De Anza College

Instructional Annual Program Review 2021-22

**Instructions**: The first column is section and question number, followed by ask without explanation The third column fully describes the information that the IPBT is requesting. The blank or fourth column is where you will type your response. Save program review as a Word document. This is the document you will send to your Dean. It will be posted on the De Anza website in pdf format.

In addition to this document, please also submit to your Dean the Resource Request spreadsheet making sure facilities requests are on “Facilities” tab and large-ticket items are on Large-ticket Items” tab.

Due: Friday May 6, 2022

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|  | **Information Requested** | **Explanation of Information Requested.**  | **Enter your answers here** |
|  | Department Name: |  | Biology |
|  | Program Mission Statement: | How does your program mission statement relate to the mission of De Anza College and our Institutional Core Competencies”? (<https://www.deanza.edu/about-us/mission-and-values.html> ).  | To transfer students majoring in Biology to a 4 year college to complete their 4 year degree in Biology, to provide prerequisite preparation for nursing and allied health students, and to provide general education lab science courses for students majoring in other disciplines at De Anza College.  |
| I.A.1 | What is the Primary Focus of Your Program? | Choose from General Education, Transfer. Career/Technical, Learning Resources/Academic Services, personal enrichment or N/A | Transfer |
| I.A.2 | Choose a Secondary Focus of Your Program. | Choose from General Education, Transfer. Career/Technical, Learning Resources/Academic Services, personal enrichment or N/A | Career/Technical |
| I.B.1 | # Certificates of Achievement Awarded | State the number of Certificates of Achievement awarded during the 2020-21 academic year. Please refer to: <https://www.deanza.edu/ir/AwardsbyDivision.html> . If you do not offer Certificates of Achievement please state “none offered”. | none offered |
| I.B.2 | # Certificates of Achievement-Advanced Awarded: | State the number of Certificates of Achievement - Advanced awarded during 2020-21 academic year. Please refer to<https://www.deanza.edu/ir/AwardsbyDivision.html> If you do not offer Certificates of Achievement” please state “none offered”. | none offered |
| I.B.3 | # ADTs (Associates Degrees for Transfer) Awarded | State the number of Associate Degree Transfer awarded by you department during the 2020-21 academic year. Please refer to <https://www.deanza.edu/ir/AwardsbyDivision.html> . If you do not offer Associate Degree Transfer, please state “none offered”. | 4 |
| I.B.4 | # AA and/or AS Degrees Awarded: | State the number of Associate of Arts or Associate of Science degrees awarded during the 2020-21 academic year. Please refer to <https://www.deanza.edu/ir/AwardsbyDivision.html> .If you do not offer Associate of Arts or Associate of Science Degree, please state “none offered”. | 39 |
| I.B.5. | Trends in # Total Awards | If applicable to your program, has total number of certificates and degrees increased, decreased or stayed the same? What thoughts do you have on these changes?  | The total number of degrees increased significantly in 2020-21 when compared to the average over the last 4 years, with a 64% increase in the number of degrees. This could be due to the recent changes to the Biology ADT degree requirements (implemented in Fall 2020) |
| I.B.6. | Strategies to Increase Awards | What strategies (1, 2, 3. . . .) does your department have in place to ensure students are obtaining awards when it is applicable to their educational goal? (e.g. Outreach, In-reach, graduation workshops, collaborations with other offices, etc.) | Despite the increase in the number of degrees, the number of degrees awarded has never been very high for Biology, which is most likely due to the limited impact an A.S. degree has in the field of Biology. Most Biology students’ educational goal is a bachelor’s degree or higher. Strategies: 1. The Biology department does take part in every Opening Day and Enrollment Day outreach opportunity to inform students about the Biology degree at De Anza College, which also could account for the increase in degrees being awarded in 2020-2021.
2. The recent addition of a division counselor to the BHES division provides an excellent resource for students in meeting their educational goals.
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| I.C.1  | CTE Programs: Review of Perkins Core Indicator and SWP Outcomes Metrics | Review the most recent Perkins Core Indicator and SWP Outcomes Metrics data for your program(s). Cite planned interventions and activities to enhance student and program outcomes.Perkins Core Indicator Reports provided by Margaret Bdzil. Cal-PASS Launchboard SWP Metrics: <https://www.calpassplus.org/LaunchBoard/Home.aspx>  | N/A |
