

\*-See program review website for detailed timeline and relevant request forms:  
<https://research.gwc.cccd.edu/oir/progreview/2013/index.html>

# Golden West College

## INSTRUCTIONAL

### PROGRAM REVIEW

#### Spring 2013

**Program Name:** Physical Science

**Division Name:** Math/Science/Business/Social Science

**Overview of Program:** The Physical Science program offers courses for students for transfer to the four-year institutions and for completion of Associate degrees. These include courses for science-related majors and general education science requirements for non-science majors. The Chemistry, Physics and Geology departments offer courses for majors, as well as those for non-majors. The Astronomy and Physical Science courses are for non-science majors. There are five full-time faculty members, along with 17 part-time faculty members in the department. There are laboratory stockrooms to service the geology laboratory, the two physics laboratory rooms and the three chemistry laboratory rooms. The chemistry stockroom has a full-time supervisor. Courses are generally small enough for faculty members to get to know students well and offer individualized assistance. Lecture and laboratory sections are taught by full-time or part-time faculty members with masters or doctoral degrees in their fields.

The Physical Science faculty have been involved in a number of activities that benefit the community. Science Showtime is held on campus in the fall in conjunction with the Huntington Beach Rotary Club. Science Showtime is an opportunity for elementary and middle school students to participate in hands-on science and technology activities. Members of the chemistry faculty also participate in National Chemistry Week events for the general public each October. The department is also host to the Orange County Regional Science Olympiad, a yearly science competition between Orange County middle and high schools.

The physical science faculty provide support to the department through the sale of department published laboratory manuals for many of the courses. A small amount is added to the price of each manual sold through the bookstore which is then deposited into an account with the Golden West College Foundation. These funds are donated to the college by the faculty authors and are used for purchases and repairs not included in the normal department budget.

#### **Program Contact Information:**

<u>Program Contact Name</u>	<u>Phone #</u>	<u>E-mail prefix</u>
Teresa Speakman	x52485	tspeakman

<u>Program Manager</u>	<u>Title</u>	<u>Salary Sched/Column</u>	<u>Phone #</u>	<u>Office Location</u>	<u>E-mail prefix</u>
Jeff Courchaine	Dean	D-32	x58157	Hum 108	jcourchaine

<u>Classified Staff</u>	<u>Title</u>	<u>Salary Sched/Column</u>	<u>Phone #</u>	<u>Office Location</u>	<u>E-mail prefix</u>
Joan Deniken	Instructional Lab Assistant		51138	M/S 209	jdeniken

<u>Full-Time Faculty</u>	<u>Phone #</u>	<u>Office Location</u>	<u>E-mail</u>
Konrad Stein	51115	Tech 109	kstein
Teresa Speakman	52485	M/S 201	tspeakman
Katherine Green	52660	M/S 201	kgreen
James Almy	52150	M/S 203	jalmy
Jennifer Wilcox	51118	M/S 203	jwilcox

## Current State of the Program

### 1. What noteworthy trends do you notice in your data tables?

Essentially all courses in the department are filled to or over capacity at census. Demand continues to be very high for all courses, but courses with a dependent lab are constrained by space and can only add one or two extra students per section. Most courses have waitlists of 10-20 students and a few fill the wait list to the maximum of 30 students. The maximum number of seats has declined slightly from 2009 to 2012 during fall and spring semesters (fall 2009 = 2235 seats, fall 2012 = 2101 seats; spring 2010 = 2252 seats; spring 2013 = 2002 seats), with a significant drop in summer course availability (summer 2009 had 382 seats in physical science courses and summer 2012 had only 50 seats – 25 students in one lecture/lab course). Following the retirement of the full-time geology faculty member in May 2010, geology course seats have fallen from about 375 per semester to 275 per semester.

Student success rates have remained relatively stable over the past three years, with lower success rates in physics (64.2%) and chemistry (69.2%), which have large numbers of science majors in more challenging courses, and higher success rates in astronomy (75.5%), geology (75.0%) and physical science (76.5%), which are primarily general education courses. When looking at demographics, success rates do not change significantly with the age or gender of the student while different ethnic groups have significantly different success rates: white 71.5% (31% of physical science students), Asian/Pacific Islander 72.2% (42% of students), multiple ethnicities 68.7% (9% of students), Hispanic 63.8% (12% of students) and African-American 57.6% (1% of students). These numbers vary somewhat from semester to semester, but there is no trend in one direction or another.

