Fall 2021 Comprehensive Program and Area Review (PAR):

Academic Programs

Dear Chabot Community,

Welcome to Fall 2021! This is the electronic template for the **Academic Programs Fall 2021 Comprehensive Program and Area Review (PAR).** We encourage you to work together with your program or service area to complete these questions collaboratively. One way to facilitate real-time collaboration is to upload these questions into a google doc. Please submit your completed template with attachments to your Dean/Manager by **10/11/21**. Your Dean/Manager will provide you with feedback. After you receive their feedback, you will then enter the information from your template (and attachments) into Qualtrics by **10/25/21**. Importantly, your PAR is NOT complete until you submit your responses on Qualtrics.

Please reach out to the PAR shared governance committee if you have any questions about filling out your Fall 2021 PAR! Co-Chairs: Deonne Kunkel Wu dkunkelwu@chabotcollege.edu and Cynthia Gordon da Cruz cgordondacruz@chabotcollege.edu.

Background Information:

- What organizational unit does your program/area belong to?

  X Academic Services
  ___ Administrative Services
  ___ Student Services
  ___ Office of the President

- Name of your Program, Discipline, Area or Service:

  ___ *Chemistry (Science & Math)*

- Name(s) of the person or people who contributed to this review:

  ___ *George Arab, Donna Gibson, Wayne Pitcher, Harjot Sawhney, and Andy Wells*

- What division does your Program/Area reside in?

  ___ Academic Pathways and Student Success
  ___ Applied Technology and Business
  ___ Arts, Media, and Communication
  ___ Counseling
  ___ Health, Kinesiology and Athletics
  ___ Language Arts
  X Science and Mathematics
  ___ Social Sciences
  ___ Special Programs

Status of Program Goals from Prior Comprehensive PAR Cycle

- Please refer to the goals/new initiatives you established in the last comprehensive PAR cycle. The last comprehensive PAR was written in Fall 2017 to plan for 2018-19; 19-20; and 20-21. If you need a reminder of your goals, you can access them in the PAR App Program Review Reports.
  Click on:

- [PAR App Program Review Reports](#).
- Then "Select Academic Year" on the top (choose 2018-19)
- Then "Submissions" (in the left hand toolbar)
- Then find your area and click "View" in the right most column
- For **Academic Areas**, find question 8: "Reflecting on your answers to questions 1-7, what are your top goals (no more than 5) for the next three years?"
- For **Service Areas**, find question 8: "Reflecting on your answer to questions 1-7, what new initiatives (no more than 5) do you propose for the next three years?"
- For **Administrative Areas**, find question 9: "Reflecting on your answers to questions 1-8, what are your top goals (no more than 5) for the next three years?"

You should be able to view the goals you submitted in the last comprehensive PAR, which was written in Fall 2017 to plan for the three-year cycle starting in 2018-19. Please note that the "goals" you established are distinct from the outcomes for your service area (SAOs) or program area (PLOs). In general, SAOs and PLOs tend to be enduring and overarching aims for your service/program, whereas the goals for a comprehensive PAR year are more specific, are expected to be completed over the PAR cycle, and are often part of a concrete action plan to reach your overarching and enduring SAOs and PLOs. For example, one of the Learning Connection's SAOs is: "Students from diverse backgrounds and with diverse learning needs will receive tutoring that improves their abilities to complete assignments, study, and/or succeed in their courses." This is an enduring aim that is unlikely to change from PAR cycle to PAR cycle. A PAR goal for the Learning Connection might be to refine the student diversity and antiracist tutoring practices training for incoming tutors. This goal is specific, expected to be completed over the PAR cycle, and supports their SAO (if incoming tutors are trained in antiracist tutoring practices, they will be well-equipped to support students with diverse learning needs).

Goal from Previous Cycle	Status of Goal	Outputs or measures (e.g students served, program change made, etc.) Please explain.
1. Integration of lab curriculum for different courses	___ Achieved _X_ In Progress ___ Not achieved but still relevant ___ Not achieved and no longer relevant	Lab manuals continue to be updated. Unfortunately delayed by transition to online teaching during COVID pandemic.
2. Address the placement of students in Chem 1A	___ Achieved _X_ In Progress ___ Not achieved but still relevant ___ Not achieved and no longer relevant	Multiple measures introduced for placement in Chem 1A. Data will be collected on success rates of different groups (i.e., passed Chem 31, passed placement exam, etc.)
3.	___ Achieved ___ In Progress ___ Not achieved but still relevant ___ Not achieved and no longer relevant	
4.	___ Achieved ___ In Progress ___ Not achieved but still relevant ___ Not achieved and no longer relevant	
5.	___ Achieved ___ In Progress ___ Not achieved but still relevant ___ Not achieved and no longer relevant	

Learning Outcomes Assessment Results

<u>SLO:</u>

Student Learning Outcomes (SLOs): SLOs are the outcomes that instructors aim for students to successfully reach by the end of a course. SLOs should be established for each course, listed in CurricUNET, displayed on all course syllabi, and assessed in CurricUNET on a 5-Year cycle. The following questions are about SLO assessment.

- How many courses in your discipline have SLOs developed and listed in CurricUNET?
  - **X** All courses
  - Almost all or most courses
  - About half of the courses
  - A few courses
  - No courses

If any courses do not have SLOs, please explain why.

- How many courses in your discipline have rubrics (or some other form of assessment) developed to measure SLOs?
  - **X** All courses
  - Almost all or most courses
  - About half of the courses
  - A few courses
  - No courses

If any courses do not have rubrics to measure SLOs, please explain why.

- How many courses in your discipline had their SLOs assessed and recorded in CurricUNET in the 5-year cycle?
  - **X** All courses
  - Almost all or most courses
  - About half of the courses
  - A few courses
  - No courses

If any courses were not assessed in the five-year cycle, please explain why.

