Instructional Discipline Template

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A. Program Information

Program Mission Statement

Please enter your mission statement here.

Answer:

The chemistry department's mission is to provide students of all backgrounds with a strong foundation in the theoretical, experimental, and applied areas of chemistry through our integrated lecture and hands-on lab curriculum. To prepare students for successful entry into 1) a four-year university, 2) an allied health program, or 3) professional school. To support the college mission, we develop students' analytical reasoning, collaborative learning, and critical thinking skills to help become informed global citizens and achieve their future goals.

Program Level Student Learning Outcomes

Please list the program level student learning outcomes.

Answer:

Students completing a chemistry sequence will 1 - acquire and apply the knowledge of current theories and applications in chemistry to their field of study. 2 - develop the ability to acquire, assess, and evaluate experimental data through integrated lab exercises. 3 - be able to communicate effectively using the language of chemistry. 4 - be trained in the safe handling of chemicals and the execution of standard laboratory techniques.

Enrollment Variables and Trends

Enrollment Trends
Physical Scienc, Math & Engin - Chemistry-FD

	2014-15	2015-16	2016-17	2017-18	2018-19	5-yr %Inc
Unduplicated Headcount	2,126	2,145	2,222	2,134	1,992	-6.3%
Census Enrollment	3,125	3,176	3,243	3,397	3,136	0.4%
Sections	119	122	123	125	113	-5.0%
WSCH	8,442	8,509	8,681	8,275	7,577	-10.2%
FTES (end of term)	569	574	585	558	510	-10.3%
FTEF (end of term)	18.1	18.7	19.0	17.3	15.4	-14.8%
Productivity (WSCH/FTEF)	467	455	456	479	492	5.3%

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B. FTES - Enrollment Trends

1. In the data table above, what does the FTES data trend indicate?

- ☐ the data trend shows an increase in FTES
- ☑ the data trend shows a decrease in FTES
- ☐ the data trend shows no change in FTES

Discuss the factors that would help the college understand these trends and whether there are tangible reasons for the increase or decrease.

Answer:

The five-year trend in FTES for Chemistry is -10.3% (borderline). This is slightly worse than the Foothill trend of -7.3% but better than PSME of -15.3%. With few declared chemistry majors, chemistry is a service department for Biology (-7.0%), Allied Health Sciences (-25.4%), and other STEM majors (≈ -13%). Our enrollments trend the same as these student populations. We recognize coordinated scheduling with biology and physics may be a problem. As of summer 2020, all the chemistry classes except organic are running at full capacity. This supports the idea that hybrid offerings should increase our FTES.

2. Looking at the data trend, has the faculty/staff discussed proposed actions to stabilize/increase FTES?

- ☑ yes
- ☐ no

If yes, describe the proposed actions for stabilizing/increasing the FTES.

Answer:

We are making an effort to increase the population of middle college (high school) students by offering CHEM 25 onsite at Eastside Preparatory High School (East Palo Alto) during the summer and CHEM 25/1A to the high school level students of the Khan Lab School (Mountain View) during the academic year. We do not know if these students continue at Foothill. Coordinated scheduling with biology and physics may help. Hybrid offerings, online supplemental instruction, and alternative course delivery designs are possibilities to increase FTES.

C. Sections - Enrollment Trends

1. In the data table above, what does the data trend indicate about the number of sections offered?

- ☐ the data trend shows an increase in sections
- ☑ the data trend shows a decrease in sections
- ☐ the data trend shows no change in sections

If the data trend shows an increase or decrease in sections, explain why the number of sections increased or decreased.

Answer:

The 2018-19 section count of 113 is overstated compared to the 2014-15 count of 119. We decoupled the organic lecture from the lab during this time interval, causing the number of organic sections to increase by the number of lectures taught during the year. There are 8 additional organic sections (the decoupled lectures) in the 2018-19 count of 113 without any increase in FTES. Without decoupling, the 2018-19 section count would be 105, an -11.8% change, consistent with the decline (-10.3%) in FTES.

If the data indicates an increase in sections with a decrease in FTES, explain why the number of sections increased while FTES decreased.