| I.C.2 | CTE Programs: Labor Market Demand and Industry Trends: | Review and summarize statewide and regional labor market (LMI) data for occupations that are closely aligned with your program. Cite current industry trends. Provide an overview of your program advisory committee's recommendations relating to existing and new course and certificate/degree offerings. Cite additional data when applicable.California EDD LMI Info: <https://www.labormarketinfo.edd.ca.gov/cgi/dataanalysis/areaselection.asp?tablename=occprj>  | N/A |
| 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 per year (Fall, Winter and Spring): Provide number from previous year, and # increase or decrease. To the extent possible, specify what data you used to arrive at this number. | N/A |
| 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 per year (Fall, Winter and Spring): Provide number from previous year APRU, and # increase or decrease. To the extent possible, specify what data you used to arrive at this number. | N/A |
| 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 per year (Fall, Winter and Spring): Provide number from previous year APRU, and # increase or decrease. To the extent possible, specify what data you used to arrive at this number. | N/A |
| I.E.1 | Full Time Faculty (FTEF) | For ALL programs: State the number of FTEF assigned to your department/program. Refer to your program review data sheet: <https://www.deanza.edu/ir/program-review.20-21/index.html> . | 8 |
| I.E.2 | # Student Employees | If applicable to your program, state number of student employees and if there were any changes between number this academic year and the previous two academic years. | N/A |
| I.E.3 | Full Time Load as a % | State the percentage of courses taught by full-time faculty (exclude overload). Refer to your program review data sheet. <https://www.deanza.edu/ir/program-review.20-21/index.html> or access within the program review tool. | 41.0% |
| I.E.4 | # Staff Employees | If applicable to your program, state number of staff employees and if there were any changes. ONLY report the number of staff that directly serve your program. Deans will make a report regarding staff serving multiple programs.  | 3, one vacant |
| I.E.5 | Changes in Employees/Resources | Briefly describe how any increase or decrease resources/employees (exclude teaching faculty) has impacted your program. What strategies does your program have in place to ensure students are being supported and able to reach their full capacity when faced with these changes and challenges**?** (e.g. Mentors, embedded tutors, extended lab hours, instructional support, non-credit support, etc.) | The impact of the vacant staff position has yet to be felt to a large degree since this staff member was in charge of the Science Resource Center, and most biology courses have been online due to the pandemic. The Science Resource Center provides instructional support for the Biology department including: * extensive collection of models
* comprehensive library of CD ROMs and videotapes
* nine computers, 12 television/VCR sets
* conference rooms can be reserved by students, staff or PT faculty for tutoring, meetings or group study
* test proctoring support
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|  | **Enrollment** |  |  |
| II.A | Enrollment Trends  | What changes in enrollment have you seen in the last three years? Refer to <https://www.deanza.edu/ir/program-review.20-21/index.html> or access within the program review tool. You do not need to list enrollments; rather reflect on enrollment trends. What strategies does your department have in place to increase or maintain current enrollment trends?  | The Biology department has seen a large increase in enrollment in 2020-2021 with a 4.2% increase in enrollment from 2019-2020. In order to maintain this increase, the Biology department will continue to be active in outreach opportunities at De Anza College. In addition, the Biology department continues to see long wait lists and student demand in the prerequisite Bio 40 series and the Biology majors 6 series courses. Adding more sections of these courses would help improve enrollment, this will have to be considered along with available lab space and other resources. |
| II.B. | Enrollment Trends for disproportionately impacted student groups | Using the program review data tool, what is the enrollment of African American, Latinx, Filipinx, and Pacific Islander students as a percentage of your entire program compared to other student groups in campus-wide percentages? You do not need to list enrollments, but rather reflect on what the trends look like. Link to equity plan and strategic plans1. What could be contributing to the differences?
2. What strategies does your department have in place to increase or maintain enrollment of these student groups?