- Assessing SLOs has led to improvements in my area.
  - Strongly disagree
  - Somewhat disagree
  - Neither agree nor disagree
  - **X** Somewhat agree
  - Strongly agree

<u>PLOs:</u>

Certificate and Degree programs also establish and assess **Program Learning Outcomes** (PLOs). PLOs are the outcomes students should successfully reach when they complete all the requirements for a certificate or degree program. PLOs are also assessed in CurricUNET on a 5-year cycle.

- Were all Program Learning Outcomes (PLOs) assessed in the 5-year cycle in CurricUNET?
  - __X__ Yes, all PLOs were assessed in the 5-year cycle.
  - ___ Almost all PLOs were assessed in the 5-year cycle.
  - ___ No, many PLOs were not assessed in the 5-year cycle.

If any PLOs were not assessed in the five-year cycle, please explain why.

- Assessing PLOs has led to improvements in my area.
  - ___ Strongly disagree
  - ___ Somewhat disagree
  - ___ Neither agree nor disagree
  - __X__ Somewhat agree
  - ___ Strongly agree

Institutional Supports and Barriers

Reflect on your experiences, data, and/or previous program reviews and consider what work in your discipline/service area you are most proud of and what problems remain a major challenge. Then respond to the following questions:

- What institutional-level supports or practices were particularly helpful to **your program or area** in reaching its PAR Goals, SLOs, PLOs, SAOs, and/or the college mission?

  Work (statistics/data) by the office of institutional research has been and will be helpful to our program.

- What institutional-level barrier or challenges prevented or hindered **your program or area** from reaching its PAR Goals, SLOs, PLOs, SAOs, and/or the college mission?

  Program review is only conducted on a discipline level. It would be helpful to have a collective program review submitted for the main 3 student groupings that chemistry classes mainly contribute to: STEM students, Allied Health students, and general education students.
  Another barrier that has been challenging to the chemistry program is not replacing our retired faculty member. This has been especially true during the pandemic when the work of creating all online lab activities fell only on full-time faculty members. We have trouble finding time to do all the work related to the upkeep/innovation required in all of the lecture and lab portions of our courses. In addition, there is the time required to work upkeep/organize/order the materials required for our labs.

- What institutional-level supports or practices do employees in your program/area believe are particularly helpful **to students** in reaching their educational milestones and/or goals? (i.e., from your vantage point, what does Chabot do for students that we should **keep** doing?)

  Providing drop-in tutoring via the STEM Center has been helpful to our students.

- What institutional-level barriers or challenges do employees in your program/area believe are a hindrance **to students** in reaching their educational milestones and/or goals? (i.e., from your vantage point, what does Chabot do that we should **stop** doing or **change** to better support our students?)

Academic Programs/Disciplines Data

In order to reach Chabot's mission, the college looks at the following outcome metrics to evaluate previous program success and plan for the future. Some outcomes will be more applicable to particular programs in specific PAR cycles; please look at the data available on the outcomes that are most relevant to your program and use it to answer the following questions:

FTES and Enrollment
FTES is an enrollment metric. It basically converts the total number of units students are taking in a given timeframe (e.g., semester, academic year, etc.) into the equivalent number of full-time students that would be needed to generate this same number of units. Colleges are funded based on the FTES they generate (both historically and now as the "Base Allocation" in the Student Centered Funding Formula). Please check out the [Chabot College Enrollment Management Data Dashboard](#) to respond to the questions below. The data in this section will be given to the Chabot Enrollment Management Committee (CEMC) to support their work.

● Over the past 3 years, in comparison to the overall FTES trends of the college, FTES in your discipline have:
    ___ Decreased in comparison to the overall college trends
    ___ Stayed roughly the same in comparison to overall college trends
    _X_ Increased in comparison to overall college trends

Please provide a brief explanation that would help the college understand these trends (e.g., tangible reasons for the increase or decrease).

   While the college as a whole has experienced a decline in FTES from Fall 2018 to Spring 2021, Chemistry saw an initial decline at the start of the COVID pandemic, followed by a rebound to previous levels.

● As noted above, enrollments impact our funding. Please review the courses in your discipline in the [Chabot College Enrollment Management Data Dashboard](#): are there specific courses/sections that, on average, across the past three years did not fill to capacity? Why might this be?

   On average our courses fill to capacity or are filled over capacity. There are some exceptions on the section level. This seems to be dependent on the instructor: typically our full-time faculty have fill rates at or above 100% and some of our part-time faculty have sections that are below 100%.
   We do note that the Enrollment Management Data Dashboard does not present the requested information in an easy-to-use manner. It would be easier if the data were sortable by semester, and not by section. We do not always have the same instructors teaching the same sections semester after semester.

● Is there anything faculty in your area would consider doing to improve overall discipline productivity* while maintaining our commitment to student learning? (e.g., taking additional students in sections with higher fill rates or changing the days/times or format—in-person, hybrid, online—of low fill-rate classes, etc.)
    productivity=(FTES or WSCH)/FTEF or the number of full time students or weekly student contact hours per full time faculty member

   We already take additional students in most sections. Hiring a new full-time instructor (see request below) will help improve the quality of our instruction. Expanding our pool of part-time faculty will also be helpful.

● Are there any classes in your discipline which routinely fill to capacity and for which there is often a waitlist? If yes, please list here.

   YES! All of them: Chem 1A, Chem 1B, Chem 10, Chem 12A, Chem 12B, Chem 30A, Chem 30B, Chem 31.

Enrollment Disaggregations:
Enrollments can be disaggregated by race and ethnicity, gender, etc.
*Enrollments are the total number of class enrollments/seats in a given time period. A student enrolled in multiple courses increases the count for each of those courses. This is a count of *seats filled*, not a count of persons filling them.