Answer:

NA

D. Productivity - Enrollment Trends

1. In the data table above, what does the data trend indicate about the productivity number?

- ☑ the data trend shows the productivity number increased
- ☐ the data trend shows the productivity number decreased
- ☐ the data trend shows no change in the productivity number

If the data trend shows an increase or decrease in productivity, explain why the productivity increased or decreased.

Answer:

The department's productivity has increased by 5.3%. Our productivity tracks with the Administration's enrollment/budget goals. The three year period covering 2014-15 to 2016-17 shows a decrease in productivity, consistent with the Administration's emphasis to increase sections/enrollment. In the last two academic years, productivity has increased by 7.9%, consistent with the Administration's focus to reduce costs by increasing productivity. Canceling low enrollment labs (< 20 students) is the reason productivity increased. We now offer more double lecture sections to increase productivity and are building a more student-center schedule.

2. Does the data trend suggest changes are necessary to improve productivity?

- ☐ yes
- ☑ no

If yes, describe the proposed actions for stabilizing/increasing the productivity number.

Answer:

NA

E. Enrollment by Student Demographics

Enrollment Distribution

by Gender

	2014-15		2015-16		2016-17		2017-18		2018-19	
	Enr	Percent	Enr	Percent	Enr	Percent	Enr	Percent	Enr	Percent
Female	1,699	54%	1,741	55%	1,856	57%	1,954	58%	1,820	58%
Male	1,406	45%	1,422	45%	1,374	42%	1,427	42%	1,295	41%
Not Reported	20	1%	13	0%	13	0%	16	0%	21	1%
Total	3,125	100%	3,176	100%	3,243	100%	3,397	100%	3,136	100%

by Ethnicity

	2014-15		2015-16		2016-17		2017-18		2018-19	
	Enr	Percent	Enr	Percent	Enr	Percent	Enr	Percent	Enr	Percent
African American	90	3%	80	3%	94	3%	114	3%	128	4%
Asian	1,129	36%	1,153	36%	1,258	39%	1,401	41%	1,236	39%
Filipinx	199	6%	236	7%	228	7%	253	7%	213	7%
Latinx	559	18%	639	20%	700	22%	713	21%	778	25%
Native American	15	0%	15	0%	15	0%	23	1%	6	0%
Pacific Islander	34	1%	29	1%	44	1%	32	1%	32	1%
White	768	25%	763	24%	708	22%	806	24%	708	23%
Decline to State	331	11%	261	8%	196	6%	55	2%	35	1%
Total	3,125	100%	3,176	100%	3,243	100%	3,397	100%	3,136	100%

by Age

	2014-15		2015-16		2016-17		2017-18		2018-19	
	Enr	Percent	Enr	Percent	Enr	Percent	Enr	Percent	Enr	Percent
19 or less	702	22%	743	23%	715	22%	633	19%	653	21%
20-24	1,677	54%	1,621	51%	1,732	53%	1,767	52%	1,585	51%
25-39	674	22%	743	23%	722	22%	903	27%	839	27%
40 +	72	2%	69	2%	74	2%	94	3%	59	2%
Total	3,125	100%	3,176	100%	3,243	100%	3,397	100%	3,136	100%

by Education Level

	2014-15		2015-16		2016-17		2017-18		2018-19	
	Enr	Percent	Enr	Percent	Enr	Percent	Enr	Percent	Enr	Percent
Bachelor or higher	398	13%	356	11%	393	12%	461	14%	382	12%
Associate	93	3%	94	3%	108	3%	121	4%	96	3%
HS/Equivalent	2,408	77%	2,560	81%	2,584	80%	2,638	78%	2,504	80%
All Other	226	7%	166	5%	158	5%	177	5%	154	5%

Total	3,125	100%	3,176	100%	3,243	100%	3,397	100%	3,136	100%

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a. Enrollment by Gender

The following questions concern enrollment distribution by gender.

