

## INSTRUCTIONAL ANNUAL PROGRAM PLANNING WORKSHEET FOR 2016-2017

CURRENT YEAR: 2015-2016

PROGRAM: ASTRONOMY

CLUSTER: PHYSICAL SCIENCES

LAST YEAR CPPR COMPLETED:

NEXT SCHEDULED CPPR: 2019

CURRENT DATE: FEBRUARY 19, 2016

The Annual Program Planning Worksheet (APPW) is the process for:

- ☐ reviewing, analyzing and assessing programs on an annual basis
- ☐ documenting relevant program changes, trends, and plans for the upcoming year
- ☐ identifying program needs, if any, that will become part of the program's resource plan
- ☐ highlighting specific program accomplishments and updates since last year's APPW.

Note: Degrees and/or certificates for the same program may be consolidated into one APPW.

This APPW encompasses the following degrees and/or certificates:

### GENERAL PROGRAM UPDATE

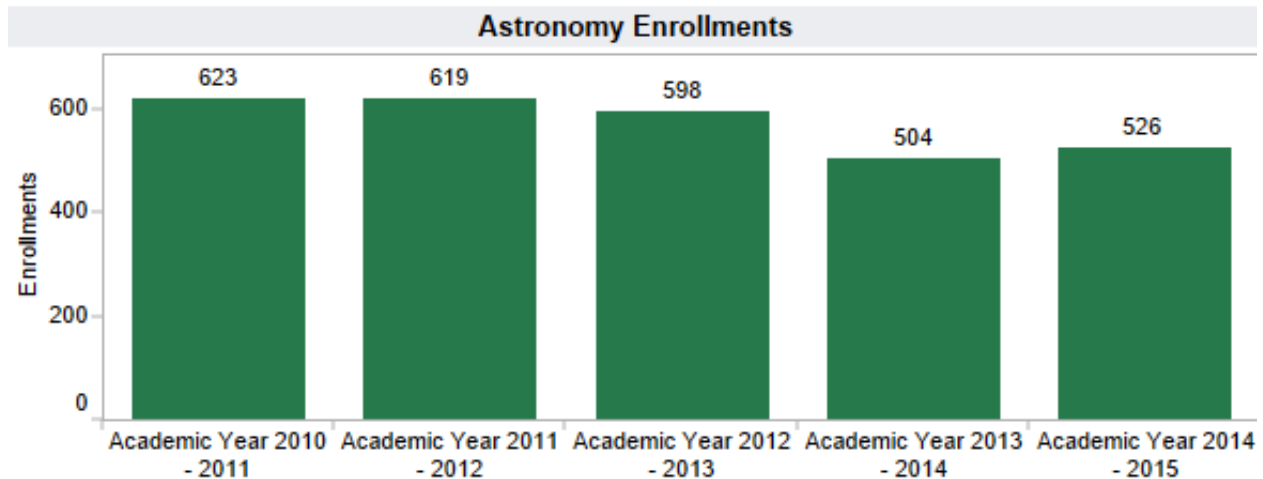
Describe significant changes, if any, to program mission, purpose or direction. NONE.

### DATA ANALYSIS AND PROGRAM-SPECIFIC MEASUREMENTS

In addition to other data that is relevant to your program, institutional program data is available on the SLOCCCD Institutional Research and Assessment Program Review Data Dashboard site. The hyperlinks below will take you directly to each data element on the Dashboard site.

Please paste the charts into this document, and respond to the prompts for each data element. Please also comment on your program's data and how it compares to the overall college data.

Note: Your responses to the prompts for the data elements below should be for the entire program. If this APPW is for multiple degrees and/or certificates then you MAY want to comment on each degree and/or certificate, or discuss them holistically for the entire program being sure to highlight relevant trends for particular degrees and/or certificates, if necessary.