Take a look at disaggregation of your enrollments by race and ethnicity (and/or by gender) over the past three years on the [Chabot College Course Enrollments and Success Rates Dashboard](#). Consider how the representation of traditionally underrepresented race/ethnicity/gender student groups in your program compares to the typical makeup of your discipline, field, or industry (and/or for disciplines with large percentages of General Education enrollments—like English, math and communication studies—consider how the representation of traditionally underrepresented race/ethnicity/gender student groups in your **major courses** compare to your discipline, field, or industry).

- The representation of traditionally underrepresented race/ethnicity/gender student groups in our **discipline/major** compared to our industry/field:
  - **X** could be improved.
  - ___ is just right.
  - ___ is outstanding - we are increasing the diversity of the field.

For disciplines with a high percentage of offerings that are required for General Education—such as English, math, or communication studies—please also compare the representation of traditionally underrepresented race/ethnicity/gender student groups/disproportionately impacted groups (DI Groups) in your **general education** classes to the overall student body population.
- DI Groups in our **general education** classes:
  - ___ are **underrepresented** in comparison to their representation in the student body.
  - ___ have **similar representation** in comparison to their representation in the student body.
  - ___ are **overrepresented** in comparison to their representation in the student body.
  - ___ Not applicable, our discipline does not have high enrollments in general education classes.

Please provide a brief explanation that would help the college understand these trends (e.g., tangible reasons to understand the representation of DI groups in your general education classes at Chabot).

_____*This is a difficult question to answer. Chemistry only has one GE course, so we will not be discussing that here. Instead, we will compare Chemistry's enrollments to other ethnicity/gender statistics. A full discussion would take up way more space than we have here, so we will provide the following general observations:*
- *As far as enrollments by gender are concerned, Chemistry has a slightly great percentage of female students than Chabot as a whole, and a MUCH greater percentage of women than is found in undergraduate programs, graduate programs, and industrial settings*
- *For enrollments by ethnicity, Chemistry at Chabot has a higher percentage of Asian American and Filipina/Filipino students than the college as a whole, and a lower percentage of students from other ethnic groups. Compared to undergraduate programs, graduate programs, and industry, our percentage of students from DI groups is higher.*
- *Despite Chemistry having a higher percentage of students from DI groups than undergraduate programs, graduate programs, and industry, we still have some way to go--the diversity of the sciences beyond the undergraduate level is atrocious. The fact that our students are more diverse than the field as a whole does not mean we can't do better at serving our DI students.*

Non-Credit
- Does your program/area offer non-credit classes?
  - ___ Yes
  - **X** No

- Over the next 3 years, non-credit course offerings in our program/area are planned to:
  - ___ Decrease
  - ___ Stay the same as they are now
  - ___ Increase

Course success rates
Refer to the [Chabot College Course Enrollments and Success Rates Dashboard](#).

- Over the past three years, how have course success rates in your discipline changed? Course success rates have:
  - ___ Decreased
  - _X_ Stayed roughly the same
  - ___ Increased

Use the [Chabot College Course Enrollments and Success Rates Dashboard](#) to disaggregate your course success rates. Do any populations jump out to you as disproportionately impacted (succeeding at lower rates than students from other racial/ethnic, gender groups, or the overall college average)?
- Check all groups that are *disproportionately impacted* (succeeding at lower rates than students from other racial/ethnic, gender groups, or the overall college average):
  - _X_ African American/ Black
  - ___ Asian American/ Asian
  - ___ Filipino/x
  - _X_ Latinx/ Chicanx
  - ___ Native American/ Alaska Native
  - ___ Pacific Islander/ Hawaiian
  - ___ White/ European American
  - ___ Female
  - ___ Male

(Comment/Explain) Please provide a brief explanation that would help the college understand the trends in overall course success rates or disproportionate impacts in course success rates for any student group:

First, although the dashboard allows us to disaggregate our success rates by ethnic groups, the number of students we have from several ethnic groups is too small for the data to appear in the dashboard. This is especially true at the course level, which is where the data would be the most useful!

Overall, our students succeed at rates similar to the overall college success rates, with one exception. Some ethnic groups have slightly higher success rates than the college (White, Asian American, Filipina/Filipino) and some have slightly lower success rates (Latina/Latino). It is among our African American students that we recently have had a much lower success rate than the college as a whole. Until the Spring 2021 semester our success rates among African American students was almost identical to the college success rates. However, our success rate among African American students dropped to 51% in Spring 2021, compared to 63% for the college. Unfortunately, it is difficult to determine which Chemistry courses are most affected, since the number of African American students in a given course is often below the level at which the dashboard provides data.

That said, we have taken note that our success rates among African American and Latina/Latino students are lower than for other ethnic groups. This is an area of ongoing concern and work. Historically, STEM fields have not had great diversity, and many students from DI groups are discouraged by outside forces from entering STEM. We will continue to work on increasing both enrollments and success among these groups. This will be accomplished with continuous partnership with UMOJA and Puente programs, incorporating embedding tutors into our gateway courses.

The Office of Institutional Research strives to continually improve representation in our data. Currently, we have a [dashboard on course enrollments and success rates](#), which can be disaggregated by race/ethnicity, gender, and part-time/full-time status. What other student group(s) would you like to be able to disaggregate by in the dashboard? How will this disaggregation promote Chabot's mission? (Please keep in mind we will need to build further disaggregation into the dashboard over time and we will work in the order that is possible to do based on data availability and for which there is the most interest in Chabot campus community.)

Again, we need to see the data at the course level. We understand the need for student privacy, but we can't help students if we don't know where they are struggling.

Program completion (AD-Ts, AA/AS, Chancellor-approved Certificates)

Take a look at the IR report on [Degrees by Discipline](#).

- Over the past 3 years, what is the trend in Degrees awarded (AD-Ts and AA/AS) in your program(s)?
  - ___ Decreased
  - _X_ Stayed roughly the same
  - ___ Increased

Take a look at the IR report on **Chancellor-Approved** [Certificates by Discipline](#).

