



Welcome to Program Review

College of Alameda - 2019

ASTR - Instruction

Program Review

Program Overview

Please verify the mission statement for your program. If your program has not created a mission statement, provide details on how your program supports and contributes to the College mission.

The mission of the Astronomy Department at College of Alameda is to introduce students to the Universe and insight into its mysteries. Students will learn how observations have shaped theories of basic astronomical phenomena and the evolution of the Universe.

We provide comprehensive and flexible programs that empower students to achieve their goals through offering of online and face-to-face sections of introductory astronomy.

Program Total Faculty and/or Staff

Full Time

Andrew Park

Part Time

Dietmar Krauss Varban
Andrew Fittingoff
Benjamin Stahl

The Program Goals below are from your most recent Program Review or APU. If none are listed, please add your most recent program goals. Then, indicate the status of this goal, and which College and District goal your program goal aligns to. If your goal has been completed, please answer the follow up question regarding how you measured the achievement of this goal.

If we are able to retain our astronomy instructors through a few assessment cycles, the results of assessment may lead to improvement of pedagogy and improved assessments.

Status

In-Progress

If Completed, What evidence supports completion of this goal? How did you measure the achievement of this goal?

College Goal

Strengthen Data-driven / informed decision making

District Goal

Advance Student Access, Equity, and Success

Provide opportunities for students to participate in astronomical observations.

Status

In-Progress

If Completed, What evidence supports completion of this goal? How did you measure the achievement of this goal?

College Goal

Advance CoA teaching and learning

District Goal

Advance Student Access, Equity, and Success

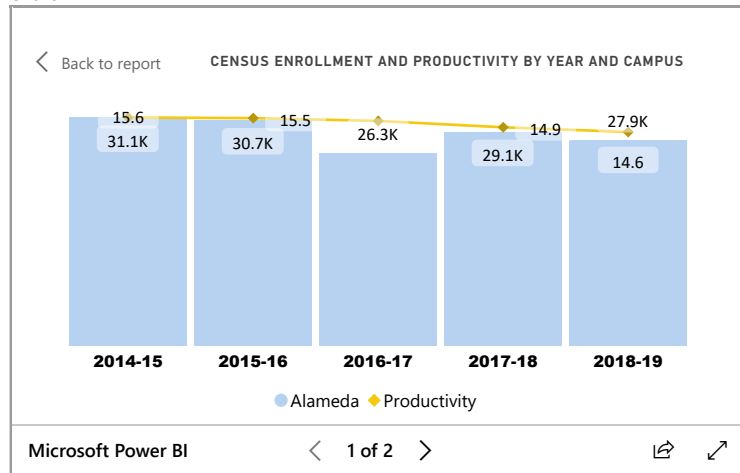
Describe your current utilization of facilities, including labs and other space

Majority of ASTR courses are offered online. While there is no permanent home for face-to-face ASTR lecture sections, the classroom needs have been met in the past years.

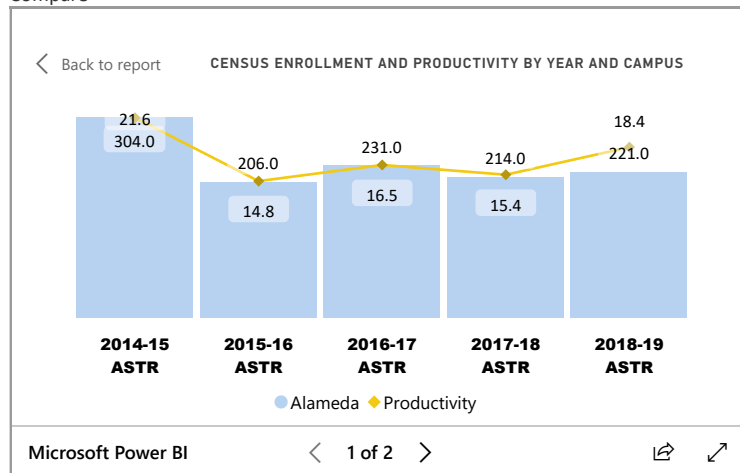
Enrollment Trends

College Level - Program and Department comparison

Chart



Compare



Using the Enrollment Trends dashboard filter to your college and subject area. Reflect on the enrollment trends over the past three years. How does the enrollment trend for your program compare to the overall college trend? What factors could be attributing to this trend?