1. In the data table above, what does the data trend indicate about program enrollment by gender?

Females

- [x] the data trend shows an increase in the female enrollment rates
- [ ] the data trend shows a decrease in the female enrollment rates
- [ ] the data trend shows no change in the female enrollment rates

Males

- [ ] the data trend shows an increase in the male enrollment rates
- [x] the data trend shows a decrease in the male enrollment rates
- [ ] the data trend shows no change in the male enrollment rates

If the data trend shows a change in male or female enrollment, explain why there was a change.

Answer:

The female enrollment in 2018-19 is up by 7.1% compared to 2014-15, while male enrollment has decreased by -7.9%. We believe the increased female enrollment corresponds with increased enrollments in our 30A/30B courses (allied health) that are predominately female students. Why the male student count is down maybe from the boom in the local economy over this time period, where males are more apt to work than go to school.

2. Does your program differ in the percentage of males to females, in this most recent year, compared to the College? (College 2018-19 = 52% Female, 48% Male)

- [ ] yes
- [x] no

If the data indicates a lack of gender parity in your program as compared to the college percentages, what is the source of that disparity and what proposed/planned actions is the program taking to achieve parity?

Answer:

The difference in gender parity is less than or equal to 10%. We see this as not a significant difference between the genders, nor is this a substantial deviation from the college averages. No action required.

Data Table for Enrollment by Gender of Declared Majors

https://foothill.edu//programreview/prg-rev-docs/fh-programreview2019_20enroll-by-gender-and-declared-major.pdf (https://foothill.edu//programreview/prg-rev-docs/fh-programreview2019_20enroll-by-gender-and-declared-major.pdf)

Click the link to view Enrollment by Gender of Declared Majors data table and respond to the questions below.

3. In the data table above, what does the data trend indicate about enrollment (headcount) by gender of declared majors in the program?

Females

- [ ] the data trend shows an increase in the female enrollment of the declared major
- [x] the data trend shows a decrease in the female enrollment of the declared major
- [ ] the data trend shows no change in the female enrollment of the declared major

Males

- [x] the data trend shows an increase in the male enrollment of the declared major
- [ ] the data trend shows a decrease in the male enrollment of the declared major
- [ ] the data trend shows no change in the male enrollment of the declared major

b. Enrollment by Ethnicity

The following questions concern enrollment distribution by ethnicity.

1. In the data table above, what do the data trends indicate about program enrollment by ethnicity?

African American

- ☐ the data trend shows an increase in the African Americans enrollment rates
- ☐ the data trend shows a decrease in the African Americans enrollment rates
- ☑ the data trend shows no change in the African Americans enrollment rates

Asian

- ☐ the data trend shows an increase in the Asian enrollment rates
- ☐ the data trend shows a decrease in the Asian enrollment rates
- ☑ the data trend shows no change in the Asian enrollment rates

Filipinx

- ☐ the data trend shows an increase in the Filipinx enrollment rates
- ☐ the data trend shows a decrease in the Filipinx enrollment rates
- ☑ the data trend shows no change in the Filipinx enrollment rates

Latinx

- ☑ the data trend shows an increase in the Latinx enrollment rates
- ☐ the data trend shows a decrease in the Latinx enrollment rates
- ☐ the data trend shows no change in the Latinx enrollment rates

Native American

- ☐ the data trend shows an increase in the Native American enrollment rates
- ☐ the data trend shows a decrease in the Native American enrollment rates
- ☑ the data trend shows no change in the Native American enrollment rates

Pacific Islander

- ☐ the data trend shows an increase in the Pacific Islander enrollment rates
- ☐ the data trend shows a decrease in the Pacific Islander enrollment rates
- ☑ the data trend shows no change in the Pacific Islander enrollment rates

White

- ☐ the data trend shows an increase in the White enrollment rates
- ☐ the data trend shows a decrease in the White enrollment rates
- ☑ the data trend shows no change in the White enrollment rates

Decline to State

- ☐ the data trend shows an increase in the Decline to State enrollment rates
- ☑ the data trend shows a decrease in the Decline to State enrollment rates
- ☐ the data trend shows no change in the Decline to State enrollment rates

2. Does your program differ in enrollment distribution among ethnic groups, in this most recent year, compared to the College enrollment by ethnic group? (College 2018-19 = 5% African American, 30% Asian, 5% Filipinx, 26% Latinx, 0% Native American, 1% Pacific Islander, 29% White, 4% Decline to State)

- ☑ yes
- ☐ no

If yes, looking at the ethnic groups above, explain changes identified over the past five years for each ethnic group (address each ethnic group by bullet point).

