



I. COMP REHENSİ VE REVIEW

B. INSTRUCTIONAL STAFFING

1. In the table

2. Describe the number of, activities of, and recommendations resulting from advisory committee meetings that have occurred over the past two years. What information and/or data were presented that required or currently require changes to be made to your program?

[Begin response here]

3. Does labor market data and/or the need for additional education indicate that changes should be made to your program? Does the program (continue to) meet a labor market demand and/or fulfill an important step toward higher/additional education?

[Begin response here]

D. PROGRAM GOALS

1. List and describe program/disciplinary goals for the next comprehensive review cycle. Be sure to highlight innovative, unique, or other especially noteworthy aspects.

In considering your program's future

This section must be completed for ALL academic programs, inc

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Use your Program Outcome Maps to assist you in this subsection. As you plan your course assessments, keep the higher level program outcome in mind. While course level assessment serves the purpose of examining the teaching and learning for that particular course, it also provides the data that will be viewed collectively for assessment of the associated program level outcomes.

PROGRAM LEVEL OUTCOMES

- 1.

students need to develop through time and practice. Many of our students lack these skills, and they approach physics by trying to memorize

the process. The overall goal is to streamline the assessment process using well-developed rubrics stored in eLumen that can be easily accessed by other physics faculty. In addition, eLumen will allow full-time faculty to generate reports and work together with adjunct faculty physics.

During summer 2015 and Academic year 2015-2016, all the SLOs and PLOs will be assessed themselves to see if changes need to be made so that they meet higher level Blooms

Taxonomy standards and whether they can be improved. The full-time instructor will meet with Mohammed Yahdi, who is in charge of SLOs, to see what improvements can be made. If changes are made, then the full instructor will follow the College's procedure to change them.

E. PREVIOUSLY SCHEDULED ACTIVITIES

This subsection focuses on activities that were pr

This section must be completed for ALL academic programs, whether scheduled for annual or comprehensive review in spring 2015.

A. NEW ACTIVITIES

This subsection addresses new activities for, and continuing new activities into, AY 2015-16. An activity can address many different aspects of your program/discipline, and ultimately is undertaken to improve, enhance, and or keep your program/discipline area current. A new activity may or may not require additional resources. Activities can include but are not limited to:

- a. NEW CURRICULUM
- b. FURTHER DEVELOPMENT OF THE PROGRAM OR SERVICE
- c. GRANT DEVELOPMENT AND PROPOSALS
- d. FACULTY AND STAFF TRAINING
- e. MARKETING/OUTREACH
- f. ENROLLMENT MANAGEMENT
- g. STUDENT SERVICES
- h. ADMINISTRATIVE SERVICES
- i. SUPPORT OPERATIONS
- j. FACILITIES

1. List information concerning new projects or activities

2. Student
success:
Continue to be
part of Early
Success Program

Continue to use
TopHat

Supplemental
Instruction,
STEM tutoring,
Math Academy,
Math Learning
Center, STEM

3 Transfer engineering students to four year institutions in two years
1A, 2A, 2B

One Melissa Hornstein
physics/astronomy instructor,
Laura Fatuzzo

Examine grid for scheduling conflicts for engineering majors. Schedule

4 math instructors,

1 chemistry technician,
training for math adjuncts,
STEM scholarships

4. Support STEM clubs and their outreach efforts, projects, events, etc.	6A			Supplies for STEM clubs and outreach such as STEM Olympics	Club officers: Tito Polo		
5. Develop and offer the new course Phy 32 (C-ID PHYS140), Survey of Chemistry and Physics, which is geared towards elementary education teachers	1A and 5A	Phy 32 (new course)	Have enrollments of at least 21 students	None	Laura Fatuzzi, Slava Bekker	Spring 2016	Will work with chemistry instructor Slava Becker in developing the course and in team teaching it
6. Introduce Reading Apprenticeship to all physics classrooms.	2A, 2B					Ongoing	Many students are not reading the text, an essential part to student success in the physics classes. Students need to be taught how to read scientific writing, which is very different from other kinds of writing.

* See Appendix A for a list of the 11 goals in the college's Strategic Plan.