ASTR courses at College of Alameda continue to enjoy above-average productivity and upward-trending enrollment. The primary strength of COA ASTR program over ASTR programs at our sister campuses is our online offering.

Describe effective and innovative teaching strategies used by faculty to increase student learning and engagement.

% Time	Description/Justification	Estimated Annual Salary Costs	Estimated Annual Benefits Costs
40	In the face of recent college/district FTEF cuts, our ASTR program (as the program where all courses are taught by part-time instructors) was the first to bear the brunt of the cut. We ask for ASTR course offering to be restored to historical levels. The request here reflects 2 additional course sections per semester.		
Total Costs			

Curriculum

Please review your course outlines of record to determine if they have been updated or deactivated in the past three years. Use the pull-down menus to identify courses that still need updating or deactivation and specify when your department will update each one, within the next three years.

Name	Last updated date	Semester and Year	To be updated on	To be deactivated on
ASTR 010 - Descriptive Astronomy	July, 15 2019 16:02:57	Spring 2018 - 19		
ASTR 001 - Introduction to Astrono...	February, 19 2019 09:38:25	Select Year...		5/31/2021 We are switching over to ASTR 10.

Please summarize your plans for curriculum improvement/development, including details on specific courses or programs you plan to improve/develop.

We are switching our ASTR 1 over to ASTR 10, so that we can have a consistent course number across the district (we only offer one introductory astronomy class). We are waiting for ASTR 10 to be fully articulated with transfer institutions before we switch our actual offered course to ASTR 10.

In the boxes below, please add improvement actions and resource requests that are directly related to the questions answered in this section. If there are no improvement actions or resource requested in this area, leave blank.

Improvement Actions

Improvement Action

Action Item	Description	To be completed By	Responsible Person
Continue to maintain supplies and equipment for ASTR I...	ASTR lecture demos need continued maintenance. While certain equipment and supplies have been purchased from PHYS budget, some of these have been mainly used for ASTR.	5/31/2020	Budget Committee?

Resource Request

Supplies	Instructional Supplies and Materials	
Description/Justification	Estimated Cost	
ASTR lecture demos need continued maintenance. While certain equipment and supplies have been purchased from PHYS budget, some of these have been mainly used for ASTR.	500	

Instruction - Assessment

Student Learning Outcomes Assessment

List your Student Learning Outcomes. SLOs are specific, measurable statements of what students will know, be able to do, or be able to demonstrate when they complete a course. An SLO focuses on specific knowledge, attitudes, or behaviors that students will demonstrate or possess as a result of instruction.

Course	Student Learning Outcomes (SLO)	Last date Assessed	Planned Assessment Date	Attachments
ASTR 010 - Descriptive Astronomy	Explain and discuss basic astronomical phenomena, including the seasons, the phases of the Moon, eclipses, and planetary motion.		5/31/2023	
ASTR 010 - Descriptive Astronomy	Explain and discuss the origin, development, and properties of planetary systems, stars, galaxies, and the universe.		5/31/2021	
ASTR 010 - Descriptive Astronomy	Differentiate between planets, stars, galaxies, and the universe in terms of scale.		5/31/2022	
ASTR 001 - Introduction to Astronomy	Differentiate between planets, stars, galaxies, and the universe in terms of scale.		12/31/2019	
ASTR 001 - Introduction to Astronomy	Explain and discuss basic astronomical phenomena, including the seasons, the phases of the Moon, eclipses, and planetary motion.		5/31/2020	

ASTR 001 - Introduction to Astronomy

Explain and discuss the origin, development, and properties of planetary systems, stars, galaxies, and the universe.

ASTR 001 - Introduction to Astronomy

Explain how theories in astronomy are based on observations.

How has your department worked together on assessment? Provide examples on collaboration, leadership, planning exercises, and data analysis. What aspects of assessment work went especially well in your department and what improvements are most needed?