Despite high course enrollments, very few degrees are granted in the available chemistry and physics AA majors.

### 2. What are your analyses of the causes or reasons for those trends?

Waitlists have been a welcome addition in the past three years, simplifying the process for students to get into needed classes, but the wait list numbers have grown due to the increased demand for courses with fewer seats available. The decrease in the number of available seats is due to section reductions due to budget cuts.

The low number of degrees awarded reflects the fact that essentially all successful students transfer to UC or CSU campuses without completing the paperwork for the AA degree even if they meet all the requirements for the AA. When the chemistry, physics and geology AA-T degrees are approved, perhaps more students will find it worthwhile to complete the requirements and the paperwork to record their completion.

### 3. What does your program do well?

The physical science department at Golden West College offers rigorous courses for science majors, taught in relatively small sections, and most of the time the lab course is taught by the lecture instructor. This allows the instructors to become very familiar with their students and offer personalized attention. The science major courses all have problem-based exams, requiring students to demonstrate their problem-solving and critical thinking skills on a regular basis. Our 5-unit chemistry courses offer more lab time and improved laboratory skills with twice-a-week labs rather than the once per week offerings commonly found at CSU and UC chemistry departments. Upon completion of the second-year organic chemistry course, students take the nationally normed American Chemical Society organic chemistry exam, and the class average is usually 5-10% above the national average.

Our general education science courses offer a wide variety of courses with and without labs to

meet the needs of non-science majors. The department has worked to coordinate course offerings with other departments to minimize course conflicts among commonly taken science and math classes. A number of classes offer active-learning components using research-verified techniques to improve student learning.

The physical science department coordinates and participates in a variety of science outreach events, including Science Showtime and the Orange County Regional Science Olympiad here on campus, and National Chemistry Week and other off-campus activities.

#### **4. What are the challenges to your program.**

##### ***Within your program's control***

Because the five full-time physical science faculty members each have responsibility for coordinating one (or more) specific course which does not overlap with the responsibility of another faculty member, there is little interaction between faculty members regarding course content, pedagogy, student learning objectives, lab safety, reduction of hazardous waste, or other topics which might be of general interest. In the past, the department has held only one brief faculty meeting per semester, usually about scheduling and budget issues. We are attempting to improve the amount of coordination between faculty members. Some courses may need a prerequisite or corequisite added to ensure that students taking the course are prepared and have a good chance to be successful.

##### ***Beyond your program's control***

A number of years ago, the chemistry faculty determined that the absolute minimum of full-time chemistry faculty members necessary was five. This allows one full-time person to coordinate the part-time instructors teaching the same class, oversee course content, determine and assess student learning objectives, specify laboratory activities for the class, and be sure that the labs are all conducted safely and with a minimum of hazardous waste. Over the past ten years, all five full-time faculty members have retired, and four of them were eventually replaced, still leaving us one person short following the retirement of our last long-time faculty member in Spring 2012. The Chemistry 110 and Chemistry 130 classes have taken turns being "orphaned" with no full-time faculty member to oversee them, which is very detrimental to the safety and continuity of the students' educations. The chemistry department needs to add one more full-time faculty member to ensure the safety of the students and quality of the course offerings.

Three years ago also saw the retirement of our only full-time geology instructor, and the geology courses have been taught entirely by part-time instructors since that time. We are in the middle of implementing the AS-T geology major, which requires the introduction of at least one new course and revising the course outlines for other geology courses to bring them in to compliance. We have been very fortunate to have the unpaid efforts of one of our part-time instructors to begin this process, but we cannot expect to have a viable geology major without at least one full-time faculty member to direct and coordinate the program.

The Math/Science building, in general, and the chemistry labs specifically, are in dire need of replacement, updating, and enlarging. Lecture classrooms are crowded, have stained carpets and ceilings, and desks with broken or inadequate writing surfaces. Classes are scheduled in the laboratories from 7:55 each morning until 11:10 at night, so there is no way to increase course offerings even if we wanted to. There is inadequate hood space to perform some experiments safely, faucets drip out of connections for which parts are unavailable, there is inadequate storage for the equipment and chemicals which need to be stored, and there is insufficient or outdated equipment for many experiments. If we are training scientists for employment in research and industry, it is important that the experiments and equipment bear some resemblance to what they will find following the completion of their education. A new building would allow chemistry, physics and

geology faculty to have offices in the same building, which should facilitate faculty interaction.