Are there other trends that you see when drilling into the data that may be important to explore? | In looking at the enrollment trends of specific student groups over the last 4 years,we had anincrease in Latinx students (+8%) andincrease in Pacific Islander students (+117%) African American students (-3%) Filipinx students (-5%).In regards to these student groups as a percentage of the entire program compared to the campus as a whole, the Biology department had **similar rates** as the campus when looking at 2020-2021. The only group that had a larger than 1% difference between the Biology department and the campus as a whole in this year were the Filipinx students. The Biology department actually had a **larger percentage of Filipinx students (10.1%)** than the campus as a whole (6.9%). All of our outreach looks to increase and maintain enrollment for all these student groups, and given the increased enrollment of most of these groups, we think that this outreach is having a positive effect. We will continue to work on attracting more African American students and maintaining and growing other student groups.   |
| II.C. | Overall Success Rate | What changes in student success rates have you seen in the last three years? You do not need to list success rates, rather reflect on trends in success rates. 1. What could be factors that influence success rates? Please refer to: <https://www.deanza.edu/ir/program-review.20-21/index.html>
2. What strategies does your department have in place to increase or maintain current success rates?
 | The overall success rate has improved by 3% over the last 3 years, and is now at 81%. The increase in success rates could be due to the change in course delivery due to the pandemic as this increase corresponds to the timing of the pandemic. As we get back to on-campus learning, the Biology department hopes to maintain and improve these success rates. We are hoping that increased tutoring opportunities for Biology students will be provided on-campus as that would be helpful in increasing success rates.  |
| II.D. | Success, Non-Success and Withdraw Rates for disproportionately impacted student groups | Using the [Disproportionate Impact Tool](https://www.deanza.edu/ir/program-review.18-19/Access_DI_tool.pdf) within the [Program Review Tool](http://deanza.edu/ir/PRGuide_PrintingPDF.pdf) explore differences in success rates by ethnicity, gender and special student populations (foster youth, individuals with disabilities, Veterans and low income students). Of the rows that are highlighted (which indicate there are disproportionate impacts for that group): 1. What differences do you see in successful course completion rates?
2. What are your thoughts on these differences?