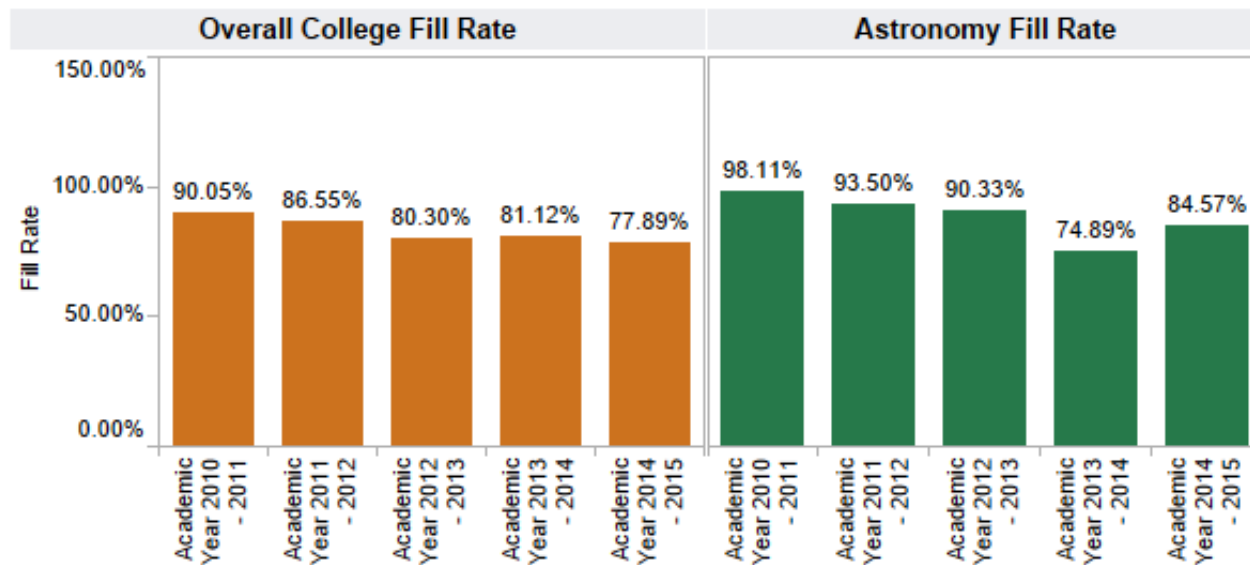
#### Enrollment

- Astronomy course enrollments have declined very slightly over the last four years, much less than the drop in overall District enrollments in the same time period. The enrollment in the 2013-14 year was markedly lower than the 2010-11, 2011-12, 2012-13. This was due to offering one section of ASTR 210 in a three-hour, one day a week section during the day, instead of a 1.5 hour, two days a week section. Enrollment in this modified section was much lower than its historical levels, and has since been changed back to the previous 1.5 hour, two days a week scheduling for 2014-2015. Subsequently the course enrollment has slightly increased.