The supply budget is inadequate to support the consumable chemicals and other materials necessary to conduct science labs, and there is no budget at all for maintenance of the equipment and instrumentation. Material fees can only be used for a small proportion of the necessary instructional supplies. During Spring 2013, for the first time, the department has been allocated some funds from lottery money, which will help to fill some of the most pressing needs, but there is still a large backlog of missing supplies and broken equipment which is in need of replacement.

For most of the college's history, the stockroom manager's position was a 12-month position, but when the current stockroom manager was transferred from another department, she retained her 11-month position. This is inadequate for the efficient running of the department, as the several weeks between semesters are among the busiest times. This is when lockers are cleaned out and reassigned for the coming semester, laboratory unknowns are prepared for the first few weeks of the new semester, and maintenance and ordering are carried out. This position needs to return to a 12-month position and be classified as an instructional associate position, as the stockroom manager has direct responsibility for hiring and managing part-time and student employees.

The Chemistry 110 computer lab is staffed by a faculty member part of the time it is open, and a part-time employee the remaining hours. The staffing and hours do not allow the students who are enrolled in Chem 110 to complete their assigned work in a timely manner, and they frequently have to wait in a long line to have their work checked. This is very frustrating for the students and a waste of their time. Additional faculty/staff time for this course is greatly needed.

Chemistry and physics courses involve quite a bit of mathematical problem-solving, but faculty members are finding the students unprepared to tackle the word problems which are integral to pursuing science. Students in introductory courses are generally underprepared in terms of mathematical fluency, study skills, and a recognition that success in science requires a great deal of hard work.

## **5. What are the opportunities for your program**

There are increasing employment opportunities in a variety of health care fields, most of which involve the study of physical science as part of their preparation. A significant number of students come to Golden West College to complete requirements for health profession careers following completion of a bachelor's degree in a different field. We could potentially devise a certificate for these students which would reflect their successful completion of the necessary courses. Perhaps the science departments could work with the Career Center to publicize these types of careers to the student body, particularly to underrepresented minority populations.

There will be a new Geology AS-T degree available soon, and we can recruit students to enroll in this degree program and then transfer to excellent geology programs at UC Riverside or Cal State Fullerton. When the Chemistry and Physics AS-T degrees are approved, perhaps we will be able to increase the number of chemistry and physics students who actually apply for and earn those degrees.

If we have sufficient full-time faculty members, it would be beneficial to develop several new courses. Possibilities include a chemistry general education course, a science for elementary teachers course, and courses or a certificate program in hazardous waste treatment. Formation of a STEM partnership with nearby high schools and four-year universities would help to encourage students, particularly underrepresented minorities, to enter science fields.

Finally, although we do a significant amount of community outreach, primarily due to the long-time and continuing efforts of retired chemistry faculty member Carol Grimes, there is a great need to educate the general public about science and more opportunities to increase this role of the department should be investigated.

## **6. Identified areas in need of improvement**

The physical science department could benefit from more coordination between faculty members, more coordination with other departments on campus whose majors are taking our courses, and more coordination with the science departments of the other schools in our district. It would be useful to have an opportunity to meet with the faculty members at other schools to learn from each other about effective ways to present difficult content, different methods of instruction and active learning, and what resources each campus has available which might be available for sharing or learning from.

The current supply and maintenance budget is inadequate to support the current level of enrollment. The building is too small, rundown, and in need of serious renovation or replacement.

**Program-Level Student Learning Outcomes (pSLOs) Assessed During 2010-12****Summary of Program SLO Assessment (pSLO) Results**

Program Name: Chemistry Semester:  Fall  Spring Year: 2012  
 Program  Transfer Major  
 Certificate of Achievement  
 Basic Skills  
 Area of Emphasis  
 Gen Ed Area

Which Institutional SLO does this address?

