

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: papemaryv@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:		Mathematics
	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	<p>PLO #1: Analyze and synthesize the concepts of mathematics from a graphical, analytical, numerical, and verbal approach.</p> <p>PLO #2: Demonstrate and apply a systematic and logical approach to modeling and solving mathematical problems.</p> <p>PLO #3: Use correct notation and mathematical precision in communicating mathematics.</p> <p>#1 and #2 relate to the Institutional Core Competency “Critical thinking”. #3 relates to “Communication and expression”.</p>
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	Basic Skills

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.	17
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	
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	70.9
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	
I.E.3	Full-time to Part-time ratio % of Full -time Faculty	Compare the changes in % of FT and PT faculty teaching in your department? 0 = no change; (- %) = decreased; % = increased; blank= not applicable to your program.	FT: (-0.8%) Overload: (-9.5%)

	Compared to % Part-time Faculty Teaching	Refer to your program review data sheet. http://deanza.edu/ir/program-review.15-16.html .	PT: +3.5% Only 36.3% of our schedule was taught as full-time load during the 2015-16 year, a % which has remained essentially constant during the past three years. Even with our hire of 5 full-time instructors starting in Fall 2016, the percentage of our schedule taught by full-time faculty will likely decrease in 2016-17 due to increased enrollment and further retirements and resignations.
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.	
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	2012-13: 22,236 2013-14: 23,240 2014-15: 23,854 2015-16: 22,950 Enrollment has grown 3.2% from 2012-13 to 2014-15. The decline in enrollment for 2015-16 is due to a decrease in seat count from 40 to 35 in all developmental classes, as negotiated by the district administration and the faculty union. We were unable to find enough instructors to add back the number of sections necessary to accommodate students displaced by the lower seat count, and the 3.5% decline between 2014-15 and 2015-16 is almost purely accounted for by the loss of those “seats”. Initial estimates of 2016-17 enrollments show a modest recovery of the lost enrollment.
II.B.1	Overall Success Rate	What significant changes in student success rates have you seen in the last three years?	From 2012-13 to 2015-16, student success rate has risen from 63.7% to 65.2%.
II.B.2	Plan if Success Rate of	In accordance with ACCJC requirements, the college has adopted an institutional standard	Our student success rate is above 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.	
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.)	<ul style="list-style-type: none"> Starting in 2015-16 the seat count in our developmental classes has been reduced from 40 to 35, as negotiated by the district administration and faculty. We taught 88 sections of developmental classes in Fall 2016, so this translates to an overall loss of 440 places in developmental classes. We would have to add over 12 new developmental sections to make up for the loss, which is equivalent to the quarterly load of four full-time instructors! The state is mandating a switch to a common, state-wide assessment, and the use of multiple measures in placing incoming students into classes. The department has spent time discussing how to map competency results from the common assessment to our courses, and will need to hold discussions to decide on appropriate additional measures to use alongside the common assessment in placing students into our courses. The department has taken on additional curriculum work to insure that the courses needed for transfer degrees align with the state C-ID descriptors. The department is creating separate curricula for honors versions of some of our courses.
	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)	2012-13: 7,297 2013-14: 8,066 2014-15: 8,527 2015-16: 8,276

			Targeted population enrollment has grown 13.4% from 2012-13 to 2015-16. In contrast, the non-targeted population shrank 1.8% over the same time period.
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	<p>The equity gap has risen from 17.1% in 2012-13 to 17.5% in 2015-16. The targeted population’s success rate increased from 52.2% in 2012-13 to 54.0% in 2015-16. The non-targeted population’s success rate increased from 69.3% to 71.6% in the same time period.</p> <p>The plan in the 2013-14 Comprehensive Program Review included decreased class size for developmental classes, increased counseling services for math classes including at the developmental level, and expansion of MPS.</p> <p>Decreased class size for developmental classes was implemented starting in 2015-16, and likely accounts for some of the increase in the success rate for both targeted and non-targeted populations. The MPS program has expanded starting in 2016-17, and the effects of this expansion will show up in future Program Reviews.</p> <p>We still need increased counseling services at all levels of math classes, including non-MPS developmental; students need support in study skills and in academic planning.</p>
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.	The targeted population had a 54.0% success rate in 2015-16. Much of this can be attributed to lower success rates in developmental classes. Item III.B above addresses ways the department could increase success at the developmental level, which would, in turn, increase the targeted population’s success rate.
III.D	Departmental Equity	What progress or achievement has the program made relative to the plans stated in your	

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.	0% assessment of Program Level Outcome statements. The department has a plan for assessing all Program Level Outcomes by Winter 2019.
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.	61.3% assessment of Student Learning Outcome statements.
	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	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	The department's enrollment has grown 3.2% from 2012-13 to 2015-16, with no corresponding increase in full-time faculty. We have accomplished this growth by increasing the number of part-time faculty, but this increase is unsustainable. It is becoming very difficult to find new part-time instructors, as we have tapped out the local market of qualified candidates. We face the prospect of a reduction in the number of sections we are able to offer (and a corresponding enrollment reduction) in 2017-18 as we lose full-time instructors without adding any new ones. Another factor limiting our ability to expand enrollment is the availability of classrooms in high-demand time slots.
V.C1	Faculty Position(s) Needed	A drop down menu will allow you to choose: Replace due to Vacancy, Growth, None Needed Unless Vacancy	Growth
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,	Starting in 2015-16 our developmental classes have a maximum enrollment of 35

