**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. The third column is where you can input your data/responses at this time. You will be able to copy and paste or type in your information from the third column directly into the TracDat boxes. Save this Word doc in the following format: sp2016cpr\_deptname. Last steps: ALWAYS keep a soft copy of your work in your files to ensure that your work is not lost. Upload a copy of this document into the Trac Dat, “Documents file”. Also upload the Program Review Data sheet(s). 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

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|  | **Information Requested** | **Explanation of Information Requested.** **? TracDat Help button will reveal the same cues (sorry no hyperlinks)** | **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.** | **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: |  | Physics | Physics |  |
|  | 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 purpose or mission of the physics program is to not only teach the fundamental laws of nature (physics) but also develop a student’s ability to think critically and independently for herself. By learning the scientific method of posing and testing hypotheses with experimental data, a student leaves our department with the mindset of being able to logically analyze and evaluate information. This ability will allow the student to gain insight and make meaningful, useful conclusions about the problems encountered throughout the course of her life.Our PLOs connect to the school’s mission and core competencies directly; physics develops the intellect by encouraging thoughtful, deliberate and patient reasoning and the scientific method helps one become a leader as problem solver in the community. Students hone the skills of communication and expression by writing coherent lab reports and develop critical thinking by repeated use of logical reasoning in the application of the fundamental laws of nature**.** | The purpose or mission of the physics program is to not only teach the fundamental laws of nature (physics) but also develop a student’s ability to think critically and independently for herself. By learning the scientific method of posing and testing hypotheses with experimental data, a student leaves our department with the mindset of being able to logically analyze and evaluate information. This ability will allow the student to gain insight and make meaningful, useful conclusions about the problems encountered throughout the course of her life.Our PLOs connect to the school’s mission and core competencies directly; physics develops the intellect by encouraging thoughtful, deliberate and patient reasoning and the scientific method helps one become a leader as problem solver in the community. Students hone the skills of communication and expression by writing coherent lab reports and develop critical thinking by repeated use of logical reasoning in the application of the fundamental laws of nature**.** |  |
| 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 | 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 | 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 |  |  |  |
| 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.fhda.edu/ir/program-review.14-15.html> . | 7.5 | 7.5 |  |
| 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 and no change | 0 and 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.fhda.edu/ir/program-review.14-15.html>. | 41 %. It has not changes significantlyCompare 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.fhda.edu/ir/program-review.14-15.html>. | 41 %. It has not changes significantlyCompare 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.fhda.edu/ir/program-review.14-15.html>. |   |
| 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.  | **0 . A decrease of 1 physics lab technician compared to 2012-13. (check date)** | **0 . A decrease of 1 physics lab technician compared to 2012-13. (check date)** |  |
| 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. | Starting n 2013-2014 our program has been negatively affected by the loss of the lab technician position. The lab technician allows us to a) conduct lectures with relevant physical demonstrations that positively impact targeted student populationsb) have a physical presence on the campus with displays that encourage participation in the program particularly for targeted groups that may not have a background that involved exposure to the direct application of physics principles in the community (solar cells for example a conservation energy idea)c) Lab equipment has not been maintained which deceases the number of physical experiments that can be conducted; this causes larger lab groups and decreased participation particularly among students in targeted groups who are likely to “hang back” and allow other students to take the lead (in a student group of 3 or 4 instead of 2)d) lab instruction is reduced as professors spend time doing provisioning of equipment during e) Our department has been growing in enrollment and classes over the last two years and each of these problems listed becomes even more problematic  | Starting n 2013-2014 our program has been negatively affected by the loss of the lab technician position. The lab technician allows us to a) conduct lectures with relevant physical demonstrations that positively impact targeted student populationsb) have a physical presence on the campus with displays that encourage participation in the program particularly for targeted groups that may not have a background that involved exposure to the direct application of physics principles in the community (solar cells for example a conservation energy idea)c) Lab equipment has not been maintained which deceases the number of physical experiments that can be conducted; this causes larger lab groups and decreased participation particularly among students in targeted groups who are likely to “hang back” and allow other students to take the lead (in a student group of 3 or 4 instead of 2)d) lab instruction is reduced as professors spend time doing provisioning of equipment during e) Our department has been growing in enrollment and classes over the last two years and each of these problems listed becomes even more problematic  |  |