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- Equipment (non-expendable, greater than \$5,000), supplies (expendable, valued at less than \$5,000)
- Software

3. Transfer engineering students to four-year institutions in two years

a) Describe the new activity or follow-on activity that this resource will support.

Hartnell College is near Silicon Valley, a driving force of the US economy. By earning degrees in engineering, our students would be able to get high paying, secure jobs. It is important that we create a pathway for students to succeed in four-year institutions. Enrollments in physics and engineering have grown substantially in the last couple of years, and we have added PHY 32 as well as one extra lab both Fall and Spring semesters. The current full-time physics instructor will not be able to teach all of the new sections, and adjuncts in physics are difficult to find in Salinas. Therefore, it is important to hire a full-time physics instructor.

b) Describe how this activity supports any of the following:

- 1) Core Competency
- 2)

a) Describe the new activity or followon activity that this resource will support.

STEM clubs teach students leadership skills, communication skills, and teamwork skills. In addition, it encourages students to reach building important ties to their community. These skills are important but often not gained and just participating in a course. That is why it is important to support all STEM activities. One activity that has been very important is the Physics Olympiad. This activity has been done yearly for the past 25 years. It is an event that brings together local high school students to participate in a fun day of science. It is important to continue this activity. Resources are needed such as transportation for participants, and prize money.

b) Describe how this activity supports any of the following:

6) Core Competency

7) Program level Out13.5511(e) Continue thi

- 8) Course level Outcome
- 9) Program/Discipline Goal
- 10) Strategic Priority Goal

It would support the Physics Program goal of meeting the needs of the student community, including Elementary Education students who need both chemistry and physics. It would support Strategic Priority Goals 1A and 5A.

c) Does this activity span multiple academic years? Yes.

If yes, describe the action plan for completion of this activity.

Will work on developing the course during summer 2015 and fall 2015 in order to have all the labs and resources ready for spring 2015.

d) What measureable outcomes are expected from this activity? List indicators of success.

The indicator of success would be to have the class offered in spring 2015 with at least 20 students signed up for the class.

e) What are the barriers to achieving success in this activity?

Making sure students know that this new class is being offered. Can work with counselors to make sure that students of this new class, especially the elementary education students and faculty.

6.

a) Describe the new activity or follow on activity that this resource will support.

Introduce Reading Apprenticeship to all physics classrooms.

b) Describe how this activity supports any of the following:

- 11) Core Competency
- 12) Program level Outcome
- 13) Course level Outcome
- 14) Program/Discipline Goal
- 15) Strategic Priority Goal

It would support strategic goals 2A and 2B

c. Does this activity span multiple academic years? NO

If yes, describe the action plan for completion of this activity.

I will be part of an online 6-week 30-hour training program for Reading Apprenticeship. I will incorporate in physics classes the techniques learned in order to help students learn to read their physics texts.

d) What measurable outcomes are expected from this activity? List indicators of success.

I will give students short reading assignments. Will develop indicators as presented in the training.

e) What are the barriers to achieving success in this activity?

Time limitations. These activities take time to do, and we have so little time to cover all of the topics. I will explore the possibility of using Reading Apprenticeship strategies not only in class, but also in the lab, where students have to do advanced problems. During lab, I would have more time to model the reading and do problems.

1.

Sixty laptops

1		Four Specific Hea Set (E)								184.00
1		Two Introduction Optics Systems (E)								1518.00
1		Two Diode Lase Intro Optics (E)								458.00
1		Two High-Precision Diffraction Slits (E)								398.00
1		Two Resonanc Boxes (E)								154.00
1		One Resonance Tul (E)								399.00
1		Fifteen String Vibrators (E)								1245.00
1		Two Michelson Interferometer (E)								1698.00
1		Five Electrical Equivalent of Heat Apparatus (E)								845.00
1		Six Wireless Dynamic Sensor Systems (E)								1494.00
1		Five Current senso (E)								195.00
1		Three Speed of Apparatus (E)								537.00
1		Three Balanc Beam w/TAP OH 00								495.00
1		UNLIMITED S, R (E)								192.50
1		Calipers (E)								240.00

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4		Supplies for STEM							\$1,000

APPENDIX A. Strategic Priorities & Goals (from Hartnell Coll

Priority 5: Innovation and Relevance for Programs and Services

Goal 5A: Hartnell College will provi