So far, assessment has occurred at individual instructor level. This continued practice may be adequate, given the small size of the discipline, but the new AMS does offer new collaboration opportunities.

What were the most important things your department learned from assessment? If implementation of your action plans resulted in better student learning and/or changes in curriculum, detail the results

From the last program review (2015): "Student Learning Outcomes in ASTR 1 have been regularly assessed since Fall 2013. Performance has been mixed. A number of instructors formulated plans for improvement, but left before they could assess changes in student performance resulting from changes in teaching."

We hope to have better continuity in ASTR instructors and have more substantial report at the next program review.

Give us an update on your Program Learning Outcomes (PLOs). A complete program assessment means all PLOs have been assessed for that program. Attach any evidence, i.e. reports from Task Stream or Curricunet Meta.

There is no degree program in Astronomy, and there are no PLOs to be assessed.

Does your department participate in the assessment of multidisciplinary programs?

No

If Yes, Describe your department's participation and what you learned from the assessment of the program that was applicable to your own discipline.

Writing just to explain that the "No" answer above is that we haven't been invited to participate in the assessment of multidisciplinary programs. As ASTR courses fulfill elective requirements of some associate degrees, we hope to be invited in program review of these degrees.

Does your department participate in your college's Institutional Learning Outcomes (ILOs) assessment?

No

If Yes, Please describe your departments participation in assessing Institutional Learning Outcomes.

Writing just to explain that the "No" answer above is that we haven't been invited to participate in assessing ILOs. We would welcome an invitation.

What support does your department need from administrators, assessment coordinators and/or your campus assessment committee to continue to make progress in assessment of outcomes and implementation of action plans?

We need stipends for part-time faculty who assess SLOs. As all ASTR courses are currently taught by part-time faculty, without a stipend, it is difficult to keep up with the SLO assessment cycle (we do hope to make up some lost ground in AY 2019-2020).

In the boxes below, please add improvement actions and resource requests that are directly related to the questions answered in this section. If there are no improvement actions or resource requested in this area, leave blank.

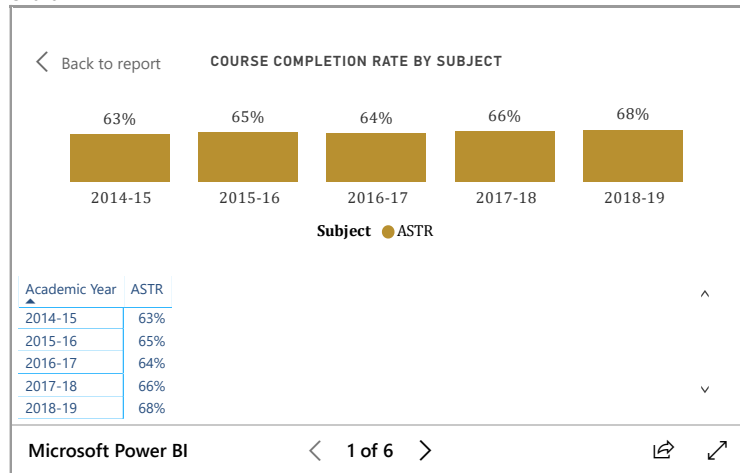
No Actions/Requests

Improvement Actions

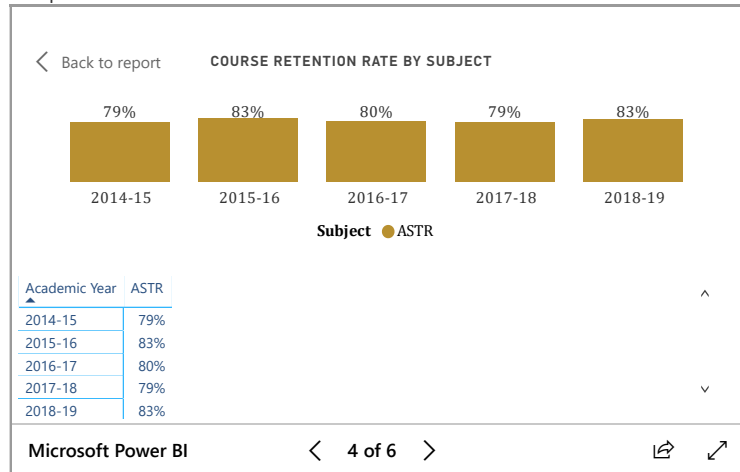
Course Completion

College Level - Program and Department comparison

Chart



Compare



Consider your course completion rates over the past three years (% of student who earned a grade of "C" or better).