Step 1	Define the Expected Program Student Learning Outcome (pSLO).	Students will demonstrate improved problem-solving and critical thinking skills.
Step 2	What method did you use to assess the SLO?	Quizzes, exams and laboratory reports were used to assess students' skills.
Step 3	Describe the results of your assessment.	As students progress through the chemistry curriculum, they are capable of increasingly complex problem solving.
Step 4	Describe your analysis of the data.	In introductory courses Chemistry 110 (123 students) and Chemistry 130 (52 students), students were assessed on straightforward scientific notation and unit conversion problems. In Chemistry 110, over 75% of students were successful and in Chemistry 130, 80% were successful in these skills. In first year chemistry major courses Chemistry 180 (135 students) and Chemistry 185 (78 students), students were evaluated on stoichiometry and equilibrium problems. Chemistry 180 students demonstrated 68% proficiency on stoichiometry and Chemistry 185 students demonstrated 64% proficiency on equilibrium questions. In second year chemistry major course Chemistry 225 (50 students), 72% of students were proficient on problems involving prediction of various reaction products.
Step 5	What planning and changes will or have occurred, as a result of assessment and analysis of data, to improve student learning?	Faculty members will do some polling of students to determine their preparation for the class based on the previous course taken and will look into pre- and post-test to show improvement. An increase of active-learning components such as clickers and group problem-solving sessions will also potentially be used in future program assessments.
Name/Title of Person Completing this		Teresa J. Speakman
		Date: 11/6/2012

## Summary of Program SLO Assessment (pSLO) Results

Program Name: Chemistry Semester:  Fall  Spring Year: 2012  
 Program:  Transfer Major :  
 Certificate of Achievement  
 Basic Skills Sequence  
 Area of Emphasis  
 Gen Ed Area

Which Institutional SLO does this address? Broad knowledge, analytic skills

Step 1	Define the Expected Program Student Learning Outcome (pSLO).	Students will develop a working knowledge of inorganic and organic chemistry, including calculations, reactions, and nomenclature.
Step 2	What method did you use to assess the SLO?	Quizzes, exams and laboratory reports were used to assess students' skills.
Step 3	Describe the results of your assessment.	As students progress through the chemistry curriculum, they learn nomenclature of inorganic and organic compounds, a wide variety of reaction types and their applications, and how to perform many types of calculations.
Step 4	Describe your analysis of the data.	In the introductory course, Chemistry 130 (57 students), students were assessed on straightforward scientific notation and unit conversion problems. Only 54% were proficient in these basic calculation skills. In the first semester chemistry major course, Chemistry 180 (126 students), students were assessed on nomenclature of inorganic compounds. Success varied widely (18 – 97% successful) based on type of question and whether they were evaluated in the middle or at the end of the semester. Chemistry 185, second semester chemistry major course, (68 students), students were evaluated on calculations involving experimentally determined rate laws – 72-81% of students demonstrated proficiency. In first semester, second year chemistry course Chemistry 220 (54 students), 87% of students could adequately name organic compounds containing alcohol and amine functional groups, including stereochemistry. In the second semester, second year chemistry major course Chemistry 225 (22 students), 80% of students were proficient in naming organic compounds including aromatic, carbonyl and carbohydrate functionality.

<b>Step 5</b>	<b>What planning and changes will or have occurred, as a result of assessment and analysis of data, to improve student learning?</b>	In Chemistry 130, 180, and 225, additional practice problems will be developed. Some instructors plan to make changes in classroom delivery, such as decreasing PowerPoint presentations and increasing in class group work and problem solving.	
<b>Name/Title of Person Completing this</b>		Teresa J. Speakman, Physical Science Dept. Chair	<b>Date:</b> 3/6/2013



**Program-Level Student Learning Outcomes (pSLOs) Assessed During 2010-12***Complete a separate page for each major and/or certificate you assessed.*

Program Name: Physics Semester  Fall  Spring Year: \_\_\_\_\_  
 Program Type:  Transfer Major Assessed: \_\_\_\_\_  
 Certificate of Achievement  Winter  Summer 2012  
 Basic Skills Sequence  
 Area of Emphasis  
 Gen Ed Area

