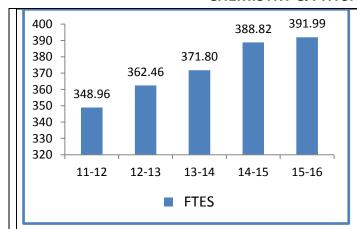
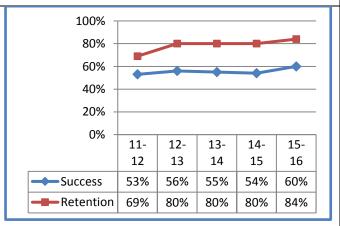
# CHEMISTRY & PHYSICAL SCIENCE — 2015-2016



	10-11	11-12	12-13	13-14	14-15	15-16
Duplicated Enrollment	1,839	1,611	1,678	1,737	1,801	1,864
FTEF	23.06	20.03	22.01	24.81	25.84	27.83
WSCH per FTEF	505	523	494	450	451	423



	10-11	11-12	12-13	13-14	14-15	15-16
Sections	84	75	78	91	94	97
% of online enrollment	4%	3%	4%	7%	3%	4%
Degrees awarded*	5	5	9	8	7	
Certificates awarded *	N/A	N/A	N/A	N/A	N/A	N/A

<sup>\*</sup>These degrees are in Chemistry.

#### Description:

The Chemistry program provides instruction and laboratory experience appropriate for general education requirements in the area of physical sciences, pre-nursing and allied health preparation courses, and lower-division preparation required for Chemistry and Biochemistry transfer students. The same lower-division courses service transfer students in nearly every field of science, engineering, and pre-professional school preparation, such as pharmacy, dental, physical therapy, and medical schools.

#### Assessment:

The efficiency of the program has decreased, but is still at an acceptable level for laboratory-based instruction. Some factors contributing to decreased efficiency include the need to offer single sections at a variety of times (e.g., Saturdays) in order to increase access and FTES. Another reason could be related to our attempts to increase the number of Chemistry and STEM-related degrees. The classes required for these majors have lower caps due to safe laboratory practices and therefore decrease efficiency. The department has increased the number of STEM majors by offering additional sections of general and organic chemistry. Student success and retention are improved compared to recent years, which may be due in part to faculty workshops, which focus on entry/exit skills and student success.

### Department Goals:

- Increase the number of science and engineering majors to affect the economic viability of the region.
- Continue to increase the number of STEM degrees granted.
- Continue to improve student success.
- Maintain laboratories with equipment and supplies needed for quality education.
- Investigate non-credit options to enhance problem-solving skills necessary to succeed in Chemistry.

## Challenges & Opportunities:

- Identifying and retaining adjunct faculty. Every semester we
  must scramble to identify part-time faculty as our current
  pool finishes graduate school and/or finds permanent
  employment. For the past few years we have cancelled
  classes or asked for waivers for faculty to teach above 67%.
- Improving student success. While there is a noteworthy improvement in 15-16, the success rate is still lower than desired. Recent issues include students enrolling in too many units, students not understanding the time necessary to succeed in chemistry, and a decrease in supplemental instruction (SI) facilitators and tutors. We continue to explore innovative ideas to help our students succeed, while maintaining the rigor of our curriculum.

#### **Action Plan:**

- Sustain the number of major's preparation sections and continue to expand pathways leading to STEM degrees.
- Explore innovative approaches to increase the success rates of our allied health and STEM students.
- Expand SI access in an efficient manner across our courses.
- Maintain our position as the largest community college Chemistry program in the Inland Empire.
- Evaluate our new allied health course (CHEM 105) designed for CSU transfer nursing students.