Name	2016 - 17 Completion Rate (%)	2017 - 18 Completion Rate (%)	2018 - 19 Completion Rate (%)
ASTR 1 INTRO TO ASTRONOMY	64	65	68

Use the filters on the top and right of the graphs to disaggregate your program or discipline data. When disaggregated, are there any groups whose course completion rate falls more than 3% points below the discipline average? If so, indicate yes and explain what your department is doing to address the disproportionate impact for the group.

Age	<input type="radio"/> Yes <input checked="" type="radio"/> No	Age groups 25-29 and 30-34 seem to consistently underperform the class average. We need to look into why, and if there is something that can be done to help.
Ethnicity	<input type="radio"/> Yes <input checked="" type="radio"/> No	While there is some year-to-year variation, Black / African American group underperforms the average by about 10%. We need a department conversation on what can be done.
Gender	<input type="radio"/> Yes <input checked="" type="radio"/> No	There is a consistent underperformance of woman students across the discipline. We need to look into why, and if there is something that can be done to help.
Foster Youth Status	<input type="radio"/> Yes <input checked="" type="radio"/> No	
Disability Status	<input type="radio"/> Yes <input checked="" type="radio"/> No	There is a dip in completion rate of DSPS students in AY 2018-19 but that may be temporary, as DSPS students completed at comparable rates to the average in previous years. We will need to monitor.
Low Income Status	<input type="radio"/> Yes <input checked="" type="radio"/> No	
Veteran Status	<input type="radio"/> Yes <input checked="" type="radio"/> No	

Consider your course completion rates over the past three years by mode of instruction. What do you observe?

Select Course	ASTR 001 - Introduction to Astronomy		
	2016 - 17 Completion Rate (%)	2017 - 18 Completion Rate (%)	2018 - 19 Completion Rate (%)
Face-to-Face	64	68	68
Hybrid			
100% Online	64	64	68
Dual Enrollment			
Day time			
Evening			

How do the course completion rates for your program or discipline compare to your college's Institution-Set Standard for course completion?

Students in ASTR succeed at rates comparable to the college average.

How do the department's Hybrid course completion rates compare to the college course completion standard?

There are no hybrid courses in ASTR (each lecture section is either 100% online or 100% face-to-face).

Are there differences in course completion rates between face to face and Distance Education/hybrid courses? If so, how does the discipline, department or program deal with this situation? How do you assess the overall effectiveness of Distance Education/hybrid course?

Student completion rates in ASTR are comparable across face-to-face and 100% online sections.

Describe the course retention rates over the last three years. If your college has an Institution-Set Standard for course retention, how does your program or discipline course retention rates compare to the standard?

Retention rates in ASTR are slightly higher than the college average.

What has the discipline, department, or program done to improve course completion and retention rates?

This information is not currently available.

In the boxes below, please add improvement actions and resource requests that are directly related to the questions answered in this section. If there are no improvement actions or resource requested in this area, leave blank.

Improvement Actions

Improvement Action

Improvement Action

Action Item	Description	To be completed By	Responsible Person
Regular online ASTR/PHYS faculty meeting during seme...	The small size and composition of ASTR/PHYS faculty make in-person meeting during college flex day or during the semester difficult. We need to organize an online meeting to overcome this obstacle.	5/31/2020	Andrew Park