OIR now has two separate certificate reports: Chancellor Approved Certificates by Discipline and All Certificates by Discipline.
- Over the past 3 years, what is the trend in **Chancellor-Approved** certificates awarded in your program(s)?
  - ___ Decreased
  - ___ Stayed roughly the same
  - ___ Increased

- Please provide a brief explanation that would help the college understand these trends in degree and certificate completion. (e.g., tangible reasons for the increase or decrease).

  ___Chemistry currently does not have an AS-T degree, so we have not seen potential growth. We have proposed an AS-T degree, but our proposed degree that meets the state template has too many units for state approval.___

- If your area does not produce a lot of degrees or Chancellor-approved certificates, is there an associated industry test for which you are preparing students or non-Chancellor-approved certificates? If you have any data on success rates or numbers for the industry certification/test or for non-Chancellor-approved certificates, please share. (Optional)

  ___Although the number of Chemistry degrees awarded is not large, Chemistry serves many students that get degrees in other disciplines, or do not get degrees and simply transfer to a 4-year institution. Majors in which students must take chemistry courses include: Biology, Nursing, Dental Hygiene, and Engineering. Any analysis of the number of degrees produced by ANY STEM discipline should take into consideration the interdisciplinary nature of our course pathways. ___

- What barriers make it difficult for students to complete your program? Are there any barriers that could be disproportionately experienced by students from a particular demographic group (e.g., racial/ethnic, age, disability status, parents, etc.)

  ___The two main factors that affect student completion are the time it takes and the availability of classes. Chemistry courses are sequential in nature, as are other STEM courses, so it can be difficult for students to finish the sequence and transfer in two years. This is further complicated by the fact that our courses are always full with waiting lists, making it difficult for some students to take courses when they need to.

  Any factors that affect students' ability to take courses in a timely manner will impact their ability to complete the course sequence. Outside family commitments and jobs are two common student situations that keep them from progressing. Unfortunately, students from DI groups are often in these situations.___

Staffing Analysis

In this section you will analyze trends in staffing, technology, and facilities.

Staffing	Current # (Fall 2021)	How has staffing for this group changed in the last 3 years (decrease, flat, increase)
Full-time Faculty	5	_X_ Decreased ___ Stayed roughly the same

		___ Increased
Part-time Faculty	9	___ Decreased _X_ Stayed roughly the same ___ Increased
Full-time Classified Professionals	1	___ Decreased _X_ Stayed roughly the same ___ Increased
Part-Time Permanent or Hourly Classified Professionals		___ Decreased ___ Stayed roughly the same ___ Increased
Student Employees	0	_X_ Decreased ___ Stayed roughly the same ___ Increased
Independent Contractors/Professional Experts		___ Decreased ___ Stayed roughly the same ___ Increased

Academic Disciplines Only: Compare changes over the past three years in the FTES/enrollment in your area with changes in staffing in this same time period. What do you notice?

One of our full-time instructors, Maggie, Schumacher, retired in 2019 and has not been replaced. She was a lead general chemistry instructor (chem 1A and 1B), two of our most important classes. Her load has largely been taken up by part-time instructors. The decrease in our full-time faculty negatively affects our ability to serve our students. This may be affecting our enrollments and success rates. This speaks to our need to hire a replacement full-time faculty member.

Compare the representation of DI populations in your program's/area's staffing (faculty, classified professionals, and administrators) to the representation of DI populations in the students you serve. What do you notice? If there is a gap in representation between students and the Chabot professionals who serve them, how has your program/area addressed that gap?

Yes, roughly speaking, there is a gap, which needs to be addressed, and could best be addressed by hiring new full-time faculty.

Technology
- The **technology** in our program/area is sufficient to support student learning and/or carry out our program/area outcomes and goals.
   ___ Strongly disagree
   _X_ Somewhat disagree
   ___ Neither agree nor disagree
   ___ Somewhat agree
   ___ Strongly agree

If you strongly disagree or somewhat disagree, please explain. (optional)
Simulation programs are becoming increasingly important in many STEM areas. We would like to take full advantage of these tools to serve our students. Examples are : Chem Draw,a chemical structure drawing tool, and

Facilities
- The **facilities** in our program/area are sufficient to support student learning and/or carry out our program/area outcomes and goals.
  - ___ Strongly disagree
  - **X** Somewhat disagree
  - ___ Neither agree nor disagree
  - ___ Somewhat agree
  - ___ Strongly agree

If you strongly disagree or somewhat disagree, please explain. (optional)

Larger lecture spaces are needed for double lecture sections (48+ students).

Professional Development
- In general, **Faculty members** in my program/area regularly participate in professional development activities offered **by/at Chabot.**
  - ___ Strongly disagree
  - ___ Somewhat disagree
  - ___ Neither agree nor disagree
  - **X** Somewhat agree
  - ___ Strongly agree

- In general, **Classified Professionals** in my program/area regularly participate in professional development activities **offered by/at Chabot.**
  - **X** Strongly disagree
  - ___ Somewhat disagree
  - ___ Neither agree nor disagree
  - ___ Somewhat agree
  - ___ Strongly agree

- In general, **Faculty members** in my program/area regularly participate in professional development activities offered **outside of Chabot.**
  - ___ Strongly disagree
  - ___ Somewhat disagree
  - ___ Neither agree nor disagree
  - **X** Somewhat agree
  - ___ Strongly agree

- In general, **Classified Professionals** in my program/area regularly participate in professional development activities offered **outside of Chabot.**
  - **X** Strongly disagree
  - ___ Somewhat disagree
  - ___ Neither agree nor disagree
  - ___ Somewhat agree
  - ___ Strongly agree

- How did these professional development experiences contribute to improving your program/area, equity, and/or student learning and achievement?

