Instructions: The first column below matches key words in TracDat where you will enter the requested information. The second column fully describes the information that the IPBT is requesting. It also represents the information you would see if you pressed the help button (a question mark) by each box in TracDat. You will be able to copy and paste or type in your information into the TracDat boxes. **SAVE OFTEN WHILE ENTERING INFO!!!!!** ALWAYS keep a soft copy of your work in your files to ensure that your work is not lost. You will save program review as a pdf through the print option of your browser. This is the document you will send to your Dean and it is the document that will be posted on the De Anza website. If you have questions, please refer to your workshop handout (http://www.deanza.edu/slo/tracdat.html) or contact: papemary@fhda.edu.

Section I: Overall program description (including CTE)
Section II: Overall student enrollment and success
Section III: Equity
Section IV: Assessment Cycle
Section V: Resource requests

In TracDat. Limit narrative to 100 words; bullet points encouraged

	Information Requested	Explanation of Information Requested. ? TracDat Help button will reveal the same cues (sorry no hyperlinks)	Input your answers in columns provided. Note: reference documents can also be attached. Make sure to note the name of any reference documents in your explanations.
	Program Description		
	Department Name:		Astronomy
	Program Mission Statement:	"What are your Program Learning Outcomes? How do your Program Learning Outcomes relate to the mission of De Anza College and our Institutional Core Competencies"? (http://www.deanza.edu/about/missionandvalues.html)	The Astronomy Department's Program Learning Outcomes are that the student will be able to 1) appraise the benefits to society of astronomical research, 2) evaluate the impact on Earth's characteristics of the evolution of the solar system, stars, and stellar systems, and 3) evaluate astronomical news items or theories about astronomy based upon the scientific method. These outcomes contribute to the College's student core competencies in communication & expression, information literacy, and critical thinking.

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I.A.1	What is the Primary Focus of Your Program?	Select Basic Skills, Transfer. Career/Technical, Learning Resources/Academic Services, personal enrichment or N/A	Transfer
I.A.2	Choose a Secondary Focus of Your Program.	Basic Skills, Transfer. Career/Technical, Learning Resources/Academic Services, personal enrichment or N/A	Personal Enrichment
I.B.1	# Certificates of Achievement Awarded	If applicable, enter the number of Certificates of Achievement awarded during the current academic year. Please refer to: http://deanza.fhda.edu/ir/AwardsbyDivision.html Leave blank if not applicable to your program.	
I.B.2	# Certificates of Achievement-Advanced Awarded:	If applicable, enter the number of Certificates of Achievement - Advanced awarded during the current academic year. Please refer to http://deanza.fhda.edu/ir/AwardsbyDivision.html . Leave blank if not applicable to your program.	
I.B.3	# ADTs (Associates Degrees for Transfer) Awarded	List Associate Degree Transfer awarded by you department during the current academic year. Please refer to http://deanza.fhda.edu/ir/AwardsbyDivision.html Leave blank if not applicable to your program.	
I.B.4	# AA and/or AS Degrees Awarded:	If applicable, enter the number of Associate of Arts or Associate of Science degrees awarded during the current academic year. Please refer to http://deanza.fhda.edu/ir/AwardsbyDivision.html Leave blank if not applicable to your program	
I.C.1	CTE Programs: Impact of External Trends	Career Technical Education (CTE) programs: provide regional, state, and labor market data, employment statistics. Refer to "CTE Program Review Addenda" at: https://www.deanza.edu/workforceed/ged/ Identify any significant trends that may affect your program relative to: 1) Curriculum Content; 2) Future plans for your program e.g. enrollment management plans.	
I.C.2	CTE Programs: Advisory Board Input:	Career Technical Education (CTE) programs: provide recommendations from this year's Advisory Board (or other groups outside of your program, etc.). Briefly, address any significant recommendations from the group. Describe your program's progress in moving towards assessment or planning or current implementation of effective solutions.	
I.D.1	Academic Services and Learning Resources: # Faculty Served	Only for programs that serve staff or students in a capacity other than traditional instruction, e.g. tutorial support, service learning, etc. State number of faculty served: 0 = no change; (-#) decreased; # increased; leave blank if not applicable to your program	
I.D.2	Academic Services and Learning Resources: # Students Served	Only for programs that serve staff or students in a capacity other than traditional instruction, e.g. tutorial support, service learning, etc. State number of students served: 0 = no change; (- #) decreased; # increased; leave blank if not applicable to your program	