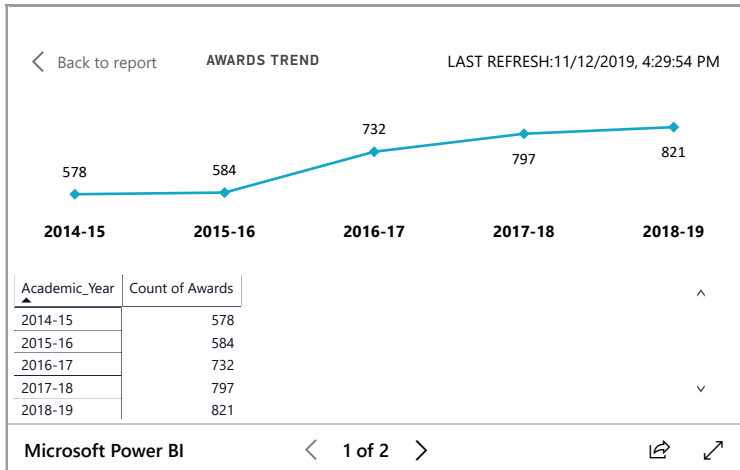
Resource Request

Choose an Option

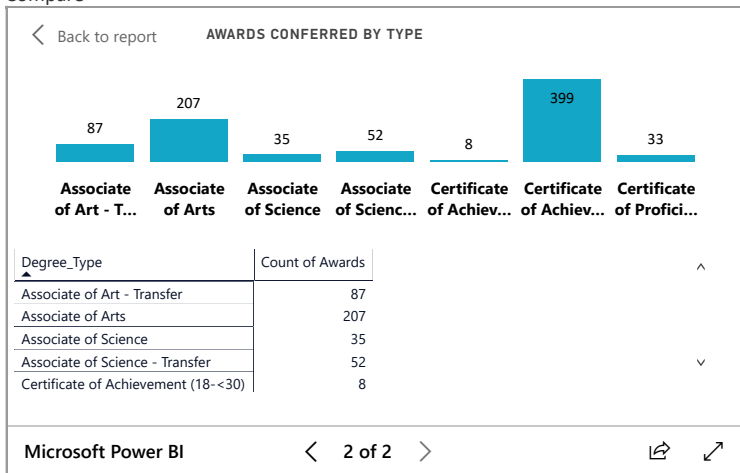
Degrees and Certificates

College Level - Program and Department comparison

Chart



Compare



What has the discipline, department, or program done to improve the number of degrees and certificates awarded? Include the number of degrees and certificates awarded by year, for the past three years.

N/A

Over the next 3 years, will you be focusing on increasing the number of degrees and certificates awarded?

No

What is planned for the next 3 years to increase the number of certificates and degrees awarded?

ASTR offers service courses---introductory astronomy courses which satisfies Physical Science GE requirement for other degrees and programs. It is not possible to offer an ASTR degree at a 2-year institution.

In the boxes below, please add improvement actions and resource requests that are directly related to the questions answered in this section. If there are no improvement actions or resource requested in this area, leave blank.

Improvement Actions No Actions/Requests

Engagement

Discuss how faculty and staff have engaged in institutional efforts such as committees, presentations, and departmental activities. Please list the committees that full-time faculty participate in.

No full-time faculty currently teaches in ASTR. The sole full-time faculty with FSA in ASTR (Andrew Park) currently only teaches PHYS courses, and his involvement in institutional efforts have been noted on PHYS program review.

Discuss how faculty and staff have engaged in community activities, partnerships and/or collaborations.

The part-time faculty in ASTR teaches across the district at our sister campuses, including Laney and Merritt.

Discuss how adjunct faculty members are included in departmental training, discussions, and decision-making.

We communicate regularly by email, but we need to include some real-time discussion opportunities. Aside from one department lunch hosted at Otaez in Fall 2017, there have not been a time when all faculty in ASTR could meet together.

In the boxes below, please add improvement actions and resource requests that are directly related to the questions answered in this section. If there are no improvement actions or resource requested in this area, leave blank.

Improvement Actions Improvement Action

Improvement Action

Action Item	Description	To be completed By	Responsible Person
Provide opportunities for students to participate in astr...	There are spaces on COA campus that can be used to host astronomical observation opportunity ("Star Party"). We need new equipment to make this possible.	5/31/2020	Budget Committee?