Answer:

Only small increases/decreases in enrollment percentages are observed in each group except Latinx (+7%) and decline to state (-10%). The percentages below are population differences between Chemistry and the College. African American: -1% No significant difference. Up 42% in CHEM. Asian: +9% Some difference. Trend up 9.5% in CHEM Filipinx: +1% No significant difference. Trend up 7.0% in CHEM Latinx: -1% No significant difference. Trend up 39% in CHEM Native American: 0% No difference. Trend down -60% in CHEM Pacific Islander: 0% No difference. Trend down -5.9% in CHEM White: -6% Some difference. trend down -7.8% in CHEM Decline to State: -3% Some difference. Trend down -89% in CHEM Summary of differences: Chemistry has a higher population of Asian students and fewer White and Decline to State compared to the College population. Aside from this difference, the department enrollments mirror the College population as a whole. We have no other data to support Chemistry Enrollment Trends: Total enrollment was up by only +0.3% over 4-yrs. The 4-year trends show an increase in African American (+42%), Latinx (+39%), and Asian (+9.5%) populations at the expense of Decline to State (-89%). Other ethnic group percentages have held relatively constant with the White showing a decrease of -7.8% compared to the college average.

3. Do the data trends suggest programmatic actions are necessary to address disparities in enrollment by ethnicity, including low enrollment within a particular group?

☐ yes
☑ no

If yes, describe the proposed actions for addressing disparities in enrollment by ethnic group within the program.

Answer:

N/A

F. Student Course Success

Course Success Rates by Unit

Course Success
Physical Scienc, Math & Engin - Chemistry-FD

	2014-15		2015-16		2016-17		2017-18		2018-19	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
Success	2,071	66%	2,104	66%	2,233	69%	2,438	72%	2,216	71%
Non Success	547	18%	565	18%	497	15%	511	15%	502	16%
Withdrew	506	16%	507	16%	513	16%	448	13%	418	13%
Total	3,124	100%	3,176	100%	3,243	100%	3,397	100%	3,136	100%

Course Success for African American, Latinx, and Filipinx Students

	2014-15		2015-16		2016-17		2017-18		2018-19	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
Success	445	52%	485	51%	597	58%	634	59%	694	62%
Non Success	209	25%	268	28%	237	23%	253	23%	245	22%
Withdrew	194	23%	202	21%	188	18%	193	18%	180	16%
Total	848	100%	955	100%	1,022	100%	1,080	100%	1,119	100%

Course Success for Asian, Native American, Pacific Islander, White, and Decline to State Students

	2014-15		2015-16		2016-17		2017-18		2018-19	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
Success	1,626	71%	1,619	73%	1,636	74%	1,804	78%	1,522	75%
Non Success	338	15%	297	13%	260	12%	258	11%	257	13%
Withdrew	312	14%	305	14%	325	15%	255	11%	238	12%
Total	2,276	100%	2,221	100%	2,221	100%	2,317	100%	2,017	100%

Some courses may continue to be listed but no longer have data due to renumbering or because the course was not offered in the past five years.

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a. Student Course Success

1. In the data table above, what does the data trend indicate about overall course success?

- [x] the data trend shows an increase in the students' course success percentage
- [ ] the data trend shows a decrease in the students' course success percentage
- [ ] the data trend shows no change in the students' course success percentage

If the data trend shows an increase, decrease, or no change in students' course success percentage, explain what programmatic factors led to such a trend.

Answer:

Overall course success has increased by 5% over the last four years. This 5% increase is from a decrease in non-success of -2% and withdraws of -3%. We have not identified any program factors that may be responsible for this 5% increase in success. This slight increase may be from normal year-to-year statistical fluctuations.