What strategies might be helpful in closing gaps in successful course completion? | There are two groups (Latinx, Pacific Islander) that show a disproportionate impact in looking at Summer 2020- Spring 2021. Of all the groups, only the Latinx students show a disproportionate impact in the 2 years prior to this. This gap has been relatively consistent for Latinx students over the last 3 years (between 8-10%), which means that it is something that we in the Biology department want to address, especially as we all come back to campus. In addition, we’d like to see success rates increase for all groups of students, even if they don’t show a disproportionate impact. As mentioned above, increased face-to-face tutoring opportunities, such as bringing back the Adjunct Skills program, for Biology students would help. In addition, it would be nice to see a similar program to the MPS program on-campus for Biology and other departments.  |
| II.E. | 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, reorganization of program AB 705, noncredit curriculum, loss of personnel, etc.) | N/A |
|  | **Equity** | In order to meet the goals within our [State Equity Plan](https://www.deanza.edu/sssp-se-bsi/documents/DAC_Student_Equity_Plan_2019-22_Final.pdf), [Institutional Metrics](http://deanza.edu/ir/planning/planning_files/InstitutionalMetrics_2019_4.29.19.pdf), and [Educational Master Plan](http://deanza.edu/ir/state-of-the-college-related-information/documents/EMP2015-2020_3-11-16.pdf), the following section asks you to reflect on questions focused on student equity to help inform our goals.  |  |
| III.A. | Equity Plans for groups other than the acknowledged disproportionately impacted groups | Are there other groups of students besides the acknowledged disproportionately impacted groups of African American, Latinx, Filipinx, and Pacific Islander students that your department intentionally focused support for. | We are also looking on how we can better serve our foster youth, veterans, ESL students who do not identify as disproportionately impacted as well as first generation students.  |
| III.B. | Program Success | Describe any events/program changes/successes that you would like to share relative to your equity efforts? | One of our full-time Biology faculty members is a member and the secretary of DALA (De Anza Latinx Association). She is also a member of the Equity Inquiry Team and was part of the pilot program for the monthly Anti-Racist Teaching Practitioner’s Winter 2021 Cohort. Her experiences and providing a link to Latinx students can only benefit equity within the Biology department.  |
| III.C. | Equity Planning and Support | Has equity work generated any need for resources? If so, what is your request? Include staff/position needs. | Not at this time, although as we continue the work this may change. |
| III.D. | Departmental Equity Planning and Progress | Identify which of the following resources you need? How would the resource help?* Professional Development – what areas?
* Enhanced support for students
* Departmental Collaborations
* Best Practices
* Coaching/Consultation
 | Enhanced support for students would be helpful, especially in providing study spaces and resources for students. The Science Resource Center is a valuable resource for students and contributes to equity within the department through enhanced opportunities to engage in the learning process. And as mentioned above, an increase in the number of tutoring opportunities for Biology students would also provide equity.  |
| III.E. | Assistance Needed to close Equity Gap | Would you like assistance with identifying strategies and/or best practices and/or resources to help facilitate student success? | Not at this time, although as we continue the work this may change. |
|  | **Assessment Cycle** | Navigate to <https://www.deanza.edu/slo/> and click “TracDat is gone” which will take you to accordion listing SLO assessments under “Student Learning Outcomes and Assessments Summaries by Division:” |  |
| IV.A | SLOAC Summary | Describe an accomplishment or enhancement that resulted from SLO assessment starting with Spring 2020 through end of Spring 2022.. | Although no formal SLO assessment was conducted, department faculty collaborated throughout the pandemic for weekly meetings to discuss strategies to improve student learning and assessment through weekly zoom meetings. |
| IV.B | Assessment  | List the names of the courses in your department (e.g. CIS 22A) that are planned to be assessed by the conclusion of 2021-22 academic year.  | It is difficult to continue assessments, as it is unclear on whether it is part of the faculty contract to do this. Until we are provided more clarity on this issue, further assessments are on hold.  |
|  | **Resource Requests** |  |  |
| V.A | Budget Trends | Over the past five academic years, describe impact, if any, of external or internal funding trends that you might be currently dealing with ( eg COVID demands) 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. | In order to increase enrollment, attract and retain students and decrease the equity gap, we do need to have additional resources and see an increase to our B budget funding.  |
| V.B | Funding Impact on Enrollment Trends | Over the past five academic years, 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:  | Upon returning to campus, nearly all Biology classes involve labs and hands-on learning experiences for students. It is extremely important that we be able to provide all our students, but especially our disproportionately impacted students, with sufficient resources to maximize student success. We cannot do this without increased funding.  |
| V.C.1 | Faculty Position(s) Needed | Describe each request as: “Replace due to Vacancy”, “Growth”, or if none state “None Needed Unless Vacancy” | Growth, especially in our prerequisite classes for Nursing and allied health and in our majors Biology courses for students to transfer as science majors.  |
| 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. | The percentage of FT instruction has decreased over the last 5 years (-4%), while our productivity has increased over that same time span (+7.4%). This indicates that we’re doing more with less. In order to provide students with the optimum opportunity to succeed, they do require FT faculty who can commit to needed department work outside of just teaching. We already have some full-time faculty members on reduced load (Article 18) and anticipate losing some more faculty work-hours either due to more faculty on reduced load or retirement. We are experiencing a high demand for Biology 6 and 40 sections per student e-mails and full waitlists for these courses.  |
| V.D.1 | Staff Position(s) Needed | 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. | “None Needed Unless Vacancy” |
| 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 | Equipment Requests | List all equipment resource needs on the Excel spreadsheet. Be sure to include to justification and costs in appropriate columns. | On spreadsheet |
| V.F | Facility Request | List all facility needs on the spreadsheet. Be sure to include to justification and costs in appropriate columns. | On spreadsheet |
| V.G | Other Needed Resources | List any other resource needs on the spreadsheet. Be sure to include to justification and costs in appropriate columns. | On spreadsheet |
| V.H.1 | Staff Development Needs | Based on what you have written above, what professional development support/resources do you need to achieve your goals? | None at this time. |
| V.H.2 | Staff Development Needs Justification | Please provide reasons for your professional development needs. If you have assessment data available to justify this request for professional development, please provide the SLO/PLO assessment data, reflection, enhancement, and/or CTE Advisory Board input, etc. to support this need. If not, provide other data to support this need. | N/A |
| VI. | Closing the Loop | Over the last five years, how did you assess the results of the requested resources, and what were those results? How do you plan to reassess the outcomes after receiving each of the additional resources requested this year | Additional resources provided allowed us to increase our enrollment and more importantly increase retentions and success rates among various student groups. We were able to offer more online labs and resources for students so that they could experience labs even though they were learning remotely. Faculty were able to use resources such as Simbio, JoVE and Labster. We continue to aggressively pursue our constant goal to decrease the equity gap and increase student success as indicated in the College Mission Statement.  |
|  | Submitted by: | APRU writer’s name | Jason Bram  |
|  | Last Updated: | Give date of latest update  | 4/24/22 |