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I.D.3	Academic Services and Learning Resources: # Staff Served	Only for programs that serve staff or students in a capacity other than traditional instruction, e.g. tutorial support, service learning, etc. State number of staff served: 0 = no change; (- #) decreased; # increased; leave blank if not applicable to your program	
I.E.1	Full Time Faculty (FTEF)	For ALL programs: Refer to your program review data sheet. http://deanza.edu/ir/program-review.15-16.html	2.5
I.E.2	# Student Employees	State number of student employees and if there were any changes: 0 = no change; (- #) = decreased; # = increased; blank if not applicable to your program	0 no change
I.E.3	Full-time to Part-time ratio % of Full -time Faculty Compared to % Part-time Faculty Teaching	Compare the changes in % of FT and PT faculty teaching in your department? 0 = no change; (- %) = decreased; % = increased; blank= not applicable to your program. Refer to your program review data sheet. http://deanza.edu/ir/program-review.15-16.html .	From the 2014-2015 academic year to the most currently reported year, 2015-2016, the percent load taught as full-time changed from 55% to 53%, a decrease of 2%.
I.E.4	# Staff Employees	State number of staff employees and if there were any changes: 0 = no change; (- #) = decreased; # = increased; blank if not applicable to your program ONLY report the number of staff that directly serve your program. Deans will make a report regarding staff serving multiple programs.	1 No Change
I.E.5	Changes in Employees/Resources	Briefly describe how any increase or decrease of employees/resources has impacted your program. Leave blank if not applicable to your program.	
	Enrollment		
II.A	Enrollment Trends	What significant changes in enrollment have you seen in the last three years? Refer to http://deanza.edu/ir/program-review.15-16.html	Enrollment Trends: No significant change in enrollment is evident over the past three years. Minor variations (less than 5% in either direction) have tracked with small variations in number of sections offered. Over that span, the program's total enrollment has declined by 3.4%. The College-wide enrollment during that period declined by 5.5%, so this program has fared marginally better than the College overall.
II.B.1	Overall Success Rate	What significant changes in student success rates have you seen in the last three years?	Overall Success Rate: Our overall success rate has remained steady for the past three years at 80% (79%, 80%, and 81%).
II.B.2	Plan if Success Rate of	In accordance with ACCJC requirements, the college has adopted an institutional standard	Our success rate is well over 60%

	Program is Below 60%	for successful course completion at or above 60% http://deanza.edu/ir/state-of-the-college-related-information/pdf/Institutional_Metrics_2016.pdf If course success rates in your program fall below 60%, what are the department's plans to bring course success rates up to this level? Leave blank if N/A.	(see above).
II.C	Changes Imposed by Internal/External Regulations	Address program changes implemented as a response to changes in College/District policy, state laws, division/department/program level requirements or external agencies regulations? How did the change(s) affect your program? (e.g. any curriculum, program reorganization, staffing etc.)	
	Equity		
III.A	Growth and Decline of Targeted Student Populations	Briefly, address student enrollment data relative to your program's growth or decline in targeted populations: African Americans, Latinos, Filipinos. (Refer to http://deanza.edu/ir/program-review.15-16.html)	The percentage of our students who are in targeted groups has increased by 1% since the 2013-14 academic year (from 35.5% to 36.5%), which is essentially the same growth as the College at large in the same time period (1.1%, from 34.5% to 35.6%).
III.B	Closing the Student Equity Gap:	What progress or achievement has the program made relative to the plans stated in your program's 2013 -14 Comprehensive Program Review, Section II.A.3, towards decreasing the student equity gap? See IPBT website for past program review documentation: http://deanza.edu/gov/IPBT/program_review_files.html	Our department's equity gap (comparing success rates of targeted and all groups) has remained essentially constant at around 10% for the past three years. Specifically, success rates for those three years for targeted groups has been 70%, 68%, and 74%, and for all groups 79%, 80%, and 81%. The fluctuations are negligible. The 2015-16 gap is very slightly less than for the PSME division at large (11%), and very slightly higher than the college-wide gap of 7%. Our 2013-14 Comprehensive Program Review indicated a desire to increase success rates for all students, but particularly targeted groups, by increasing hands-on components in our lecture courses and by increasing access to our stand-alone laboratory