2. Do the data suggest changes are necessary to improve student course success?

- [x] yes
- [ ] no

If yes, describe the proposed actions for stabilizing/increasing the student's course success percentages.

Answer:

Compared to the 81% success rate at Foothill, Chemistry's rate of 71% looks deficient. However, chemistry is no different than PSME courses with a similar difficulty level (Computer Science: 71%, Engineering: 69% and Mathematics: 66%). We want overall success rates in Chemistry to be higher. Our focus will be CHEM 1A (61%), CHEM 1B (64%), and CHEM 25 (66%) once we get back into the classroom and can review our curriculum and pedagogy. We believe our course structure and pedagogy will be significantly different post-COVID-19.

b. Student Course Success by Student Groups

1. In the data table above, what is the observed trend for course success rates for African American, Filipinx, and Latinx student groups?

- ☑ the data trend shows an increase in the course success percentage
- ☐ the data trend shows a decrease in the course success percentage
- ☐ the data trend shows no change in the course success percentage

2. In the data table above, what is the observed trend for course success rates for Asian, Native American, Pacific Islander, White, and Decline to State student groups?

- ☑ the data trend shows an increase in the course success percentage
- ☐ the data trend shows a decrease in the course success percentage
- ☐ the data trend shows no change in the course success percentage

3. In the data table above, is there a course success gap between African-American, Latinx, Filipinx student groups and Asian, Native American, Pacific Islander, White, Decline to State student groups?

- ☑ yes
- ☐ no

If the data trend shows an increase or decrease in course success gap, explain why the course success gap increased or decreased.

Answer:

The success rate for the African American, Filipinx, and Latinx student groups (G1) has increased by +10% over the last five years. A significant increase and meets the standard. Over the same period the Asian, Native American, Pacific Islander, White, and Decline to State (G2) increased by +4%. We are not sure why success rates have increased for either group over this period, but the department has engaged in a more active learning style. Success Rate Percentages 2018-2019 G1: College (73%), Chemistry (62%). A Gap of -11%. G2: College (85%), Chemistry (75%). A Gap of -10%.

4. Does the data suggest that changes are necessary to decrease student course success gap between African-American, Latinx, Filipinx student groups and Asian, Native American, Pacific Islander, White, and Decline to State student groups?

- ☑ yes
- ☐ no

If yes, what actions are program faculty and staff engaged in to decrease the course success gap between African-American, Latinx, and Filipinx student groups and Asian, Native American, Pacific Islander, White, and Decline to State student groups?

Answer:

Each group underperforms in chemistry by 10%. Expected since chemistry is considered challenging. Only 20% of graduating HS seniors are STEM ready, according to The Condition of College & Career Readiness 2019 study. Since Chemistry is no different than the College with a -10% gap between these two groups, any changes that have proven successful in closing this college-wide gap should apply to chemistry. The Chemistry Department has not identified the primary reason for this gap. We are exploring workshops, new curriculum, online office hours, embedded tutors, learning communities, and peer tutoring as possible solutions.

G. Student Course Success by Demographics

a. Student Course Success by Gender

The following questions concern student success rates by gender.

Course Success Rates by Group

Success Rates by Gender
Physical Scienc, Math & Engin - Chemistry-FD

	2018-19			
	Success	**Non Success**	**Withdrew**	**Total**

	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
Female	1,273	70%	299	16%	248	14%	1,820	100%
Male	929	72%	201	16%	165	13%	1,295	100%
Not Reported	14	67%	2	10%	5	24%	21	100%
All	2,216	71%	502	16%	418	13%	3,136	100%

2017-18

	Success		Non Success		Withdrew		Total	
	Grades	**Percent**	**Grades**	**Percent**	**Grades**	**Percent**	**Grades**	**Percent**
Female	1,396	71%	287	15%	271	14%	1,954	100%
Male	1,031	72%	221	15%	175	12%	1,427	100%
Not Reported	11	69%	3	19%	2	13%	16	100%
All	2,438	72%	511	15%	448	13%	3,397	100%