|  | **Enrollment** |  |  |  |  |
| II.A.1 | Enrollment Trends  | What significant changes in enrollment have you seen in the last three years? Refer to <http://deanza.fhda.edu/ir/program-review.14-15.html>  | 4.6 % increase and 6.4 % increase for the last two years | 4.6 % increase and 6.4 % increase for the last two years |  |
| II.B.1 | Overall Success Rate | What significant changes in student success rates have you seen in the last three years? | Success rate has been above 60 % for each of the last 3 years | Success rate has been above 60 % for each of the last 3 years |  |

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| II.B.2 | Plan if Success Rate of Program is Below 60% | In accordance with ACCJC requirements, the college has adopted an institutional standard for successful course completion at or above 60% <http://www.deanza.edu/ir/deanza-research-projects/2012_13/ACCJC_IS.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. | Success rate is 60% or higher |
| 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.fhda.edu/ir/program-review.14-15.html ) | 1.2 % increase and 6.3 % increase for the last two years |
| 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>  | The success rate increased slightly from 2013 to 2014 and decreased slightly from 2014 to 2015. There has been net 3 % decrease over the last two years  |
| 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://www.deanza.edu/ir/deanza-research-projects/2012_13/ACCJC_IS.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. | Below 60 % (48 % is 2014-2015 success rate)Having faculty identify targeted students needing help and support is an effective method to help reduce the equity gap. We have held a meeting to discuss a plan that focuses on early intervention (first two weeks of classes) for targeted groups. Action: All faculty have been encouraged to have a plan to address students who are struggling during first two weeks of class.It is essential that our lab technician position be restored if we have a realistic chance of significant change in the success rate of targeted groups. Targeted groups are affected disproportionately because of the absence of a lab technician that helps bring the subject matter “alive” for students coming from disadvantaged backgrounds. A lab technician allows the department toa) conduct lectures with relevant physical demonstrations that positively impact targeted student populationsb) have a physical presence on the campus with displays that encourage participation in the program particularly for targeted groups that may not have a background that involved exposure to the direct application of physics principles in the community (solar cells are for example a conservation energy idea: a large display of this would draw attention of students). There should be a different display every two weeks on the quad to bring in students with a “show me” mindset. Without the lab tech we can’t do this. With a lab technician these outdoor activities would lift up the creative spirit of the physical sciences on campusc) maintained lab equipment. Failing equipment deceases the number of “setups” for experiments that can be conducted; this causes larger lab groups and decreased participation particularly among students in targeted groups who are likely to “hang back” and allow other students to take the lead (in a student group of 3 or 4 instead of 2)d) lab instruction is reduced as professors spend more time doing provisioning of equipment during e) Our department has been growing in enrollment (about 6 % per year) and classes over the last two years and each of these problems listed becomes even more problematic Action: We plan to advocate for a restoration of our lab technician positionMentoring, support, and counseling from other support programs such as EOPS, PUENTE and BASIC SKILLS are critical in continuing the effort to reducing the equity gap. Action: We plan to encourage participation in these programs by contacting the programs to figure out the best ways to work the respective programs. |
| III.D | Departmental Equity Planning and Progress | What progress or achievement has the program made relative to the plans stated in your departmental 2014-15 Equity Plan? | Our equity gap decreased for the 2014-2015 year from 19 % difference to 14 % difference.See above for our plans to address the equity gap. |

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|  | **Assessment Cycle** |  |  |
| IV.A | Cycle 2 PLOAC Summary (since June 30,2014) | Give the percentage of Program Level Outcome statements assessed since June 30, 2014. Run Ad Hoc report entitled “Cycle 2 XXX PLOAC Work” and scroll to the bottom of the report for count~~.~~ Then calculate #Reflections & Analysis/#PLO statements times 100~~.~~ All program level outcomes are to be assessed at least once between Fall 2014 and end of Winter 2019. | 0 % of PLOs assessed but we have plans to do a through assessment this spring especially since part-time faculty members are now required to do SLOs (which connect to PLOs) |
| IV.B | Cycle 2 SLOAC Summary (since June 30, 2014) | Give the percentage of Student Learning Outcome statements assessed since June 30, 2014. Run Ad Hoc report titled “Cycle 2XXX SLOAC work- Active Only” and scroll to the bottom of the report for count. Then calculate #Reflections & Analysis /#SLO statements times 100. All Student Learning Outcome statements are to be assessed at least once between Fall 2014 and end of Winter 2019. | 0 % of PLOs assessed but we have plans to do a through assessment this spring especially since part-time faculty members are now required to do SLOs (which connect to PLOs)WE completed 100 % of SLOs in 2012 |
|  | 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.14-15.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 | 1 full time faculty member needs to be added.  |
| V.C.2 | Justification for Faculty Position(s): | * Briefly, how will this position support student needs?