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course. We frankly have not made as much progress in those areas as we would like. We continue to look for meaningful ways in which large-lecture astronomy courses elsewhere have integrated hands-on components, including the use of "clicker" instant-feedback technology, but have thus far found none that would be completely satisfactory in the environment of our large-enrollment, planetarium classes. Concerning the lab course, staffing limitations continued to restrict its availability to only two sections of 35 students in each academic year, despite the clear demand for those courses indicated by full sections and full wait lists. However, we have recently hired several highly competent part-time instructors who are qualified to teach the laboratory course, and we are expecting to substantially increase the number of laboratory sections in the coming year. Assigning additional sections to new faculty will alleviate the past difficult choice of taking limited staff from large (70/140) lecture sections and assigning them to the smaller (35) lab sections. Adding new laboratory sections will provide students a more hands on experience in astronomy and will extend the appeal and success of the course for a wider range of students. The additional laboratory

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			sections will also allow more students to complete their transfer degree laboratory science requirements. Acquisition of the telescope and spectroscopy demonstration device (requested below) would significantly enhance the hands on experience of students in our labs, with the concomitant benefits described above. One thing that was not mentioned in our 2013-14 Comprehensive Review was something that we are probably going to institute in the 2017-18 academic year: using a free textbook, probably the excellent astronomy resources now available through Open Stax. Too many students go without their own copy of a textbook simply because the cost is too great. Relieving students of the financial burden of purchasing a text will help them all, obviously, but will be of greatest benefit to financially-distressed students, which our targeted groups tend to be in greater proportion, so it should help those groups in a more significant way. We look forward to seeing if this will narrow the gap.
III.C	Plan if Success Rate of Targeted Group(s) is Below 60%	In accordance with ACCJC requirements, the college has adopted an institutional standard for successful course completion at or above 60% http://deanza.edu/ir/state-of-the-college-related-information/pdf/Institutional_Metrics_2016.pdf Are success rates of targeted groups at or above 60%? If not, what are the department's plans to bring the success rates of the group(s) up to this level? This applies to African American, Latino/a and Filipino students.	As noted in III.B above, our success rate for targeted students is well above 60%.
III.D	Departmental Equity	What progress or achievement has the program made relative to the plans stated in your	See the narrative in III.B above.

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	Planning and Progress	departmental 2014-15 Equity Plan?	