Many chemistry faculty participated in webinars as a consequence of the COVID-19 pandemic in order to improve the quality of the online experience for our students. We learned new ways to use Canvas, implemented new software programs for online virtual laboratory assignments, and how to deliver online lectures via zoom and other applications.

Program Maps and Equity in Scheduling

The data in this section is intended to support the further development of Guided Pathways at Chabot. Respondents' answers will be given to the Guided Pathways Steering Committee for analysis.

- **Turning in Program Maps**: A first draft of your **Program Map** for each credit degree and certificate offered within your discipline was due in May. If you already submitted all Program Maps and have no required changes or new program modifications, then you're done for now! If you did not turn in all program maps *or* changes are required *or* you have new program modifications, then please submit these Program Maps by **October 11th, 2021**. You can submit your Program Map(s) by following these steps: 1) go to this template in Google Docs,* 2) click on "file," 3) choose "make a copy", 4) click on "share with the same people," 5) rename it for the degree/certificate that you are creating and 6) update the file to your program map. Then it will *automatically be stored* in the folder for submitting it to Guided Pathways.
  *There appears to be a current bug in Microsoft Products that does not allow links to google docs to automatically open (for some people). If you cannot open the link above, try manually copy pasting the address into a browser window. https://docs.google.com/document/d/1zU4G_Kps1CNYmR8ZOczX8RergfkJLPpU_XU3KfQC86s/edit

- Have you completed all program maps for your discipline?
  X Yes (or we will do so by the deadline).
  ___ No, because one or more of our program(s) is/are being discontinued (please fill in name of program in space below).
  ___ No, because one or more of our program(s) cannot currently be completed because not all classes have been offered recently or will be offered in the next 3 years (please fill in name of program in space below).
  ___ No, for another reason… (please fill in the reason below).

If you checked off "No" above, please explain.

- Can a student who is working toward the degree(s)/certificate(s) in your area take all their required courses for this program: 1) during the day or 2) in the late afternoon/evening/weekend or 3) online? What changes would be needed to ensure access for students in all three scenarios?

  Most of our chemistry courses are offered in both morning and afternoon sections. A few of our majors courses are offered in the evening.

- How are you collaborating with other disciplines with whom you share students to ensure that your schedules are not conflicting, so that students with specific educational goals can take the courses they need to finish in a timely fashion? Please discuss the discipline(s) with whom you already collaborate, as well as any discipline(s) with whom you would like to start collaborating.

  We are hampered in our scheduling of laboratories because they occupy a large block of time, 3-4 hours, as are most STEM laboratories, and they can conflict with other laboratory sections in other disciplines that the student may

be taking simultaneously, such as biology and physics laboratory classes. Historically, we have engaged in inter-discipline collaboration in resolving conflicts and overlaps, but it is a challenging and ongoing collaboration.

- Are there any classes in your discipline that you do not offer every semester or every year that are required for any of your degrees or programs? In an ***ideal*** world, with perfect coordination and infrastructure, how would you want to communicate which **required courses** are **not** offered in all semesters to: 1) counselors, 2) other faculty, and 3) students? (If you offer all classes required for degrees/certificates in all semesters, then you can write NA.)

Chemistry 12A is only offered in the Fall, and Chemistry 12B is only offered in the Spring. However, this is a long-standing arrangement and well-known to counseling.

Planning

Program/Area Goals: Please reflect on: 1) all the data you have reviewed, 2) the questions you have answered in this comprehensive PAR template, and 3) the various college planning documents (e.g., shorter term planning documents like the College's Planning Priorities (PRAC will post when complete), President's College Planning Initiatives, and Strategic Plan, all of which lead into the long-range planning document, the Educational Master Plan). Utilize your reflections, along with college planning documents, to develop 1-3 Goals to work on up through the next comprehensive-year PAR cycle. What are the anticipated *outputs** and *outcomes*** of your goals? How do your goals align with the Educational Master Plan (EMP)? Do your goals support the success of any DI Groups? Do your goals support any of the Student Centered Funding Formula (SCFF)*** metrics?
*outputs: direct short-term results like # of students served, workshops held, etc.
**outcomes: longer-term results like course success rates or degrees earned
***The Student Centered Funding Formula is the way all CA CC districts will be funded once the "hold harmless" period of funding expires.
Remember: Whereas **SAOs/PLOs** tend to be enduring and overarching aims for your service/program, the **goals** for a comprehensive PAR year are more specific, are expected to be completed over the PAR cycle, and are often part of a concrete action plan to reach your overarching and enduring SAOs/PLOs. For example, one of the Learning Connection's SAOs is: "Students from diverse backgrounds and with diverse learning needs will receive tutoring that improves their abilities to complete assignments, study, and/or succeed in their courses." This is an enduring aim that is unlikely to change from PAR cycle to PAR cycle. A PAR goal for the Learning Connection might be to refine the student diversity and antiracist tutoring practices training for incoming tutors. This goal is specific, expected to be completed over the PAR cycle, and supports their SAO (if incoming tutors are trained in antiracist tutoring practices, they will be well-equipped to support students with diverse learning needs).