April 17, 2017

		provide other data to support this need.	<p>students, as opposed to 40 students previously. That makes 5 fewer students per developmental section who can enroll. In Fall 2016 we offered 88 developmental sections, so 440 fewer students were able to enroll in those sections. With a maximum enrollment of 35 students per section, we would need to offer 12 extra developmental sections to make up this lost enrollment. These 12 extra sections per quarter equal the load of four full-time instructors. These numbers do not include the need for additional instructors to support potential increases in math enrollment beyond the levels reached just prior to the change in class size.</p> <p>From 2012-13 to 2015-16, our student enrollment and course section offerings have increased dramatically. Our full-time faculty FTEF is only 36.3%. 63.7% of our classes are taught outside of full-time regular load.</p> <p>Even with our large number of long-time, part-time faculty, we have been forced to hire 10-20 new part-time instructors per year to cover the number of sections we offer. Turnover among the new part-time faculty is high. The work needed to recruit, interview, hire, mentor, support, and evaluate them is a significant burden. It is extremely difficult to find enough qualified instructors. Unless we hire more full-time faculty, we will not be able to sustain our current enrollment levels.</p>
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.	Growth
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	Instructional Associate for the computer labs.

		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	Over \$1000
V.E.2	Equipment Title, Description, and Quantity	<ul style="list-style-type: none"> • Description should identify if the item(s) are new or replacement(s), furniture/fixtures, instructional equipment, technology related, expected life of item, recommended warranties etc. • Did this request emanate from a SLOAC or PLOAC process? • Does this item require new or renovated infrastructure (e.g. wireless access, hardwire access, electric, water or heat sources . . .) 	<ul style="list-style-type: none"> • We request \$80,000 per year over the next three years to replace the computers in the lab rooms (S-42, S-44 and S-48) with laptops. (We would update one lab room per year over the next three years.) The computers in these lab rooms are becoming obsolete, and some have been breaking down. • We also request site licenses for mathematical and statistical software: MatLab, Minitab.
V.E.3	Equipment Justification	<ul style="list-style-type: none"> • 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) 	<p>New computers in the lab rooms, and site licenses for mathematical and statistical software will allow instructors to schedule lab projects for their classes. Our transfer agreements require a technology component in our statistics classes, and the technology is also by many instructors in-class at all levels.</p> <p>Replacing the current, large-screen monitors with laptops would give us more flexibility with how we use the lab rooms. With the large monitors in the way, it is problematic to teach in these rooms. With laptops, it would be easy to have the students close the laptop when needed.</p>
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.	Classrooms – the department currently has scheduling priority in 12 classrooms on campus. Some of our labs rooms have the potential to serve as both laboratory and lecture type facilities, and that flexibility would provide a significant increase in the availability of appropriate classroom space. In addition to improving classroom availability by replacing large desktop computers with laptops, changes in desks, and room arrangement (whiteboards and projectors) would be greatly enhance the

			teaching environment. Currently, the lab rooms have a very long narrow configuration that is not conducive to non-lab instruction.
V.F.2	Facility Justification	<ul style="list-style-type: none"> 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? 	The limited number of classrooms in which we have scheduling priority makes it very hard for us to schedule as many classes as we would like at the most popular times of day. With more classrooms we would have more flexibility in scheduling high-demand classes at high-demand times. This would make it easier for more students to take the courses they need.
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.	<ul style="list-style-type: none"> Instructor copies of on-line textbooks. Increased budget for photocopying. Funding for department workshops and/or retreats.
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.	<ul style="list-style-type: none"> Instructor copies - many of our instructors are excited to use open educational resources such as on-line textbooks. This can be a great benefit to the students. With traditional textbooks, instructors usually receive free copies from the publishers. More instructors would be likely to choose on-line textbooks if we had copies of the textbooks available to us. Photocopying - the current budget is extremely limited, and only allows for copying quizzes and exams. Students that want paper copies of syllabi, worksheets or other handouts are forced to print them themselves. This presents an equity issue, as not all students can afford to print out their own copies. Workshops & Retreats - sample topics could include multiple measures and common assessment, technology

			training, equity solutions in the classroom, and an introduction to Common Core mathematics. These and other topics will be valuable to all members of the department. In particular, the math department has a very large number of part-time instructors, who often don't have a chance to interact with many of their colleagues.
V.J.	"B" Budget Augmentation	<p>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)</p> <p>State the SLO/PLO assessment data, reflection, and enhancement and/or CTE Advisory Board input to support this need.</p> <p>If you do not deal with the B budget directly, you can use the comment: "please refer to the Dean's summary".</p>	Please refer to the Dean's summary.
V.K.1	Staff Development Needs	<p>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)</p>	
V.K.2	Staff Development Needs Justification	<p>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</p>	
VI.	Closing the Loop	<p>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?"</p>	<p>We plan to assess the outcomes of receiving additional resources by analyzing the data in light of the degree to which it supports:</p> <ul style="list-style-type: none"> • increased enrollment • decreased equity gap • improved overall success rates
	Submitted by:	APRU writer's name, email address, phone ext.	Jim Mailhot mailhotjames@fhda.edu x 8667
	Last Updated:	Give date of latest update (Set next box to YES when done and ready for Dean review).	

April 17, 2017