2016-17

	Success		Non Success		Withdrew		Total	
	Grades	**Percent**	**Grades**	**Percent**	**Grades**	**Percent**	**Grades**	**Percent**
Female	1,257	68%	297	16%	302	16%	1,856	100%
Male	965	70%	199	14%	210	15%	1,374	100%
Not Reported	11	85%	1	8%	1	8%	13	100%
All	2,233	69%	497	15%	513	16%	3,243	100%

2015-16

	Success		Non Success		Withdrew		Total	
	Grades	**Percent**	**Grades**	**Percent**	**Grades**	**Percent**	**Grades**	**Percent**
Female	1,121	64%	328	19%	292	17%	1,741	100%
Male	973	68%	235	17%	214	15%	1,422	100%
Not Reported	10	77%	2	15%	1	8%	13	100%
All	2,104	66%	565	18%	507	16%	3,176	100%

2014-15

	Success		Non Success		Withdrew		Total	
	Grades	**Percent**	**Grades**	**Percent**	**Grades**	**Percent**	**Grades**	**Percent**
Female	1,119	66%	284	17%	295	17%	1,698	100%
Male	940	67%	259	18%	207	15%	1,406	100%
Not Reported	12	60%	4	20%	4	20%	20	100%
All	2,071	66%	547	18%	506	16%	3,124	100%

Success Rates by Age

Physical Scienc, Math & Engin - Chemistry-FD

2018-19

	Success		Non Success		Withdrew		Total	
	Grades	**Percent**	**Grades**	**Percent**	**Grades**	**Percent**	**Grades**	**Percent**

19 or less	478	73%	102	16%	73	11%	653	100%
20-24	1,099	69%	287	18%	199	13%	1,585	100%
25-39	593	71%	107	13%	139	17%	839	100%
40 +	46	78%	6	10%	7	12%	59	100%
All	2,216	71%	502	16%	418	13%	3,136	100%

2017-18

	Success		Non Success		Withdrew		Total	
	Grades	**Percent**	**Grades**	**Percent**	**Grades**	**Percent**	**Grades**	**Percent**
19 or less	507	80%	77	12%	49	8%	633	100%
20-24	1,197	68%	311	18%	259	15%	1,767	100%
25-39	656	73%	120	13%	127	14%	903	100%
40 +	78	83%	3	3%	13	14%	94	100%
All	2,438	72%	511	15%	448	13%	3,397	100%

2016-17

	Success		Non Success		Withdrew		Total	
	Grades	**Percent**	**Grades**	**Percent**	**Grades**	**Percent**	**Grades**	**Percent**
19 or less	543	76%	84	12%	88	12%	715	100%
20-24	1,143	66%	313	18%	276	16%	1,732	100%
25-39	496	69%	95	13%	131	18%	722	100%
40 +	51	69%	5	7%	18	24%	74	100%
All	2,233	69%	497	15%	513	16%	3,243	100%

2015-16

	Success		Non Success		Withdrew		Total	
	Grades	**Percent**	**Grades**	**Percent**	**Grades**	**Percent**	**Grades**	**Percent**
19 or less	535	72%	106	14%	102	14%	743	100%
20-24	1,039	64%	336	21%	246	15%	1,621	100%
25-39	480	65%	115	15%	148	20%	743	100%
40 +	50	72%	8	12%	11	16%	69	100%
All	2,104	66%	565	18%	507	16%	3,176	100%

2014-15

	Success		Non Success		Withdrew		Total	
	Grades	**Percent**	**Grades**	**Percent**	**Grades**	**Percent**	**Grades**	**Percent**
19 or less	522	74%	104	15%	76	11%	702	100%
20-24	1,045	62%	352	21%	280	17%	1,677	100%
25-39	460	68%	83	12%	130	19%	673	100%
40 +	44	61%	8	11%	20	28%	72	100%
All	2,071	66%	547	18%	506	16%	3,124	100%