Goal	Briefly describe the expected *outputs* (e.g., direct short-term results like # of students served, workshops held, etc) or *outcomes* (e.g., longer-term results like course success rates or degrees earned) for your goal.	EMP Alignment	Equity DI Group Alignment	SCFF Metric Alignment
1. Better market multiple measure	outputs: -Increased enrollment in Chem 1A	**X** Equity **X** Access ___ Pedagogy and Praxis	___ African American/Black ___ Latinx	**X** Enrollment/FTES ___ Transfer level English, math or ESL achievement **X** Degree or certificate completion

access to Chem 1A	outcomes: -Increased success rates in Chem 1A	___ Academic and Career Success ___ Community and Partnerships	___ Native American/Alaska Native ___ Pacific Islander/Hawaiian ___ Disabled ___ Foster Youth ___ LGBT ___ DI Gender ___ Other _____	**X** Transfer ___ CTE Units ___ Attainment of a Living Wage ___Supplemental Metric (Financial aid or AB 540) ___Other_____
2. Supplemental instruction for Chem 1A	outputs: -Increased number of students served by supplemental instruction outcomes: -Increased success in Chem 1A	**X** Equity ___ Access ___ Pedagogy and Praxis **X** Academic and Career Success ___ Community and Partnerships	___ African American/Black ___ Latinx ___ Native American/Alaska Native ___ Pacific Islander/Hawaiian ___ Disabled ___ Foster Youth ___ LGBT ___ DI Gender ___ Other _____	**X** Enrollment/FTES ___ Transfer level English, math or ESL achievement **X** Degree or certificate completion **X** Transfer ___ CTE Units ___ Attainment of a Living Wage ___Supplemental Metric (Financial aid or AB 540) ___Other_____
3. Pilot increasing equity in Chemistry courses	outputs: -New pedagogical methods implemented to improve equity in pilot sections. outcomes: -Increased student success	**X** Equity ___ Access ___ Pedagogy and Praxis **X** Academic and Career Success ___ Community and Partnerships	**X** African American/Black **X** Latinx **X** Native American/Alaska Native **X** Pacific Islander/Hawaiian ___ Disabled ___ Foster Youth **X** LGBT **X** DI Gender ___ Other _____	**X** Enrollment/FTES ___ Transfer level English, math or ESL achievement **X** Degree or certificate completion **X** Transfer ___ CTE Units ___ Attainment of a Living Wage ___Supplemental Metric (Financial aid or AB 540) ___Other_____

Resource Requests

Contracts and Services Requests: Contracts and Services include things like equipment maintenance contracts, food vendors, external consultants or speakers. Criterion for distributing funding vary by committee (check out the Resource Allocation Rubrics available on PAR's website), but are consistently based on the Educational Master Plan, the College's Planning Priorities, and the President's College Planning Initiatives.

*Note: If your request is part of a larger project, please name the project and use the same project name for all requests related to the project so that committees can see the total cost of the project. We don't currently have a good system for different shared governance committees to come together and see the total cost of projects across resource requests that go to different committees. Adding this column to Program and Area Review is the *start* to figuring out a good process for this.

	Rank (1, 2, 3, etc. after all requests have been entered)	Project Name Use the same project name for all requests related to a large project or put 'individual request'	New, Updated, or Repeat Request	Vendor Name	Brief Job Description/Tasks	Justification BRIEFLY justify how this spending relates to the EMP, College's Annual Planning Priorities and/or President's Planning Initiatives (2-3 sentences).	Length of Contract in Months (1, 2, 10, 12, etc.)	Year(s) Needed	Estimated Cost Per Year (Total $)
Item 1	1	**IR spectrometer service contract**	___ New **X** Updated ___ Repeat	Thermal Scientific	Service Contract	For maintenance of instrumentation used in chem labs	12	**X** Annual ___ 2022-23 ___ 2023-24 ___ 2024-25	$4000
Item 2			___ New ___ Updated ___ Repeat					___ Annual ___ 2022-23 ___ 2023-24 ___ 2024-25	
Item 3			___ New ___ Updated ___ Repeat					___ Annual ___ 2022-23 ___ 2023-24 ___ 2024-25	

Equipment Requests

Criterion for distributing funding vary by committee (check out the Resource Allocation Rubrics available on PAR's website), but are consistently based on the Educational Master Plan, the College's Planning Priorities, and the President's College Planning Initiatives.

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	Rank (1, 2, 3, etc. after all requests have been entered)	Project Name Use the same project name for all requests related to a large project or put 'individual request'	New, Updated, or Repeat Request	Vendor Name	Brief Item Description	Justification BRIEFLY justify how this spending relates to the EMP, College's Annual Planning Priorities and/or President's Planning Initiatives (2-3 sentences).	Quantity (1, 2, 10, 12, etc.)	Year(s) Needed	Estimated Cost Per Year (Total $)
Item 1	1	**Burets**	__ New _x_ Updated __ Repeat	Avogadro Lab Supply	Basic Equipment needed for chemistry laboratory classes	Critical equipment needed for conducting chemistry labs	48	_x_ Annual __ 2022-23 __ 2023-24 __ 2024-25	2500.00
Item 2	2	**Emission lamps (spectrum tubes)**	_x_ New __ Updated __ Repeat	Flinn Scientific	Basic Equipment needed for chemistry laboratory classes	Critical equipment needed for conducting chemistry labs	16	_x_ Annual __ 2022-23 __ 2023-24 __ 2024-25	750.00
Item 3	3	**Vernier Labquest Data Acquisition Units**	__ New _x_ Updated __ Repeat	Vernier, Inc.	Basic Equipment needed for chemistry laboratory classes	Critical equipment needed for conducting chemistry labs	18	_x_ Annual __ 2022-23 __ 2023-24 __ 2024-25	6264.00
Item 4	4	**Vernier Pressure Sensors**	__ New _x_ Updated __ Repeat	Vernier, Inc.	Basic Equipment needed for chemistry laboratory classes	Critical equipment needed for conducting chemistry labs	18	_x_ Annual __ 2022-23 __ 2023-24 __ 2024-25	1600
Item 5	5	**Vernier Temperature probes**	__ New _x_ Updated __ Repeat	Vernier, Inc.	Basic Equipment needed for chemistry	Critical equipment needed for	20	_x_ Annual __ 2022-23 __ 2023-24	720.00

			laboratory classes	conducting chemistry lab		___ 2024-25	
Item 6	6	**Genesys 30 UV/VIS Spectrophotom eter**	___ New **x**_ Updated ___ Repeat	Spectrum Chemical	Basic Equipment needed for chemistry laboratory classes	Critical equipment needed for conducting chemistry lab	6	**x**_ Annual ___ 2022-23 ___ 2023-24 ___ 2024-25	18672.00
Item 7	7	**Ring Stands**	___ New **x**_ Updated ___ Repeat	Spectrum Chemical	Basic Equipment needed for chemistry laboratory classes	Critical equipment needed for conducting chemistry lab	48	**x**_ Annual ___ 2022-23 ___ 2023-24 ___ 2024-25	1680.00
Item 8	8	**Buret Clamps**	___ New **x**_ Updated ___ Repeat	Spectrum Chemical	Basic Equipment needed for chemistry laboratory classes	Critical equipment needed for conducting chemistry lab	48	**x**_ Annual ___ 2022-23 ___ 2023-24 ___ 2024-25	3840.00