Step 1	<b>Define the Expected Program Student Learning Outcome (pSLO).</b>	Students will demonstrate problem-solving and critical thinking skills in the general areas of physics covered in the respective courses.
Step 2	<b>What method did you use to assess the SLO?</b>	Exams and laboratory reports were used to assess students' skills.
Step 3	<b>Describe the results of your assessment.</b>	As students progress through the physics curriculum, they are exposed to increasingly complex problem solving techniques in a number of different areas related to classical and modern physics.
Step 4	<b>Describe your analysis of the data.</b>	In the calculus based physics courses, Physics 185 (90 students) and Physics 280 (31 students), the students were assessed on basic problems in mechanics, heat, sound, and electricity and magnetism. In Physics 185, only about 40% of students were successful and in Physics 280, roughly 75% successfully completed the course. In the algebra based course for non-engineering/physical science majors, Physics 120 (64 students), the students in the class were evaluated on mechanics, fluids, and waves. The Physics 120 students demonstrated 54% proficiency on mechanics and 60% proficiency on the fluids and waves questions. The final overall success rate for Physics 120 was 38%. The average score on the final exam was approximately 80%. Many students, while passing with a low C dropped the course since pharmacy and pre-med programs require a minimum of a B in physics.
Step 5	<b>What planning and changes will or have occurred, as a result of assessment and analysis of data, to improve student learning?</b>	A survey of students who successfully completed the courses indicated that as many as 50% of those who began the classes were either totally unprepared or minimally prepared to handle the mathematics associated with the classes. The algebra based students, while technically having had the prerequisite math, nevertheless were, for the most part underprepared. Most of the students lack the necessary study habits and discipline needed to be successful in physics.

**Program-Level Student Learning Outcomes for 2012-14**

(List the 3-5 most important expected student learning outcomes to be assessed over the next two years.  
Complete a separate page for each major and/or certificate you did not complete the assessment for the last 2 years.

Program Name: Chemistry Semester to be Assessed:  Fall  Spring  Winter  Summer Year: 2013  
 Program Type:  Transfer Major  Certificate of Achievement  Basic Skills Sequence  Area of Emphasis  Gen Ed Area

Step 1	<b>Define the Expected Program Student Learning Outcome (pSLO).</b>	Interpreted experimental information, developed relationships, and correlated that experimental information with theory.
Step 2	<b>What method did you plan to use to assess the SLO?</b>	Assessment of laboratory reports, lab exams and lecture exams
Step 3	<b>When is the assessment going to be done and who is going to conduct it?</b>	Assessment will be done at the end of the Fall 2013 semester by the lecture instructors of Chem 180, Chem 185, Chem 220 and Chem 225.

Program Name: Chemistry Semester to be Assessed:  Fall  Spring  Winter  Summer Year: 2014  
 Program Type:  Transfer Major  Certificate of Achievement  Basic Skills Sequence  Area of Emphasis  Gen Ed Area

Step 1	<b>Define the Expected Program Student Learning Outcome (pSLO).</b>	Students will demonstrate improved problem-solving and critical thinking skills.
Step 2	<b>What method did you plan to use to assess the SLO?</b>	Lecture and lab quizzes, exams, and lab reports.
Step 3	<b>When is the assessment going to be done and who is going to conduct it?</b>	Assessment will be done at the end of the Fall 2014 semester by the lecture instructors of Chem 180, Chem 185, Chem 220 and Chem 225.

Program Name: Physics Semester to be Assessed:  Fall  Spring  Winter  Summer Year: 2013

Program Type:  Transfer Major  
 Certificate of Achievement  
 Basic Skills Sequence  
 Area of Emphasis  
 Gen Ed Area

Step 1	<b>Define the Expected Program Student Learning Outcome (pSLO).</b>	Students will understand the basic principles and concepts of physics.
Step 2	<b>What method did you plan to use to assess the SLO?</b>	Exams and quizzes
Step 3	<b>When is the assessment going to be done and who is going to conduct it?</b>	Assessment will be done at the end of the Fall 2013 semester by the lecture instructors of Physics 185, Physics 280 and Physics 285.

Program Name: Physics Semester to be Assessed:  Fall  Spring  Winter  Summer Year: 2014

Program Type:  Transfer Major  
 Certificate of Achievement  
 Basic Skills Sequence  
 Area of Emphasis  
 Gen Ed Area

Step 1	<b>Define the Expected Program Student Learning Outcome (pSLO).</b>	Students will use the principles and concepts of physics to solve problems in the various areas of physics.
Step 2	<b>What method did you plan to use to assess the SLO?</b>	Exams and quizzes
Step 3	<b>When is the assessment going to be done and who is going to conduct it?</b>	Assessment will be done at the end of the Fall 2014 semester by the lecture instructors of Physics 185, Physics 280 and Physics 285.

## Resource Planning

**Staffing** What staff changes or additional employees does your program need to function adequately?

**Faculty:** One additional chemistry faculty member and one geology faculty member are needed.

**Management:**

**Classified:** The chemistry stockroom manager position needs to return to a 12-month position and be reclassified as an instructional lab associate position rather than an instructional lab assistant.

