

INSTRUCTIONAL ANNUAL PROGRAM PLANNING WORKSHEET FOR 2016-2017

CURRENT YEAR: 2015-2016

PROGRAM: CHEMISTRY

CLUSTER: 1 – SCIENCES AND MATH

LAST YEAR CPPR COMPLETED: 2014

NEXT SCHEDULED CPPR: 2019

CURRENT DATE: FEBRUARY 2016

This APPW encompasses the following degrees and/or certificates: AS - Chemistry

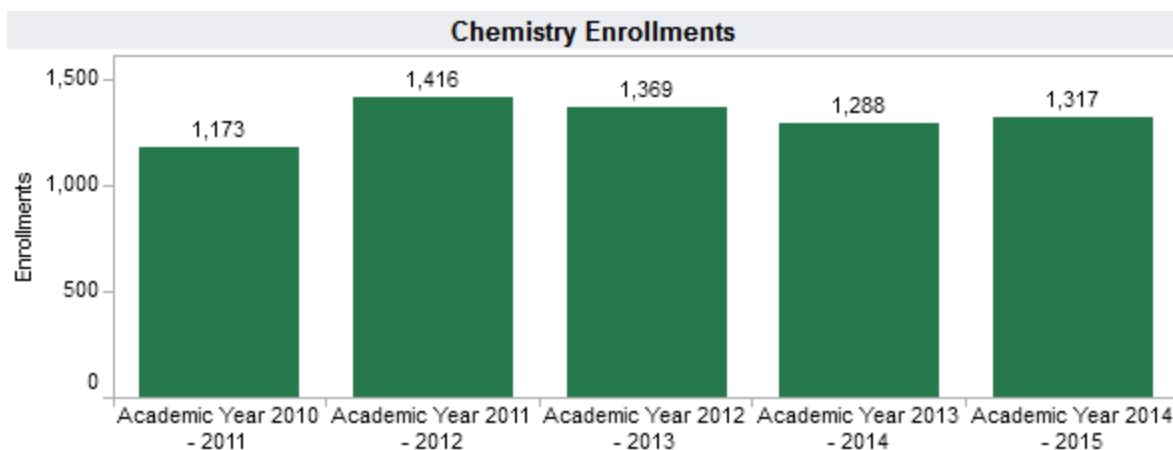
GENERAL PROGRAM UPDATE

No significant changes to program, mission, or purpose.

DATA ANALYSIS AND PROGRAM-SPECIFIC MEASUREMENTS

Enrollment (Insert Data Chart)

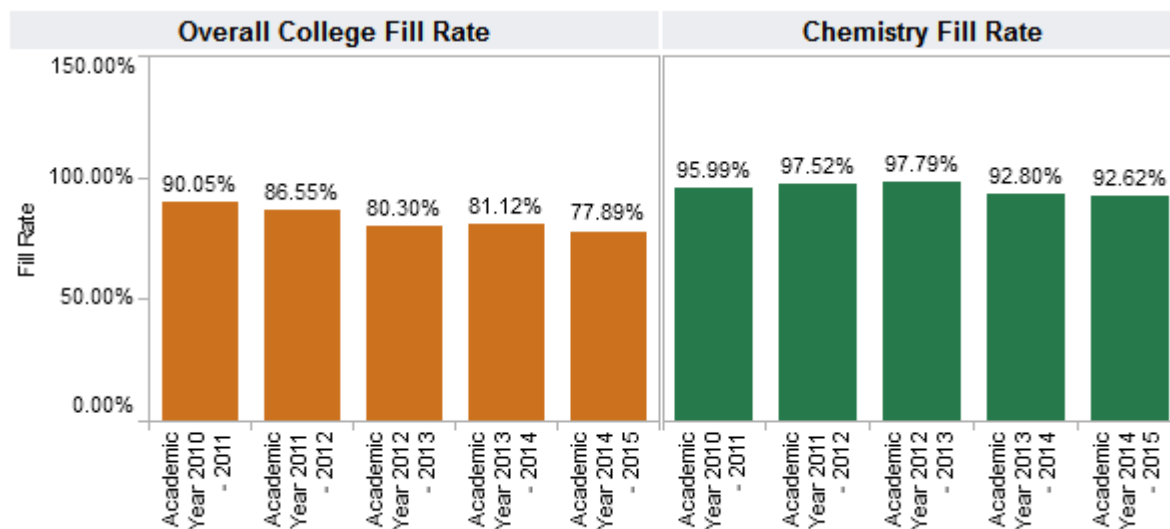
Chart 1: All CHEM Enrollments



Looking at Chart 1, it is apparent that the enrollments have dipped from their peak in 2011-2012 over the last three years. While the District has seen a 20.9% decrease in overall enrollments, chemistry has only decreased by 7.0% and shows signs of stabilizing. The division was unable to fill FT-TT chemistry recruitments in 2014 and 2015. The vacuous decision of suspending the 2016 FT-TT position will likely lead to a decrease in enrollment in 2016-2017. The projection is for chemistry to have unmet demand until the position is reinstated. Overall, growth could outpace that of the District with sufficient staffing.

