes were enrollment is limited to 24 students. WSCH ratios *(Table D3)* show very favorable numbers especially for increases in GEOL V02 and GEOL V11 over the years shown. In the Geosciences area, we urgently need one additional FT instructor, either in Geology *(or Geology/Geography combination)* to continue the stability and potential growth of this program.

Benefits:

With more FT instructors in our area, (1) students will have a greater access to FT faculty to assist them, (2) our departmental duties and work assignments will be addressed in a much more timely fashion, and (3) pressure can be taken off our several part-time geologists who now teach four sections each semester.

Request for Resources

One full-time Geosciences *(Geology)* faculty member

Funding Sources

No new resources are required (use existing resources)	N
Requires additional general funds for personnel, supplies or services (includes maintenance contracts)	Y
Requires computer equipment funds (hardware and software)	N
Requires college equipment funds (other than computer related)	N
Requires college facilities funds	N
Requires other resources (grants, etc.)	N

Initiative

Separate the Geosciences area (Geography/Geology/GIS/ESRM) from the Physics/Astr/Eng area and create two departments

Initiative ID

GEOL #2 - 2011

Links to Finding 2

Separate the Geosciences area *(Geography, Geology, ESRM)* from the Physics/Astronomy/Engineering area by creating two separate departments. In practice the two areas have functioned separately since they were created.

Benefits

This will help clarify the roles and responsibilities of those serving as department chairs of Geosciences and of Physics/etc. Geosciences department chair will be able to teach one less course a year, helping create time/energy all year for meetings, report preparation, textbook ordering/review as well as increasing communications with other FT and PT instructors. This will also rectify a long-standing contract inequity for both the involved departments.

Request for Resources

This will have a fairly minimal affect on the campus budget *(one additional class release in just one semester, plus some other smaller stipend amounts for faculty evaluations).* We feel the overall resources needed are minimal to meet the contract language currently in effect between the District and faculty.

Funding Sources

Please check one or more of the following funding sources.

No new resources are required (use existing resources)	N
Requires additional general funds for personnel, supplies or services (includes maintenance contracts)	Y
Requires computer equipment funds (hardware and software)	N
Requires college equipment funds (other than computer related)	N
Requires college facilities funds	N
Requires other resources (grants, etc.)	N

Initiative

Communicate and clarify the difference between Geography and Geology programs to the campus community

Initiative ID

GEOL #3 - 2011

Links to Finding 3

We need to establish some sort of communication line with the counseling staff and decision makers on campus to clarify the distinct nature of Geography and Geology. This process has begun with clear identification of Geography and Geology as separate programs (and the submittal of separate Program Review documents) and with discussions with the Division Dean and the Senate President about this issue. It now needs to move outward to the counseling staff and upwards on the administrative ladder. A meeting with senior administrator(s) may be useful.

Benefits

Our students, staff, faculty, and administration are all ill served by not recognizing that these two long established and commonly taught fields of study, despite some strong affinities, are separate bodies of knowledge with distinct approaches.

Request for Resources

The only resources would be some time for meetings/conferences with colleagues and decision makers on campus.

Funding Sources

No new resources are required (use existing resources)	Y
Requires additional general funds for personnel, supplies or services (includes maintenance contracts)	N
Requires computer equipment funds (hardware and software))	N
Requires college equipment funds (other than computer related)	N
Requires college facilities funds	N
Requires other resources (grants, etc.)	N

Initiative

Initiative ID

Links to Finding 4

Benefits

Request for Resources

Funding Sources

No new resources are required (use existing resources)	
Requires additional general funds for personnel, supplies or services (includes maintenance contracts)	
Requires computer equipment funds (hardware and software)	
Requires college equipment funds (other than computer related)	
Requires college facilities funds	
Requires other resources (grants, etc.)	

Geology Program Review

2011-2012

6A: Initiatives Priority Spreadsheet

The following blank tables represent Excel spreadsheets and will be substituted with a copy of the completed Excel spreadsheets.