**Hourly:** The course assistant for the Chemistry 110 open computer lab should have an increased number of hours per semester. Additional hours are needed for student assistants in the chemistry stockroom, particularly in the evening when there is no full-time person on duty.

**Considering your current employees, what staff development/training does your program need?**

Training in lab management, chemical safety and inventory control for the stockroom manager and faculty overseeing labs using chemicals.

Note: Complete all faculty request forms in separate files and submit with your program review report as an attachment.

**Technology** What improvements, changes or additions in equipment dedicated to your program are needed to function adequately?

**Equipment or Software** (e.g., computers, AV, lab equipment):

The computers in the chemistry computer lab (M/S 229) need to be updated – they are currently very slow and obsolete. A computer is needed in the stockroom for the part-time employees and student assistants. Software to manage the inventory of chemicals, glassware, and equipment would be very useful. The network printer in the chemistry computer lab died last year and needs to be replaced.

The organic chemistry program needs a new infrared spectrophotometer, an instrument used by 100 students per semester every week. These courses would also be greatly enhanced by the addition of an NMR spectrometer. The general chemistry program needs new balances, ultraviolet spectrometers and pH meters. Geology and physical science need a seismograph and the physics courses need equipment for teaching electrical concepts.

**Technical Infrastructure** (e.g., AV or computer infrastructure, cabling):

**Facilities** What improvements or changes to the facilities would you need to function adequately?

**Physical Concerns** (e.g. electrical, gas, water, foundation, space, ventilation).

A new building is urgently needed, but until that time, many faucets need replacing, some gas jets are non-operational, ventilation in M/S 232 is inadequate for some experiments (which we don't do because of this issue). The eye washes and safety showers in the chemistry and geology labs need drains (they currently just pool water on the floor).

**Health, Safety and Security** (e.g.

**Other** What changes or other additions need to be made to your program to function adequately?

IUA and Dean Review

Complete this section after reviewing all program review information provided. IUA and Dean are to separately indicate the level of concern for the program that exists regarding the following Program Vitality Review (PVR) criteria. Add comments for any item marked with a 1 or 2. Identify whether the comment is made by the IUA or the Dean.

(Scale: 0 – No concern at all, 1 – Some concern, 2 – Serious Concern)

IUA/Dean

- (0) (0) a. Significant declines in enrollment and/or FTES over multiple years
- (2) (2) b. Significant change in facility and/or availability and cost of required or necessary equipment
- (1) (1) c. Scarcity of qualified faculty
- (0) (0) d. Incongruence of program with college mission and goals, state mandates, etc
- (0) (0) e. Significant decline in labor market
- (0) (0) f. Continued inability to make load for full-time faculty in the program
- (0) (0) g. An over-saturation of similar programs in the district and/or region
- (1) (1) h. Other: The supply budget is insufficient to meet the needs of the science lab courses

Program Review Check-list

- (yes ) Department Contact Information is up to date: Department Chairs, full-time faculty, classified
- (no ) Organization Chart: Verify that it is up to date: (q:\college information\org charts) Report necessary changes to the Director of Personnel – **the entire thing has not been updated since the college reorganized**
- ( yes) Both the Dean and IUA have completed the Dean and IUA Review section.

**Signatures, Individual Comments**

Department Chair: Teresa J. Speakman

Date: April 30, 2013

Comments: Thank you for reading our report. We will appreciate assistance with any of our requests.

Division Dean: Jeffrey Courchaine

Date: April 30, 2013

Comments:

**( X ) No further review necessary**

**( ) We recommend this program for Program Vitality Review**

I have read the preceding report and accept the conclusions as an accurate portrayal of the current status of the program. Signatures are on file in the division office. Type the names of the faculty.

- ( X ) Konrad Stein
- ( X ) Katherine Green
- ( X ) James Almy
- ( X ) Jennifer Wilcox
- ( X ) Joan Deniken

I have read the preceding report and wish to add signed comments to the appendices. Signatures are on file in the division office.

- ( ) None
- ( )
- ( )
- ( )
- ( )

**Appendices**

- A. Data Sets
- B. Signed Comments
- C. Classified Position Requests
- D. Faculty Position Requests
- E. General Fund One-Time Funds Requests
- F. Curriculum Inventory
- G. SLO Inventory