* 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 and/or CTE Advisory Board input to support this need. If not, provide other data to support this need.
 | Our department is steadily growing (approximately 6 % per year) and the percentage of courses taught by full timers will decrease (from approximately 40 % to lower than 40 %)Full-time faculty have a strong physical presence on campus and give added value to the student experience. Full-time faculty are often more generally available than part-time faculty and have a long term perspective.The recruitment, hiring, mentoring and evaluation of part=-time faculty members taxes the fulltime faculty members and part-time faculty members often have a learning curve as they become more effective at conducting classes. This extra pressure on the department would be lifted significantly if a new full-time faculty member was hired. |
| V.D.1 | Staff Position(s) Needed | A drop down menu will allow you to choose: Replace due to Vacancy, Growth, None Needed Unless VacancyOnly make request for staff if relevant to your department only. Division staff requests should be in the Dean’s summary. | 1 lab technician |
| V.D.2 | Justification for Staff Position(s): | * Briefly, how will this position support student needs?
* 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.
 | a) conduct lectures with relevant physical demonstrations that positively impact targeted student populationsb) have a physical presence on the campus with displays that encourage participation in the program particularly for targeted groups that may not have a background that involved exposure to the direct application of physics principles in the community (solar cells are for example a conservation energy idea: a large display of this would draw attention of students). There should be a different display every two weeks on the quad to bring in students with a “show me” mindset. Without the lab tech we can’t do this. With a lab technician these outdoor activities would lift up the creative spirit of the physical sciences on campusc) Lab equipment has not been maintained which deceases the number of physical experiments that can be conducted; this causes larger lab groups and decreased participation particularly among students in targeted groups who are likely to “hang back” and allow other students to take the lead (in a student group of 3 or 4 instead of 2)d) lab instruction is reduced as professors spend time doing provisioning of equipment during e) Our department has been growing in enrollment and classes over the last two years and each of these problems listed becomes even more problematic  |
| 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  | $ 46,350 |
| 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?
* Does this item require new or renovated infrastructure (e.g. wireless access, hardwire access, electric, water or heat sources . . . )
 | Categories of Physics lab equipment: $25000 of new equipment for experiments with expected life of 15 to 20 years. Approximately $5000 in replacement equipment.1. $ 9000 Computer interface system: Modern computer interfaced equipment so that probes and other instruments can be added to and work with a general purpose interface system (force probes, current probes, temperature probes etc. all working on the same interface
2. $ 21,420 ,Mechanics: Computer controlled experiment in conservation of angular momentum and experiment in impulse (forces) during collisions
3. $ 8080 Electricity and Magnetism: Experiments in electrostatics incuding a static electricity set
4. $ 7850 Modern Physics experiments: Interferometer and Oil Drop apparatus
 |
| 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>
 | Modern computer controlled lab experiments bring the physics “alive” in a way that has appeal to students who do not have a strong background, or personal familiarity with the uses of physics. It is expected that the majority of this equipment will be used in regular sequence of physics classes and replace older labs that are less interactive. Some of the equipment will have use in doing demonstrations with use in non-sequence (GE level) classes which often provide students for the regular sequences classes.  |
| 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 | If there is a new initiative/project that requires additional funding, please state:* Who/what could be supported if this additional funding was awarded?
* What would the impact be on the program with 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>
* How much money is being requested?

State the SLO/PLO assessment data, reflection, and enhancement and/or CTE Advisory Board input to support this need and/or other data 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”. |  |
| 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>  |  |
| 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?” |  |
|  | Submitted by: | APRU writer’s name, email address, phone ext. | Ronald Francie, E34, x8384 |
|  | Last Updated: |  | 4/23/16 |