Success Rates by Ethnicity

Physical Scienc, Math & Engin - Chemistry-FD

2018-19

	Success		Non Success		Withdrew		Total	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
African American	75	59%	28	22%	25	20%	128	100%
Asian	960	78%	140	11%	136	11%	1,236	100%
Filipinx	153	72%	36	17%	24	11%	213	100%
Latinx	466	60%	181	23%	131	17%	778	100%
Native American	2	33%	2	33%	2	33%	6	100%
Pacific Islander	16	50%	7	22%	9	28%	32	100%
White	521	74%	101	14%	86	12%	708	100%
Decline to State	23	66%	7	20%	5	14%	35	100%
All	2,216	71%	502	16%	418	13%	3,136	100%

2017-18

	Success		Non Success		Withdrew		Total	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
African American	68	60%	22	19%	24	21%	114	100%
Asian	1,132	81%	147	10%	122	9%	1,401	100%
Filipinx	164	65%	45	18%	44	17%	253	100%
Latinx	402	56%	186	26%	125	18%	713	100%
Native American	15	65%	5	22%	3	13%	23	100%
Pacific Islander	16	50%	4	13%	12	38%	32	100%
White	595	74%	95	12%	116	14%	806	100%
Decline to State	46	84%	7	13%	2	4%	55	100%
All	2,438	72%	511	15%	448	13%	3,397	100%

2016-17

	Success		Non Success		Withdrew		Total	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
African American	48	51%	18	19%	28	30%	94	100%
Asian	933	74%	142	11%	183	15%	1,258	100%
Filipinx	145	64%	46	20%	37	16%	228	100%
Latinx	404	58%	173	25%	123	18%	700	100%
Native American	8	53%	3	20%	4	27%	15	100%
Pacific Islander	25	57%	10	23%	9	20%	44	100%
White	510	72%	85	12%	113	16%	708	100%
Decline to State	160	82%	20	10%	16	8%	196	100%
All	2,233	69%	497	15%	513	16%	3,243	100%

2015-16

	Success		Non Success		Withdrew		Total	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
African American	36	45%	27	34%	17	21%	80	100%

Asian	827	72%	160	14%	166	14%	1,153	100%
Filipinx	143	61%	61	26%	32	14%	236	100%
Latinx	306	48%	180	28%	153	24%	639	100%
Native American	11	73%	0	0%	4	27%	15	100%
Pacific Islander	16	55%	6	21%	7	24%	29	100%
White	544	71%	102	13%	117	15%	763	100%
Decline to State	221	85%	29	11%	11	4%	261	100%
All	2,104	66%	565	18%	507	16%	3,176	100%

2014-15

	Success		**Non Success**		**Withdrew**		**Total**	
	Grades	**Percent**	**Grades**	**Percent**	**Grades**	**Percent**	**Grades**	**Percent**
African American	51	57%	17	19%	22	24%	90	100%
Asian	791	70%	181	16%	157	14%	1,129	100%
Filipinx	116	58%	46	23%	37	19%	199	100%
Latinx	278	50%	146	26%	135	24%	559	100%
Native American	7	47%	4	27%	4	27%	15	100%
Pacific Islander	15	44%	12	35%	7	21%	34	100%
White	544	71%	96	13%	127	17%	767	100%
Decline to State	269	81%	45	14%	17	5%	331	100%
All	2,071	66%	547	18%	506	16%	3,124	100%

Some courses may continue to be listed but no longer have data due to renumbering or because the course was not offered in the past five years.

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1. In the data table above, what does the data indicate about program course success by gender?

Females

- [x] the data trend shows an increase in the female course success rates
- [ ] the data trend shows a decrease in the female course success rates
- [ ] the data trend shows no change in the female course success rates

Males

- [x] the data trend shows an increase in the male course success rates
- [ ] the data trend shows a decrease in the male course success rates
- [ ] the data trend shows no change in the male course success rates

If the data trend shows an increase or decrease in the male or female student course success percentages, explain why the percentage increased or decreased for both.

Answer:

The female and male four-year increases are mostly the same and mirror our average rise in success rates over the same period. This increase is small, and overall success rates are still ≈ -10% below the college averages. The chemistry department can not clearly identify the reasons for these increases. If this trend continues, we will match the college averages in 6 years.

2. Do the data suggest changes are necessary to improve female or male student course success percentage rates?

- [x] yes
- [ ] no

If yes, describe proposed actions to stabilize/increase the course success rates for either male or female.