Student Demand (Fill Rate) (Insert Data Chart)

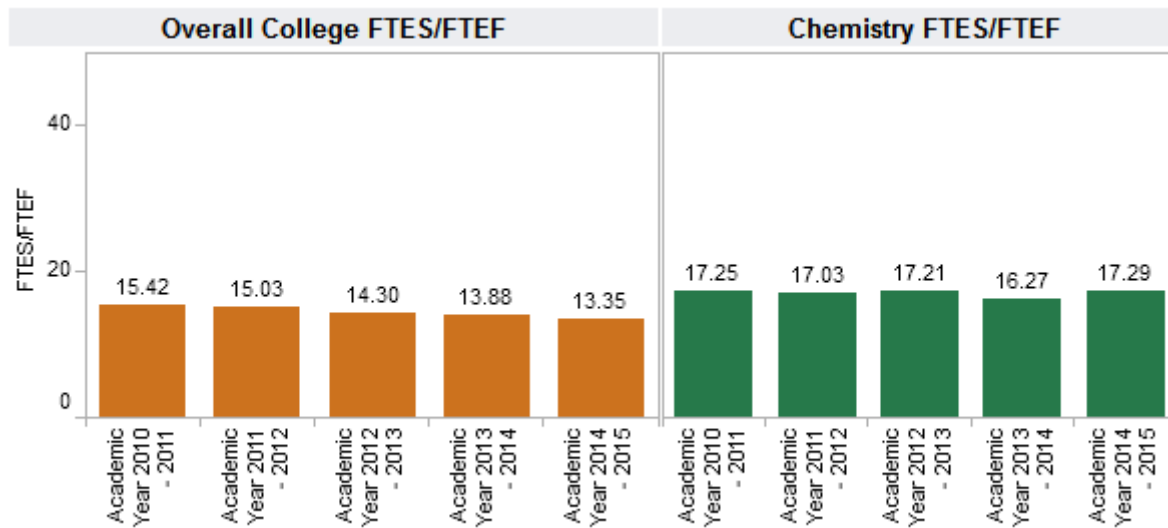
Chart 2: Fill Rate



Fill rates in CHEM courses remain far higher than the college, leading to the previous prediction that chemistry could grow at a rate faster than the college with appropriate staffing.

Efficiency (FTES/FTEF) (Insert Data Chart)

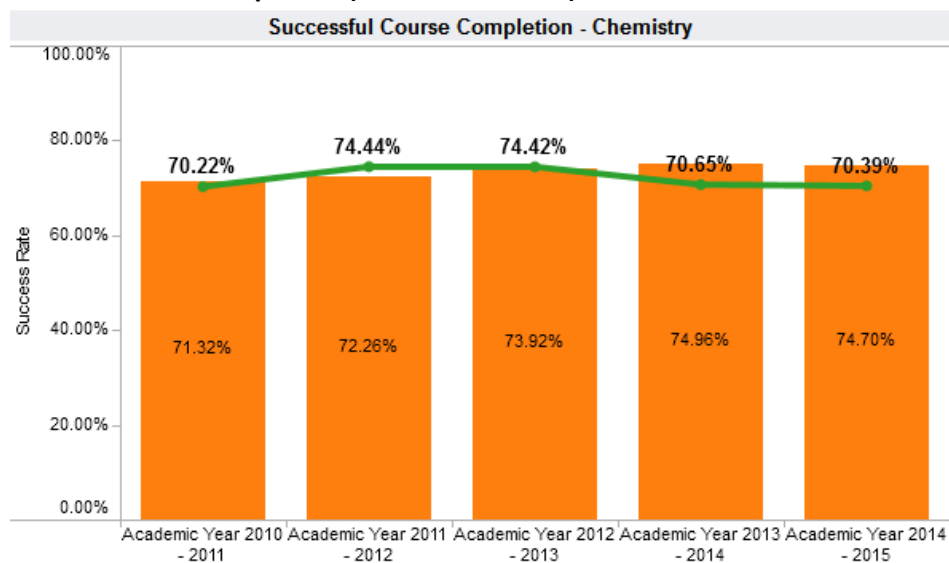
Chart 3: FTES/FTEF for all CHEM Courses:



The efficiency for CHEM courses has remained fairly consistent over the past five years, and is at a level far higher than the college overall. Slightly lower efficiencies may be expected in the future as contractual loading and FTES/FTEF formulas have changed in 2015. Plus, as of 2016, chemistry is offering an evening hybrid general chemistry course to improve access for working students.