Facilities Requests

Criterion for distributing funding vary by committee (check out the Resource Allocation Rubrics available on PAR's website), but are consistently based on the Educational Master Plan, the College's Planning Priorities, and the President's College Planning Initiatives.

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	Rank (1, 2, 3, etc. after all requests have been entered)	**Project Name** Use the same project name for all requests related to a large project or put 'individual request'	**New, Updated, or Repeat Request**	**Brief Item Description**	**Justification** **BRIEFLY** justify how this spending relates to the EMP, College's Annual Planning Priorities and/or President's Planning Initiatives (2-3 sentences).	**Year(s) Needed**	**Estimated Cost Per Year** (Total $)
Item 1			___ New ___ Updated ___ Repeat			___ Annual ___ 2022-23 ___ 2023-24 ___ 2024-25	
Item 2			___ New ___ Updated			___ Annual ___ 2022-23	

			___ Repeat			___ 2023-24 ___ 2024-25	
Item 3			___ New ___ Updated ___ Repeat			___ Annual ___ 2022-23 ___ 2023-24 ___ 2024-25	

Human Resource Requests (e.g., Faculty, Classified, Administrative, Student Workers, etc.)

Criterion for distributing funding vary by committee (check out the Resource Allocation Rubrics available on PAR's website), but are consistently based on the Educational Master Plan, the College's Planning Priorities, and the President's College Planning Initiatives.

*Note: In the project name column, if your request is part of a larger project, please name the project and use the same project name for all requests related to the project. We don't currently have a good system for different shared governance committees to come together and see the total cost of projects across resource requests that go to different committees. Adding this column to Program and Area Review is the *start* to figuring out a good process for this.

	Rank (1, 2, 3, etc. after all requests have been entered)	Project Name Use the same project name for all requests related to a large project or put 'individual request'	New, Updated, or Repeat Request	Classification	Position Title	Avg. hours per week (5, 20, 40, etc.)	Justification BRIEFLY justify how this spending relates to the EMP, College's Annual Planning Priorities and/or President's Planning Initiatives (2-3 sentences).	Year(s) Needed	Estimated Cost Per Year (Total $)
Position 1	1		___ New ___ Updated __X__ Repeat	___ Admin FT ___ Classified FT ___ Classified Hourly ___ Classified PT __X__ Faculty FT ___ Faculty PT ___ Faculty F-hour ___ Faculty Reassign ___ Student Hourly ___ Other _____	FT Chemistry Instructor	40	1. Positively affects success/retention rates. All FT Chemistry faculty have experience teaching all our courses. This familiarity enables FT faculty to provide more targeted instruction to better prepare students for courses later in course sequence. This will improve	__X__ Annual ___ 2022-23 ___ 2023-24 ___ 2024-25	

							success/retention rates. 2. Brings % of courses taught by FT faculty up to level recommended by American Chemical Society. 3. Alleviates issues with staffing courses at last minute. 4. Allows for increased course offerings.		
Position 2	2		__X__ New ___ Updated ___ Repeat	___ Admin FT ___ Classified FT ___ Classified Hourly __X__ Classified PT ___ Faculty FT ___ Faculty PT ___ Faculty F-hour ___ Faculty Reassign ___ Student Hourly ___ Other _____	PT Lab Technician	18	To prepare set-ups for designated lab courses.	__X__ Annual ___ 2022-23 ___ 2023-24 ___ 2024-25	
Position 3			___ New ___ Updated ___ Repeat	___ Admin FT ___ Classified FT ___ Classified Hourly ___ Classified PT ___ Faculty FT ___ Faculty PT ___ Faculty F-hour ___ Faculty Reassign ___ Student Hourly ___ Other _____				___ Annual ___ 2022-23 ___ 2023-24 ___ 2024-25	

- The Faculty Prioritization Committee requires a completed **[Faculty Prioritization Form](#)** if you are requesting a full-time faculty position. There will be a spot on Qualtrics to upload this completed form. In the meantime, please just submit the completed form to your dean/manager when you turn in this template on **10/11/21**.

- The Classified Prioritization Committee requires a completed **Classified Professional Prioritization Form**. There will be a spot on Qualtrics to upload this completed form. In the meantime, please just submit the completed form to your dean/manager when you turn in this template on **10/11/21**.

Professional Development, Travel, and Conferences

Criterion for distributing funding vary by committee (check out the Resource Allocation Rubrics available on PAR's website), but are consistently based on the Educational Master Plan, the College's Planning Priorities, and the President's College Planning Initiatives.

*Note: In the project name column, if your request is part of a larger project, please name the project and use the same project name for all requests related to the project. We don't currently have a good system for different shared governance committees to come together and see the total cost of projects across resource requests that go to different committees. Adding this column to Program and Area Review is the *start* to figuring out a good process for this.