## SLOCCCD Program Review Data - Student Demand (Fill Rate)

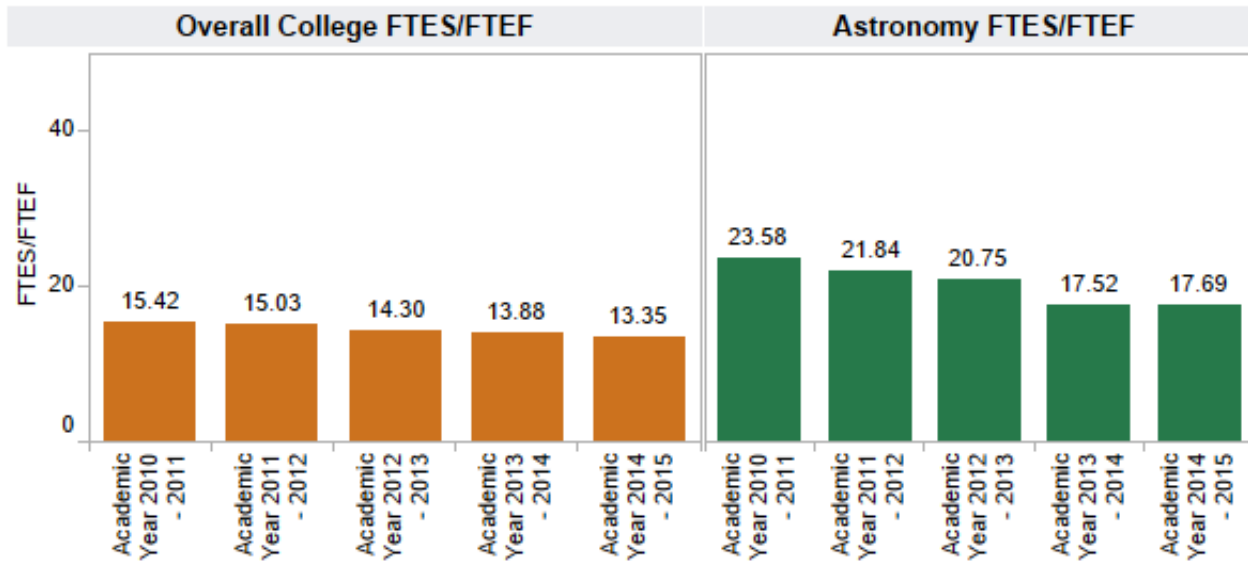
Department:  
Astronomy

Course:  
All



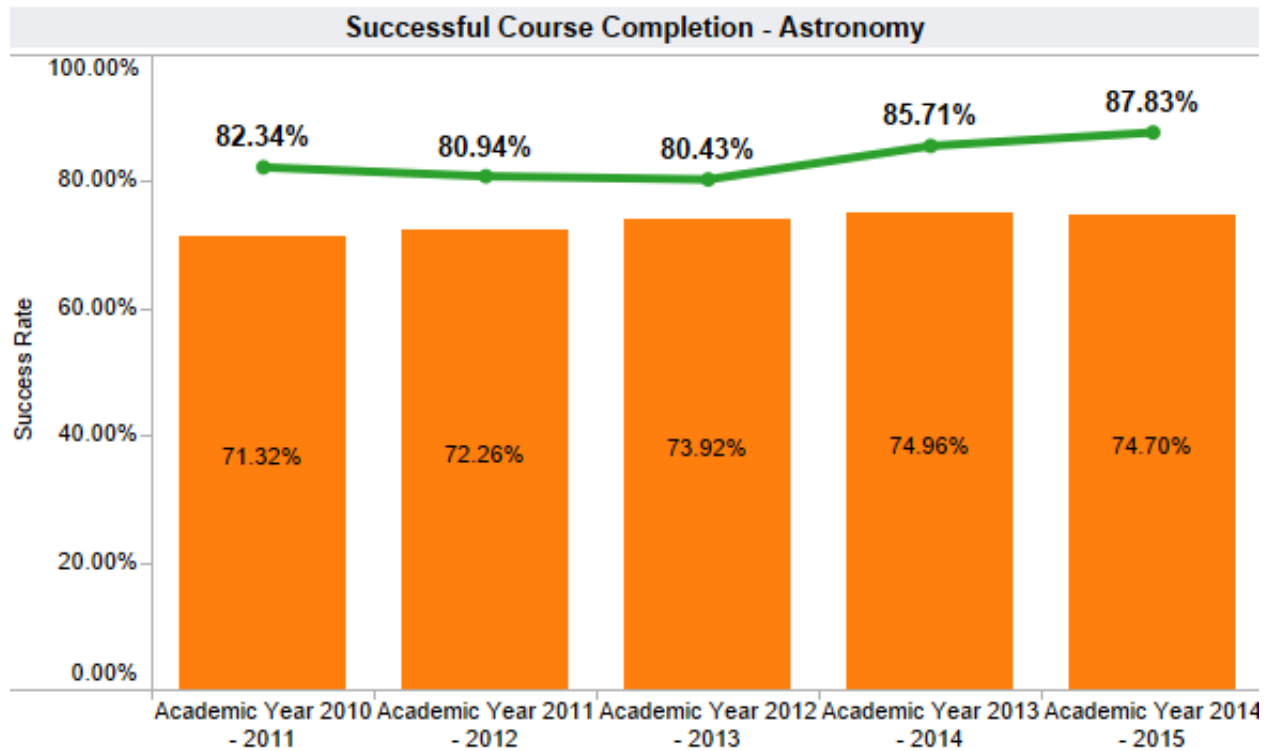
### Student Demand

- Astronomy fill rates have declined very slightly over the previous four years, however much less than the drop in overall District fill rates in the same time period. The fill rate in the 2013-14 year was markedly lower than the 2010-11, 2011-12, 2012-13. This was due to offering one section of ASTR 210 in a three-hour, one day a week section during the day, instead of a 1.5 hour, two days a week section. Enrollment in this modified section was much lower than its historical levels, and has since been changed back to the previous 1.5 hour, two days a week scheduling for 2014-2015. Subsequently the fill rate has significantly increased, and is expected to return to earlier values. This 2013-14 modified section only had a slight impact on the fill rate for the adjunct ASTR 210L course, which has otherwise remained stable.
- ASTR 299 fill rates have varied greatly as enrollment depends greatly on recruitment of high school students. However in 2014-2015 this course is offered in as a distance-learning course that allows students outside of the district to participate (in collaboration with offsite observational facilities). As a result, the fill rates have increased drastically.