Student Success – Course Completion (Insert Data Chart)

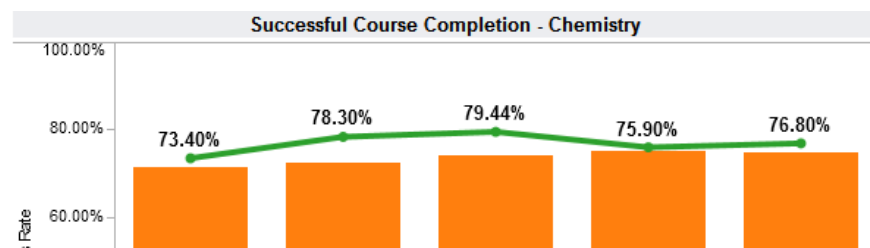
Chart 4: Course Completion (All CHEM courses)



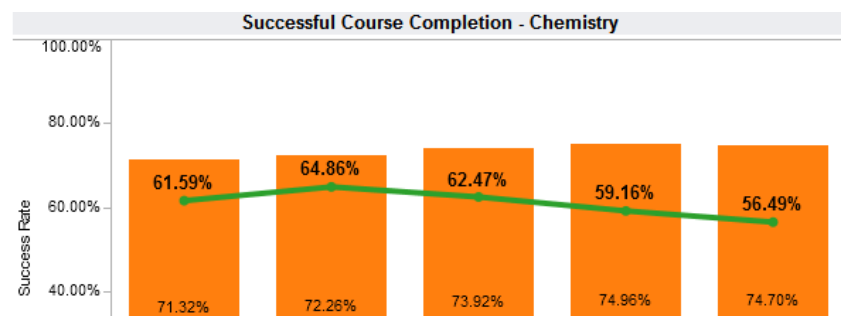
Chemistry Success Rate Table

	Academic Year 2010 - 2011	Academic Year 2011 - 2012	Academic Year 2012 - 2013	Academic Year 2013 - 2014	Academic Year 2014 - 2015
Department Success..	70.22%	74.44%	74.42%	70.65%	70.39%
Total Enrollments	1,173	1,416	1,369	1,288	1,317

Success in chemistry is near the college average, with a decline in the past two years that can be seen in both Chem 210FL and Chem 201A/201B, but is more prominent in the latter pair of courses. Chem 201A has a significantly lower success rate than other chemistry courses. Due to the large enrollments, the lower success values have a significant effect on the overall CHEM success, and the remainder of the CHEM courses have success rates higher than the college overall (see chart below). Department faculty will continue to assess student learning outcomes and make changes to improve student success.



CHEM success, All CHEM courses except Chem 201A



CHEM success
Chem 201A only

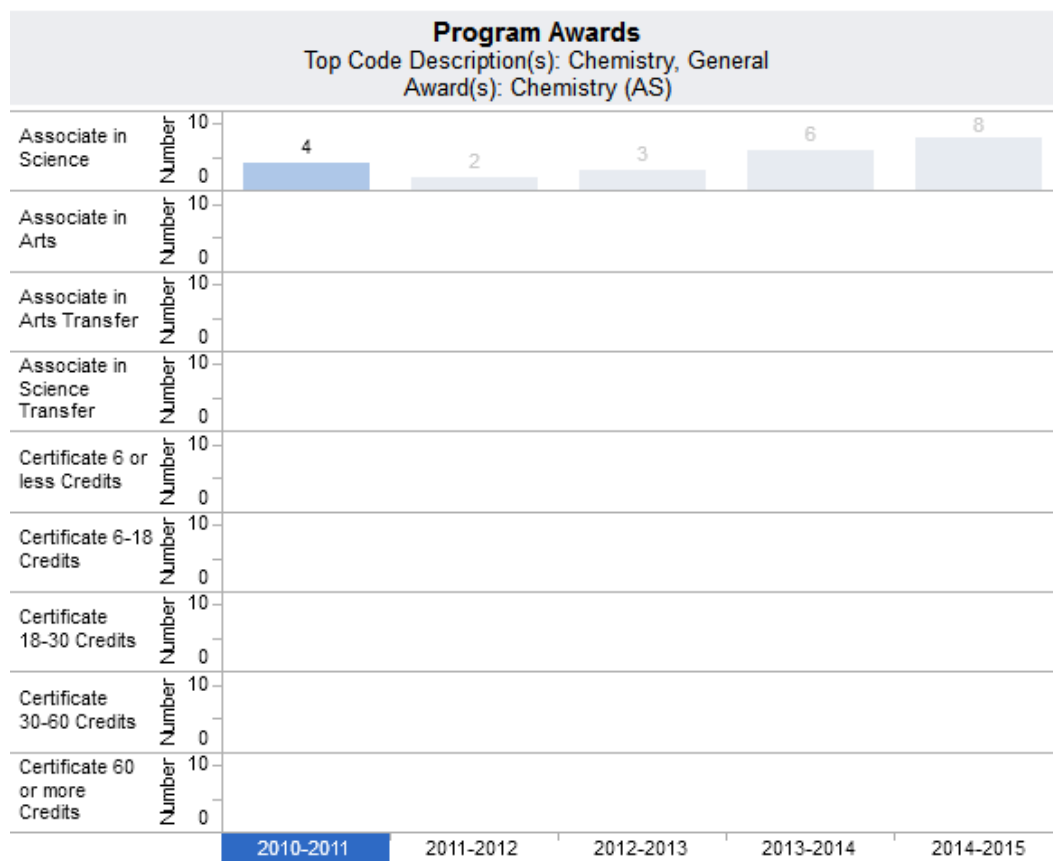
Student Success—Course Modality (Insert Data Chart)