	Rank (1, 2, 3, etc. after all requests have been entered)	Project Name Use the same project name for all requests related to a large project or put 'individual request'	New, Updated, or Repeat Request	Brief Description (1-2 sentences)	What Type of PD Request?	Justification **BRIEFLY** justify how this spending relates to the EMP, College's Annual Planning Priorities and/or President's Planning Initiatives (2-3 sentences).	Number of Attendees (1, 5, 10, etc.)	Year(s) Needed	Estimated Cost Per Year (Total $)
Request 1			___ New ___ Updated ___ Repeat		___ In-person conference with travel ___ Online conference/webinar ___ On-Campus Training ___ On-Campus Speaker ___ Other _____		2	___ Annual ___ 2022-23 ___ 2023-24 ___ 2024-25	

Request 2			___ New ___ Updated ___ Repeat		___ In-person conference with travel ___ Online conference/webinar ___ On-Campus Training ___ On-Campus Speaker ___ Other _____			___ Annual ___ 2022-23 ___ 2023-24 ___ 2024-25	
Request 3			___ New ___ Updated ___ Repeat		___ In-person conference with travel ___ Online conference/webinar ___ On-Campus Training ___ On-Campus Speaker ___ Other _____			___ Annual ___ 2022-23 ___ 2023-24 ___ 2024-25	

Supplies Requests

Criterion for distributing funding vary by committee (check out the Resource Allocation Rubrics available on PAR's website), but are consistently based on the Educational Master Plan, the College's Planning Priorities, and the President's College Planning Initiatives.

*Note: In the project name column, if your request is part of a larger project, please name the project and use the same project name for all requests related to the project. We don't currently have a good system for different shared governance committees to come together and see the total cost of projects across resource requests that go to different committees. Adding this column to Program and Area Review is the *start* to figuring out a good process for this.

	Rank (1, 2, 3, etc. after all requests have been entered)	**Project Name** Use the same project name for all requests related to a large project or put 'individual request'	**New, Updated, or Repeat Request**	**Brief Item Description** (1-2 sentences)	**Justification** **BRIEFLY** justify how this spending relates to the EMP, College's Annual Planning Priorities and/or President's Planning Initiatives (2-3 sentences)**.**	**Quantity** (1, 2, 10, 12, etc.)	**Year(s) Needed**	**Estimated Cost Per Year** (Total $)

			New Updated Repeat					Annual 2022-23 2023-24 2024-25	
Item 1			__ New __ Updated __ Repeat					__ Annual __ 2022-23 __ 2023-24 __ 2024-25	
Item 2			__ New __ Updated __ Repeat					__ Annual __ 2022-23 __ 2023-24 __ 2024-25	
Item 3			__ New __ Updated __ Repeat					__ Annual __ 2022-23 __ 2023-24 __ 2024-25	

Technology Requests

Criterion for distributing funding vary by committee (check out the Resource Allocation Rubrics available on PAR's website), but are consistently based on the Educational Master Plan, the College's Planning Priorities, and the President's College Planning Initiatives.

*Note: In the project name column, if your request is part of a larger project, please name the project and use the same project name for all requests related to the project. We don't currently have a good system for different shared governance committees to come together and see the total cost of projects across resource requests that go to different committees. Adding this column to Program and Area Review is the *start* to figuring out a good process for this.

	Rank (1, 2, 3, etc. after all requests have been entered)	Project Name Use the same project name for all requests related to a large project or put 'individual request'	New, Updated, or Repeat Request	Was the feasibility of the request discussed with IT?	Brief Item Description (1-2 sentences)	Justification BRIEFLY justify how this spending relates to the EMP, College's Annual Planning Priorities and/or President's Planning Initiatives (2-3 sentences).	Quantity (1, 2, 10, 12, etc)	Year(s) Needed	Estimated Cost Per Year (Total $)
Item 1	1	**Chem Draw**	__x__ New __ Updated __ Repeat	__ Yes __x__ No	software for drawing chemical structures	An important tool for creating new curriculum.	5	__x__ Annual __ 2022-23 __ 2023-24 __ 2024-25	3500.00

Item 2	2	**Beyond Labz**	__ New **x** Updated __ Repeat	**x** Yes __ No	Student licenses for laboratory simulation software	Student use of simulations for lab skill preparation.	250	__ Annual __ 2022-23 __ 2023-24 __ 2024-25	6250.00
Item 3			__ New __ Updated __ Repeat	__ Yes __ No				__ Annual __ 2022-23 __ 2023-24 __ 2024-25	

Categorical Funding Applications:

The **Student Access Success and Equity (SASE) committee** "develops, leads, and supports campus initiatives that strengthen student access, success, and equity." SASE "provides a platform for collaboration and communication across the college that will result in the coordination of basic skills, student access, success, and equity efforts campus-wide." If you believe that any of your funding requests meet these requirements, then please fill out their application for funding here:

https://forms.gle/ZXC65S6NscLMCz8G7

Please note that SASE may request additional information after you submit the application. Please contact the SASE committee with any questions: Administrative Tri-Chair Gabe Chaparro gchaparro@chabotcollege.edu.

Career Education funds are available for projects that: 1) support a program with a CTE TOP code or 2) continue a current project in SWP or 3) are eligible for Perkins Grants, or 4) meet other criteria such as core indicators and labor market demand. If you believe that any of your funding requests meet these requirements, then please fill out the CE application for funding here:
https://docs.google.com/forms/d/e/1FAIpQLSelkdNpRXzCbxnmVGHO7t3gC2K3eZfs_nXrOaLloFxlT1xbqw/viewform?usp=sf_link

- Please submit one form per project/TOP code, keeping in mind that funding for multiple projects per area is limited.
- If you are not sure whether you have a program that qualifies for CE funding, please reach out to Christina Read cread@chabotcollege.edu.

If you have any other questions about the CE funding process, please contact the Career Education Committee Tri-Chairs: faculty chair Connie Telles ctelles@chabotcollege.edu, admin chair Christina Read cread@chabotcollege.edu, or classified professional chair Kathleen Stanley kstanley@chabotcollege.edu.