Efficiency (FTES/FTEF)

- The overall efficiency of astronomy courses is very high compared to the District efficiency. This is due to large lectures of 45-60 students in each section, and labs with enrollments of 12-28 students in each section.



Astronomy 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..	82.34%	80.94%	80.43%	85.71%	87.83%
Total Enrollments	623	619	598	504	526

Student Success – Course Completion

- The student success rate in astronomy courses is higher than the District-wide rate, and the astronomy success rate is trending slightly higher.

Student Success—Course Modality (Insert Data Chart)

- (ASTR 210 and ASTR 210L are only offered in the face-to-face modality, while ASTR 299 is only offered as a distance-learning course, so there is no modality comparison within courses.)

Degrees and Certificates Awarded (Insert Data Chart)

- (Not applicable, as the astronomy program does not offer a degree or certificate.)

#### OTHER RELEVANT PROGRAM DATA (OPTIONAL)

The enrollment status data for students taking ASTR 210 and ASTR 210L courses (the "Multiple values" table on the following page) shows that the overwhelming majority are continuing students, and indicates that an overwhelming majority of our students are taking these courses to satisfy CSU GE requirements.

In contrast, the enrollment status data for students taking ASTR 299 courses during 2011-12, 2012-13, 2013-14 shows that the majority of them are high school enrichment students, due to the offering of this course at the South County campus. Previously in 2009-10 and 2010-11 this course was offered at the SLO campus, with some high school students enrolled.