Resource Request

Technology and Equipment	New	Description/Justification	Estimated Cost
		There are spaces on COA campus that can be used to host astronomical observation opportunity ("Star Party"). We need new equipment, specifically telescope, to make this possible. The budget requested here is for entry-level telescopes and accessories capable of observing planets (rings of Jupiter and Saturn) and moons.	2000

Action Plan Summary and New Program Goals

Total Improvement Plans: 4
 Total Resource Request: 4

Review, add or modify the following actions plans that were entered in each section. Then review the Program Goals that were marked as in progress. Determine if you would like to keep the in progress goals and draft new 3-year goals for your department or program. The action plan items should support your new program goals. Align your program goals to the college strategic goals and District Strategic Goals.

Section / Head	Description		
Instruction			
Enrollment Trends			
Increase ASTR 1/10 offering	In the face of recent college/district FTEF cuts, our ASTR program (as the program where all courses are taught by part-time instructors) was the first to bear the brunt of the cut. We ask for ASTR course offering to be restored to historical levels (and possibly beyond, as enrollment warrants).	5/31/2020	Completed Date Annual Progress Update Date
Curriculum			
Continue to maintain supplies and equipment for ASTR lecture demos	ASTR lecture demos need continued maintenance. While certain equipment and supplies have been purchased from PHYS budget, some of these have been mainly used for ASTR.	5/31/2020	Completed Date Annual Progress Update Date
Course Completion			

Regular online ASTR/PHYS faculty meeting during semester	The small size and composition of ASTR/PHYS faculty make in-person meeting during college flex day or during the semester difficult. We need to organize an online meeting to overcome this obstacle.	5/31/2020	Completed Date
			Annual Progress Update Date

Engagement

Engagement			
Provide opportunities for students to participate in astronomical observations.	There are spaces on COA campus that can be used to host astronomical observation opportunity ("Star Party"). We need new equipment to make this possible.	5/31/2020	Completed Date
			Annual Progress Update Date

New and Continuing Goals

Discipline, Department or Program Goal	College Goal	PCCD Goal
If we are able to retain our astronomy instructors through a few assessment cycles, the results of assessment may lead to improvement of pedagogy and improved assessments.	Strengthen Data-driven / informed decision making	Advance Student Access, Equity, and Success
Provide opportunities for students to participate in astronomical observations.	Advance CoA teaching and learning	Advance Student Access, Equity, and Success

Resource Request Summary

Total Cost: \$2500
 Total Resource Request: 4

Instruction					
Personnel					
Type	% Time	Description/Justification	Estimated Annual Salary Costs	Estimated Annual Benefits Costs	Total Costs
Part-time Faculty	40	In the face of recent college/district FTEF cuts, our ASTR program (as the program where all courses are taught by part-time instructors) was the first to bear the brunt of the cut. We ask for ASTR course offering to be restored to historical levels. The request here reflects 2 additional course sections per semester.			
Sub-Total: \$0					

Professional Development
 No Resources found for this category

Technology and Equipment
 No Resources found for this category

Supplies	Description/Justification	Estimated Cost
Type		
Instructional Supplies and Materials	ASTR lecture demos need continued maintenance. While certain equipment and supplies have been purchased from PHYS budget, some of these have been mainly used for ASTR.	500

Sub-Total: \$500

Facilities
No Resources found for this category

Library
No Resources found for this category

Other
No Resources found for this category

Engagement
Personnel
No Resources found for this category

Professional Development
No Resources found for this category

Technology and Equipment	Description/Justification	Estimated Cost
Type		
New	There are spaces on COA campus that can be used to host astronomical observation opportunity ("Star Party"). We need new equipment, specifically telescope, to make this possible. The budget requested here is for entry-level telescopes and accessories capable of observing planets (rings of Jupiter and Saturn) and moons.	2000

Sub-Total: \$2000

Supplies
No Resources found for this category

Facilities
No Resources found for this category

Library
No Resources found for this category

Other
No Resources found for this category

Sign and Submit

Please provide the list of members who participated in completing this program review.

Andrew Fittingoff

Please enter the name of the person submitting this program review.

Andrew Park