	Assessment Cycle		
IV.A	PLOAC Summary	Give the percentage of Program Level Outcome statements assessed to date. Run Ad Hoc report entitled "XXX PLOAC Work" and scroll to the bottom of the report for counts. Then calculate #Reflections & Analysis/#PLO statement times 100. This percentage may be over 100% or 0%. All program level outcomes are to be assessed for a minimum of a second time before the Comprehensive Program Review in Spring 2019.	Cycle 2 PLOAC Summary (since June 30, 2014): We have assessed two PLOs in cycle 2 but are having some difficulty formulating a coherent way of presenting the results in a cogent way because of the very different ways in which the four instructors involved have done and the assessments.
IV.B	SLOAC Summary	Give the percentage of Student Level Outcome statements assessed to date. Run Ad Hoc report titled "XXX SLOAC work- Active Only" and scroll to the bottom of the report for counts. Then calculate #(Reflections & Analysis + #Archived from ECMS) /#SLO statement times 100. (N.B. Number of SLOs assessed and archived from ECMS is the last item in Department -> General Information page.) This percentage may be over 100% or 0%. All course level outcomes are to be assessed for a minimum of a second time before the Comprehensive Program Review in Spring 2019.	Cycle 2 SLOAC Summary (since June 30, 2014): We have assessed five SLOs in two courses in cycle 2 but are having the same intra-departmental difficulty entering them into the system. We will resolve this by the end of the current quarter.
	Resource Requests		
V.A	Budget Trends	Describe impact, if any, of external or internal funding trends upon the program and/or its ability to serve its students. If you don't work with budget, please ask your Division Dean to give you the information.	
V.B START HERE	Funding Impact on Enrollment Trends	Describe the impact, if any, of external or internal funding changes upon the program's enrollment and/or its ability to serve its students. Refer to Program Review data sheets for enrollment information: http://deanza.edu/ir/program-review.15-16.html	
V.C1	Faculty Position(s) Needed	A drop down menu will allow you to choose: Replace due to Vacancy, Growth, None Needed Unless Vacancy	None Needed Unless Vacancy
V.C.2	Justification for Faculty Position(s):	Do you have assessment data available to justify this request for a faculty position? If so provide the SLO/PLO assessment data, reflection, and enhancement that support this need. If not, provide other data to support this need.	We are not requesting a faculty position at this time, but we very likely will in next year's APRU. Paul Olejniczak, a full time instructor in Meteorology and Astronomy, retired in June 2016. A replacement position was approved by IPBT, and a new full-time faculty member was

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			hired in that position. However, the new person is qualified only in Meteorology, not Astronomy. As a result of this and of a slight change in load factor of our lecture courses (which resulted in fewer sections assignable to individual part-time faculty), we have had to hire several new part-time faculty to teach astronomy courses in the 2016-17 academic year. While 2016-17 will not be addressed in an APRU until next year, that Review will show negative impacts of this staffing issue on enrollments and unknown impacts on student success data. We will likely be requesting a new full-time astronomy faculty in the next Program Review cycle, not only because of the current staffing situation, but also because the only person currently teaching full-time in Astronomy (Sherwood Harrington) is likely to retire at the end of the 2018-2019 academic year.
V.D.1	Staff Position(s) Needed	A drop down menu will allow you to choose: Replace due to Vacancy, Growth, None Needed Unless Vacancy Only make request for staff if relevant to your department only. Division staff requests should be in the Dean's summary.	
V.D.2	Justification for Staff Position(s):	Do you have assessment data available to justify this request for a staff position? If so, provide the SLO/PLO assessment data, reflection, and enhancement and/or CTE Advisory Board input to support this need. If not, provide other data to support this need.	
V.E.1	Equipment Requests	A drop down menu will allow you to choose: Under $1,000 or Over $1,000 or no equipment requested	
V.E.2	Equipment Title, Description, and Quantity	• Description should identify if the item(s) are new or replacement(s), furniture/fixtures, instructional equipment, technology related, expected life of item, recommended warrantees etc. • Did this request emanate from a SLOAC or PLOAC process?	One new 8-inch Cassegrain telescope (or equivalent) for use in the lab course and in demonstrations for the