Answer:

Success rates are essentially identical between males and females, but still, about -10% below the college average. As stated above in F.a #2 Student Course Success, we would like to increase success rates across the board for all groups. How to maintain and accelerate this success increase has yet to be determined.

b. Student Course Success by Ethnicity

These questions concern the course success rates of students by ethnicity.

1. In the data table above, what does the data trend indicate about program student course success by ethnicity?

African Americans

- [x] the data trend shows an increase in the African Americans course success rates
- [ ] the data trend shows a decrease in the African Americans course success rates
- [ ] the data trend shows no change in the African Americans course success rates

Asian

- [x] the data trend shows an increase in the Asian course success rates
- [ ] the data trend shows a decrease in the Asian course success rates
- [ ] the data trend shows no change in the Asian course success rates

Filipinx

- [x] the data trend shows an increase in the Filipinx course success rates
- [ ] the data trend shows a decrease in the Filipinx course success rates
- [ ] the data trend shows no change in the Filipinx course success rates

Latinx

- [x] the data trend shows an increase in the Latinx course success rates
- [ ] the data trend shows a decrease in the Latinx course success rates
- [ ] the data trend shows no change in the Latinx course success rates

Native American

- [ ] the data trend shows an increase in the Native American course success rates
- [x] the data trend shows a decrease in the Native American course success rates
- [ ] the data trend shows no change in the Native American course success rates

Pacific Islander

- [x] the data trend shows an increase in the Pacific Islander course success rates
- [ ] the data trend shows a decrease in the Pacific Islander course success rates
- [ ] the data trend shows no change in the Pacific Islander course success rates

White

- [x] the data trend shows an increase in the White course success rates
- [ ] the data trend shows a decrease in the White course success rates
- [ ] the data trend shows no change in the White course success rates

Decline to State

- [ ] the data trend shows an increase in the Decline to State course success rates
- [x] the data trend shows a decrease in the Decline to State course success rates
- [ ] the data trend shows no change in the Decline to State course success rates

If the data trend shows a decrease in any of the student ethnic groups' course success rates, explain why the percentage decreased for each (address each ethnic group by bullet point).

Answer:

Except for the Native American group, all chemistry success rates trend positive. Percentages below are differences from the CHEM four-year trend and the College population four-year trend. A (+) percentage indicates a better success rate trend in CHEM than the College. African American: +0.7% Asian: +1.4% Filipinx: +2.5% Latinx: +2.2% Native American: -3.9% (The smallest population of students, not statistically relevant.) Pacific Islander: -0.5% White: +0.1% Decline to State: -0.24% Summary of differences: As a whole, the trend in success rates for the larger populations of targeted ethnic groups is slightly better than the overall College population in the past four years.

2. Do the data indicate a gap in course success for any of the ethnic groups as compared to other groups?

- [ ] yes
- [x] no

If yes, describe the reasons for the gap in course success.

Answer:

I am assuming question 2 should read: Do the data indicate a gap in course success TRENDS for any of the ethnic groups as compared to other groups? The absolute gaps in course success (not trends) are discussed in section F.b. Most chemistry success trends are positive, with no significant differences between groups.

3. Do the data suggest that changes are necessary to improve program course success equality?

- ☐ yes
- ☑ no

If yes, describe the proposed actions for stabilizing/improving the course success by ethnicity.

Answer:

NA

Use this opportunity to provide feedback on the template or address a topic that was not previously discussed.

Answer:

Primarily: Most of the analysis with the corresponding rubric evaluation could have been generated by a computer and summarized. Also, 1) The rubric provided in pdf format was redundant 2) The rubrics should be in the TEMPLATE after each prompt. 3) The TEMPLATE should be available to all faculty, not just the writers. 4) Some of the TEMPLATE analysis was redundant. 5) Proposing ACTION PLANS this early in the review process is problematic. 6) The pdf file with the Dean's Feedback was challenging to follow. All feedback should be from a verbal discussion with the dean/reader. 7) Why 100 words?

This form is completed and ready for acceptance.