1. Please highlight any changes since you submitted your unit assessment (e.g. enrollment trends of the units as of Fall 08).

Chemistry:
Enrollment for Chemistry discipline continues to be strong despite the current limited laboratory space available. The total enrollment has increased from 175 (F08) to about 230 (F09 and S10). This increase has been accomplished by increasing the enrollment in each lab section to the maximum amount allowable for safe operation of the laboratories. In addition, the success rate for the discipline has remained constant despite the larger number of students in each section. Demand for classes remain very high for Chemistry, as shown by most classes filing early after start of registration period. With the future move to East Campus and more laboratory space, more efficient scheduling of lab courses in Chemistry can be accomplished to ease the larger student demand.

Physics & Astronomy:
Enrollment has sharply increased for Physics & Astronomy during the past 2 years. Total enrollment has increased from 169 (F08) to 279 (S10). Most of this increase has occurred in the day classes. Demand for both disciplines is high as more students from 4-year colleges wish to complete their lower division courses at 2-year campuses. The enrollment in physics courses is impacted by laboratory space, since lecture and lab classes must be scheduled together. Astronomy, on the other hand, has laboratory scheduled separately than lecture, and as a result can have much larger lecture classes. Larger space available in East Campus should further improve enrollments for both these disciplines. Student success rates have been lower than college average, but have improved since Fall ’08 (48% compared to 60%). Some of this improvement can be attributed to the availability of science tutoring in the Science Success Center (SSC).

Geography:
Enrollment in Geography has declined much in the past 2 years. Total enrollment has decreased from 272 (F08) to 201 (S10). This decline is partially due to less sections offered in this discipline. However, as a result of less sections offered, the average class size has increased from 34 to 40 during the past 2 years. Future plans for introduction of more modern geography topics (e.g. GIS) and Cartography certificate should revitalize discipline and increase enrollment to previous levels.

Physical Science:
Enrollment in this discipline has been stagnant, except for the Spring 2010, when one section of this course was offered at Sylmar High School. The demand for this discipline remains steady due to the elementary education requirement for a lecture and lab course. No major change in demand is anticipated in the future. Success rates remains high compared to college average, possibly because curriculum is well tailored to student population.
**Geology & Oceanography:**
One course in each discipline is offered on alternate semesters to increase choice of courses meeting General Education science requirement. Enrollment in each course is high to warrant continuation of current scheduling. No plan for growth of either discipline is being considered currently, but if need arises, these plans can be revised.

2. What do you see as the strengths of each of your units? What do you see as the challenges?

The greatest strength of the department is its curriculum and student-centered focus in instruction. The department currently experiences a high reputation among students wishing to enroll in courses. This reputation is most evident in high demand disciplines such as chemistry and physics. Whereas in the past many classes at Mission would remain open till classes at other neighboring colleges closed, today Mission is number one choice for many students enrolling in chemistry or physics. The department offers a large support network for students enrolled in these courses. These services include tutoring at the SSC, resources on the web, social networking groups for courses, etc. This effort has been spearheaded by all faculty in the department (full-time and adjuncts) and will continue to grow and improve with time. Whereas chemistry and physics currently lead this effort, in the near future other disciplines in the department will transition to the same goal.

Some of the challenges that the department currently faces include:
1. Lack of adequate laboratory space: All the laboratory classes in the discipline have been impacted by a shortage of laboratory space. The recent growth of enrollment in high demand disciplines (chemistry and physics) has been stagnated and will not improve till opening of the new Math & Science building in East Campus. As the opening of this new facility nears, the challenge shifts to coordination of the move and scheduling of classes in the new facility.

2. Lack of full-time faculty: In the past 2 years, the Geography discipline has functioned without a full-time faculty present. Although many adjuncts have stepped in to take some of the responsibility for the functioning of the discipline, curriculum development and maintenance remains slow and behind schedule due to this issue. In addition, with the upcoming relocation to the new building and more available lab space for chemistry, a full-time faculty with expertise in some of the new courses planned for future is urgently needed.

3. How does your unit planning support the mission of the college?

The department supports the mission of the college by offering many courses for GE and major preparation for transfer to 4-year institutions. In addition, future plans for career technical certificates such as cartography, environmental technician and chemistry technician are in process. The department also continually strives to improve student success in various disciplines through variety of support services mentioned earlier in this report.
4. What are your visions for changes, revisions and growth?

As the department plans its relocation to the East Campus, it plans to offer more courses and programs for students in several disciplines. These plans include:

- Chemistry courses such as organic and biochemistry required for major preparation for many health related fields,
- Calculus-based physics courses required for engineering and other science related majors,
- GIS and other modern techniques in earth sciences.
- Career based programs and certificates such as chemistry technician, environmental technician and cartography & GIS.

5. What resources are needed to support as well as to build the programs in your Department?

The most important resources needed are laboratory facilities and necessary equipment for operation of them, as well as full-time faculty to develop and maintain courses within the department.

6. What is the status of SLO assessments in your department?

All physics and astronomy courses have assessed SLO’s and results have been evaluated and changes implemented.

Several chemistry courses (51, 65 and 102) have assessed SLO’s, but results remain to be evaluated and changes implemented. Others courses (52 and 101) will be assessed and evaluated in Fall 11.

Geography, Geology and Oceanography and Physical Science course SLO’s need to be reevaluated and assessed during the next two semesters.

7. What is the status of the course outlines of record and course updates in your department?

Course outlines of records have been updated in all disciplines except Geography, Geology and Oceanography. These courses have to be updated with help from adjuncts since no full-time faculty is present.

8. What progress has been made towards the recommendations made by EPC following your 08-09 program review presentation?

The department has partnered with CTE programs to obtain several large equipments for the laboratories. These include purchase of a spectrophotometer through the Administration of Justice Forensics certificate and GIS software through other CTE funds.