		• Does this item require new or renovated infrastructure (e.g. wireless access, hardwire access, electric, water or heat sources . . .)	general College community. The telescope would not require any new or renovated infrastructure. One new RSpec Explorer spectroscopy classroom demonstration device. Total request of $3,210 submitted to Dean for review and Division prioritization.
V.E.3	Equipment Justification	• Do you have assessment data available to justify this request for equipment? If so, provide the SLO/PLO assessment data, reflection, and enhancement and/or Advisory Board input to support this need. If not, provide other data to support this need. • Who will use this equipment? • What would the impact be on the program with or without the equipment? • What is the life expectancy of the current equipment? • How does the request promote the college mission or strategic goals? Refer to mission: http://deanza.edu/about/missionandvalues.html and strategic goals (page 15 http://www.deanza.edu/emp/pdf/EMP2015-2020_11-18-15.pdf	Telescope: The lab course has been a very successful addition to the Astronomy program thus far. Its two sections per year fill early in the registration process. However, the Astronomy program does not have a telescope for the students to use or inspect. Instead, we have to borrow equipment, if it's available, from Community Education's Planetarium staff. Having our own telescope would not only greatly enhance students' engagement in the laboratory course, but it would allow the Astronomy department to conduct periodic public outreach viewing events independent of Community Education. Spectroscopy demonstration device: The most powerful tool in research astrophysics is spectroscopy. At this time, the Astronomy program has to rely on videos to acquaint students with spectroscopy and its applications, but having this hands-on, interactive demonstration device would provide students with a much more effective

			introduction to the power of spectroscopic analysis. Both items will significantly improve our ability to provide hands-on experience to students and improve student understanding and engagement.
V.F.1	Facility Request	Name type of facility or infrastructure items needed. Renovation vs new. Identify associated structures needed to support the facility e.g. furniture, heat lamps, lighting, unique items above and beyond what is normally included in a similar facility.	
V.F.2	Facility Justification	• Do you have assessment data available to justify this request? If so, provide the SLO/PLO assessment data, reflection, and enhancement and/or CTE Advisory Board input to support this need. If not, provide other data to support this need. • Who will use this facility? • What would the impact be on the program with or without the facility? • What is the life expectancy of the current facility? • How does the request promote the college mission or strategic goals?	
V.G.	Equity Planning and Support	Has this work generated any need for resources? If, so what is your request?	
V.H.1	Other Needed Resources	List resource needs other than faculty, staff, facility, and equipment needs. For instance, assistance in working with counselors, finding tutors to work with students, support for assessment projects.	
V.H.2	Other Needed Resources Justification	Do you have assessment data available to justify this request? If so, provide the SLO/PLO assessment data, reflection, and enhancement that support this need. If not, provide other data to support this need.	
V.J.	"B" Budget Augmentation	How much? Who/what could be supported if this additional funding was awarded? What would the impact be on the program with or without the funds? How does the request promote the college mission or strategic goals? Refer to mission: http://deanza.edu/about/missionandvalues.html and strategic goals (page 15 http://www.deanza.edu/emp/pdf/EMP2015-2020_11-18-15.pdf State the SLO/PLO assessment data, reflection, and enhancement and/or CTE Advisory Board input to support this need. If you do not deal with the B budget directly, you can use the comment: "please refer to the Dean's summary".	Please refer to the Dean's summary.
V.K..1	Staff Development Needs	What would the impact be on the program with or without meeting this need? How does the request promote the college mission or strategic goals? Refer to mission: http://deanza.edu/about/missionandvalues.html and strategic goals (page 15 http://www.deanza.edu/emp/pdf/EMP2015-2020_11-18-15.pdf	

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V.K.2	Staff Development Needs Justification	Do you have assessment data available to justify this request for staff development? If so, provide the SLO/PLO assessment data, reflection, and enhancement and/or CTE Advisory Board input to support this need. If not, provide other data to support this need	
VI.	Closing the Loop	How do you plan to reassess the outcomes after receiving each of the additional resources requested above? N.B. For the Comprehensive Program Review the question becomes "What were the assessments showing the results of receiving the requested resources over the last five years?"	SLO Assessments should demonstrate increased engagement and understanding resulting from students' hands-on use of telescope and spectrometer; enrollment should be reflected in increased engagement resulting from a more hands-on approach.
	Submitted by:	APRU writer's name, email address, phone ext.	Sherwood Harrington, harringtonsherwood@deanza.edu, x8725
	Last Updated:	Give date of latest update (Set next box to YES when done and ready for Dean review).	04/18/2016

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