Personnel –Faculty Requests

Other	Program	Program Priority (0, 1, 2, 3…)	Division Priority (R,H,M,L)	Committee Priority (R, H, M, L)	College Priority (R, H, M, L)	Initiative ID	Initiative Title	Resource Description	Estimated Cost	No New Resources Requested	General Fund	Other
1												
2												
3												
4												
5												

Personnel – Other Requests

Personnel - Other	Program	Program Priority (0, 1, 2, 3…)	Division Priority (R,H,M,L)	Committee Priority (R, H, M, L)	College Priority (R, H, M, L)	Initiative ID	Initiative Title	Resource Description	Estimated Cost	No New Resources Requested	New General Funds	Other
1												
2												
3												
4												
5												

Geology Program Review
2011-2012

Computer Equipment and Software

Equipment - Computer Related	Program	Program Priority (0, 1, 2, 3…)	Division Priority (R,H,M,L)	Committee Priority (R, H, M, L)	College Priority (R, H, M, L)	Initiative ID	Initiative Title	Resource Description	Estimated Cost	No New Resources Requested	Technology Fund	Other
1												
2												
3												
4												
5												

Other Equipment Requests

Equipment	Program	Program Priority (0, 1, 2, 3…)	Division Priority (R,H,M,L)	Committee Priority (R, H, M, L)	College Priority (R, H, M, L)	Initiative ID	Initiative Title	Resource Description	Estimated Cost	No New Resources Requested	Equipment Fund	Other
1												
2												
3												
4												
5												

Facilities Requests

Facilities	Program	Program Priority (0, 1, 2, 3…)	Division Priority (R,H,M,L)	Committee Priority (R, H, M, L)	College Priority (R, H, M, L)	Initiative ID	Initiative Title	Resource Description	Estimated Cost	No New Resources Requested	Facilities Fund	Other
1												
2												
3												
4												
5												

Other Resource Requests

Other Resources	Program	Program Priority (0, 1, 2, 3…)	Division Priority (R,H,M,L)	Committee Priority (R, H, M, L)	College Priority (R, H, M, L)	Initiative ID	Initiative Title	Resource Description	Estimated Cost	No New Resources Requested	General Fund	Other
1												
2												
3												
4												
5												

6B: Program Level Initiative Prioritization

All initiatives will first be prioritized by the program staff. If the initiative can be completed by the program staff and requires no new resources, then the initiative should be given a priority 0 (multiple priority 0 initiatives are allowed). All other initiatives should be given a priority number starting with 1 (only one 1, one 2, etc.).

6C: Division Level Initiative Prioritization

The program initiatives within a division will be consolidated into division spreadsheets. The dean may include additional division-wide initiatives. All initiatives (excluding the '0' program priorities) will then be prioritized using the following priority levels:

R: Required – mandated or unavoidable needs (litigation, contracts, unsafe to operate conditions, etc.).
H: High – approximately 1/3 of the total division's initiatives by resource category (personnel, equipment, etc.)
M: Medium – approximately 1/3 of the total division's initiatives by resource category (personnel, equipment, etc.)
L: Low – approximately 1/3 of the total division's initiatives by resource category (personnel, equipment, etc.)

6D: Committee Level Initiative Prioritization

The division's spreadsheets will be prioritized by the appropriate college-wide committees (staffing, technology, equipment, facilities) using the following priority levels.

R: Required – mandated or unavoidable needs (litigation, contracts, unsafe to operate conditions, etc.).
H: High – approximately 1/3 of the total division's initiatives by resource category (personnel, equipment, etc.)
M: Medium – approximately 1/3 of the total division's initiatives by resource category (personnel, equipment, etc.)
L: Low – approximately 1/3 of the total division's initiatives by resource category (personnel, equipment, etc.)

6E: College Level Initiative Prioritization

Dean's will present the consolidated prioritized initiatives to the College Planning Council. The College Planning Council will then prioritize the initiatives using the following priority levels.

R: Required – mandated or unavoidable needs (litigation, contracts, unsafe to operate conditions, etc.).
H: High – approximately 1/3 of the total division's initiatives by resource category (personnel, equipment, etc.)
M: Medium – approximately 1/3 of the total division's initiatives by resource category (personnel, equipment, etc.)
L: Low – approximately 1/3 of the total division's initiatives by resource category (personnel, equipment, etc.)

7A: Appeals

After the program review process is complete, your program has the right to appeal the ranking of initiatives.

If you choose to appeal, please complete the form that explains and supports your position.
The appeal will be handled at the next higher level of the program review process.

7B: Process Assessment

In this first year of program review using the new format, programs will be establishing performance indicators (goals) for analysis next year. Program review will take place annually, but until programs have been through an entire annual cycle, they cannot completely assess the process. However, your input is very important to us as we strive to improve, and your initial comments on this new process are encouraged.