## SLOCCCD Program Review Data - Demographics (Duplicated)

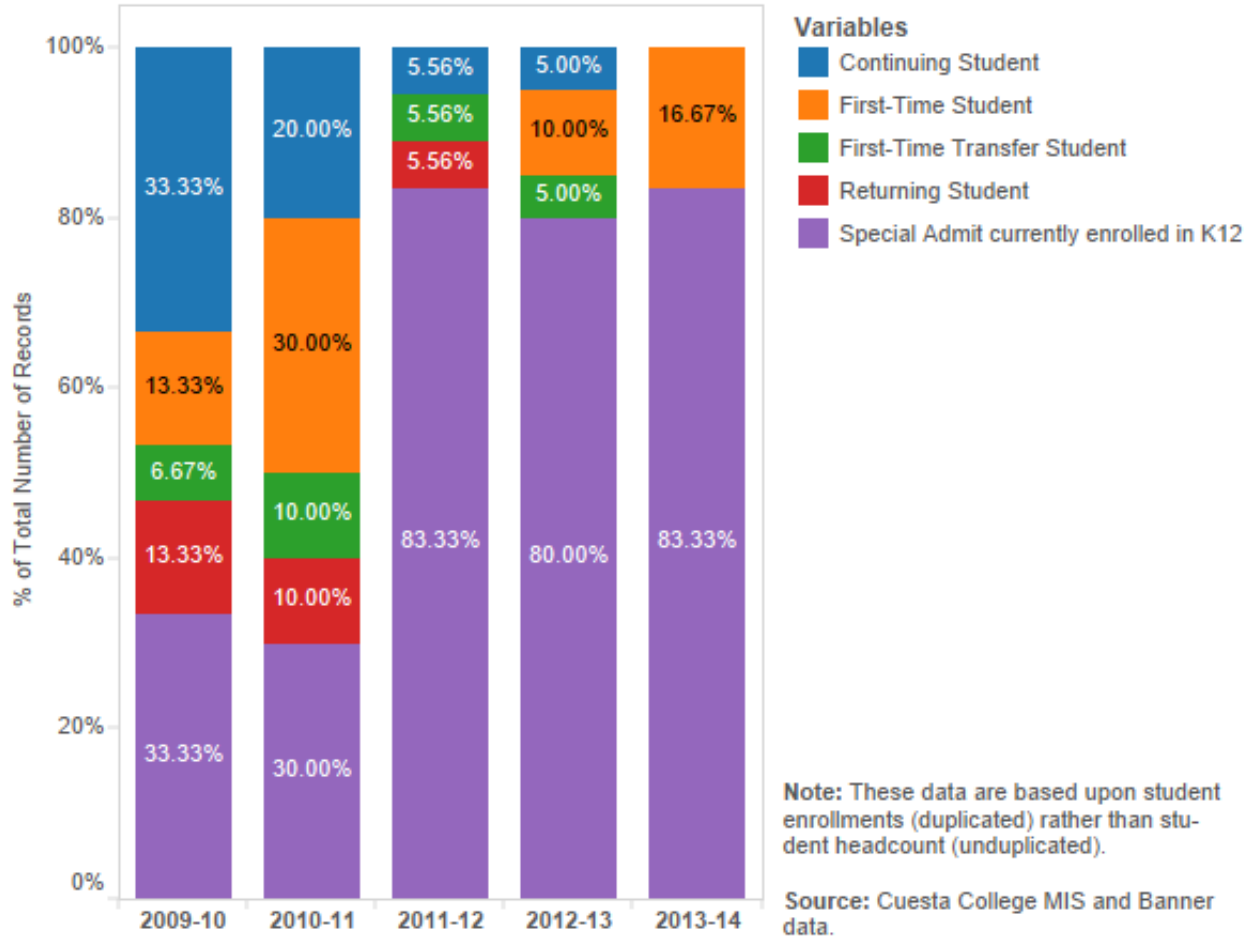
Department:  
Astronomy

Course:  
ASTR299

Region:  
All

Select Variables:  
Enroll Status

### Astronomy - Enroll Status



### Astronomy - Top 10 Majors

Major	2009-10	2010-11	2011-12	2012-13	2013-14
High School Enrichment	5	3	14	15	5
AS Psychology		1			1
AA Business Administration	1				
AS Engineering	1				
CA CSU General Ed. Breadth	1	2	2		
General Studies	1				



## PROGRAM OUTCOMES ASSESSMENT AND IMPROVEMENTS CHECKLIST AND NARRATIVE

### CHECKLIST:

- ☐ Location of current SLO assessment cycle calendar is: "140218 CPPR Astronomy.doc"  
at V:\physsci\Division\Program Planning and Review\2015\APPW's\
- ☐ Date SLO assessment cycle calendar was last updated: 02/18/2014.
- ☐ Location of current Course or Program Assessment Summary (CPAS) for each of the  
degrees/certificates in the program is: "140218 CPAS\_Astr210.doc"  
"140218 CPAS\_Astr210L.doc"  
at V:\physsci\Division\Program Planning and Review\2015\APPW's\
- ☐ Date CPAS was last updated: 02/18/2014.

### Narrative:

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. NONE
- B. NONE
- C. NONE
- D. Facilities changes

The 14" Meade reflector at the Bowen Observatory on top of the 2401/2402 science forum building will be 12 years old in 2017, and should be refurbished and realigned. There does not seem to be any local technician available to perform these tasks, so Cuesta faculty and/or volunteer members from the Central Coast Astronomical Society may need to be trained in order to do so. A technical assistant could be used to set up, run, and shut down the telescope during instructional time, such that students can view objects through the telescope during lecture, and to free up the instructor from preparing and running the telescope during lecture.

Addition of a second digital projector in the N2401 classroom will enable viewing of multiple screens of instruction, as is done in every other classroom where ASTR 210 and 210L has been or is currently offered (2401, 2402, 2101, 2105, 2108, N2409, N2439).

The opening of a doorway between the chemistry and physics/astronomy labs in the N2400 building will facilitate direct access to cross-disciplinary equipment during labs.

The North County campus telescope shelter no longer has electrical power due to ongoing construction. Reconnecting power and/or reassessment of the placement of this shelter should be done before construction is completed.

- E. NONE
- F. Other

## SURVEY

Please take 15 minutes to complete the IPPR Survey. Your assessment will serve to help us make the form and process better.

Thanks,

The IPPR Committee

Survey Link: <https://www.surveymonkey.com/r/9JXNBQD>