- List strategies used during the last year in which data was reported to increase student success.
- Did your strategies effect change?
- List the trend (*i.e. increasing, decreasing, same*).
- Based upon the trend, what strategies do you plan on implementing?

No hybrid or Distance Education courses were offered in chemistry during the reporting period. Chemistry has started to offer blended versions of Chem 201A and Chem 201P (Preparation for General Chemistry) as of 2015-2016.

Degrees and Certificates Awarded (Insert Data Chart)

Chart 6: Program Awards – CHEM



Program Awards Table

Award T..	Award	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Associat..	Chemistry (AS)	4	2	3	6	8

There has been a steady increase in degrees awarded, but the number is still small. Most students take CHEM courses to fulfill degree requirements for majors other than chemistry. Even so, many students complete the major requirements for the Chemistry A.S. as well as transfer GE, but do not qualify to receive the degree because they lack the health and/or diversity graduation requirement. Elimination of the health and diversity requirement for students completing transfer GE may significantly increase the number of A.S. degrees awarded while the degree can still be offered. With the implementation of DegreeWorks, the number of degrees may

increase. The implementation of the Chemistry AD-T may result in the local A.S. in Chemistry to be terminated.

OTHER RELEVANT PROGRAM DATA (OPTIONAL)

Not applicable.

PROGRAM OUTCOMES ASSESSMENT AND IMPROVEMENTS CHECKLIST AND NARRATIVE

CHECKLIST:

- ☐ Location of current SLO assessment cycle calendar: G:\Division\SLOA's\Course and Program Summary Forms\CPAS Chemistry
- ☐ Date SLO assessment cycle calendar was last updated: Spring 2016
- ☐ Location of current Course or Program Assessment Summary (CPAS) for each of the degrees/certificates in the program is: G:\Division\SLOA's\Course and Program Summary Forms\CPAS Chemistry
- ☐ Date CPAS was last updated: Spring 2016

Narrative:

Briefly describe program changes, if any, which have been implemented in the previous year as a direct result of the Program or Student Services Learning Outcomes Assessment. (Please refer to Item 5 on your CPAS: "Effectiveness of Previous Improvement Plans.") *If no program changes have been made as results of Program or Student Services Learning Outcomes Assessment, indicate: NONE.*

PROGRAM PLANS / FORECASTING FOR THE NEXT ACADEMIC YEAR

Briefly describe any program plans for the upcoming academic year. These may include, but are not limited to the following: *(Note: you do not need to respond to each of the items below). If there are no forecasted plans for the program, for the upcoming year, indicate: NONE.*

- A. New or modified plans for achieving program learning outcomes (Please refer to Item 6 on your CPAS: "Recommended Changes & Plans for Implementation of Improvements".) **NONE**
- B. Anticipated changes in curriculum, scheduling or delivery modality
In spring 2016, a DE/hybrid Chem 201A is being taught for the first time since 2003. A hybrid preparation course for Chem 201A was taught for the first time in fall 2015 (Chem 201P).
- C. Levels, delivery or types of services **NONE**
- D. Facilities changes **NONE**
- E. Staffing projections
A position-control FT-TT recruitment was suspended on the day of application closing in spring 2016 by the Superintendent/President. Reinstating this position will allow for growth and meeting demand in the program.
- F. Other **NONE**

SURVEY

Please take 15 minutes to complete the IPPR Survey. Your assessment will serve to help us make the form and process better. Survey Link: <https://www.surveymonkey.com/r/9JXNBQD>

Thanks,
The IPPR Committee