

Instructional Discipline Template

Instructional Discipline Template 2023

A. Program Information

**Program Mission Statement**

Please enter your mission statement here.

(DRAFT 1.0) Our mission is to help students learn mathematics and appreciate the role of math in their lives. We recognize that mathematics has been a barrier to student success and to address this we strive to create classes and structures that remove systemic, cultural, and personal barriers to college success.

B. Enrollment Trends

**Enrollment Variables and Trends**

Enrollment Trends						
Science Tech Engin & Math - Mathematics-FD						
	2018-19	2019-20	2020-21	2021-22	2022-23	5-yr %Inc
Unduplicated Headcount	5,356	5,399	5,062	4,319	4,111	-23.2%
Enrollment	9,161	8,692	8,092	6,711	6,314	-31.1%
Sections	251	254	240	211	197	-21.5%
WSCH	14,994	14,205	13,277	10,989	10,317	-31.2%
FTES (end of term)	991	938	879	726	682	-31.2%
FTEF (end of term)	26.7	27.3	25.0	22.7	19.5	-27.1%
Productivity (WSCH/FTEF)	561	521	531	485	529	-5.6%

**B.1 - FTES**

Goals: What is your program’s goal with respect to FTES?

The FTES goal for the program is around 800.

Observation & Inferences: What do you observe in the data above in relation to your goals? What do you want the college to understand about the FTES in your program?

We observe that the FTES has declined by about 30%.

1. Course offerings have decreased by about 20%
2. 2019/20 was the first year of AB705 and such we stopped offering any of our basic skills math classes.
3. 2020/21 was the pandemic year and also caused a decline in enrollment.

Action: What actions does your program plan to take in order to achieve your goals?

We continue to offer more classes as a whole and more on-campus classes.

Comparing F22-F23 a modest increase in the number of sections 4.8% has contributed to a modest increase in FTES of 4.7% (based on daily dashboard reports). If we continue with this trend, it is likely that we will increase our FTES as we add more sections.

We will also be working on a comprehensive retention plan. Most of our classes are sequence classes. Having a comprehensive retention plan can also help with persistence and enable more students to continue through the sequence.

Needs: What does your program need to execute this action plan?

We will request an increase in the budget for our Part Time instruction. During the last two years, we have actively offered fewer sections of our high enrolled classes (such as Math 10, 1A) due to limitations to the Part-Time instructional budget. But the trends are pointing to an increase in demand. Adding more sections will enable us to increase our enrollment and FTES.

## B.2 - Sections

Goals: What is your program's goal with respect to sections?

The section number goal for the department is around 225.

Observation & Inferences: What do you observe in the data above in relation to your goals? What do you want the college to understand about the sections in your program?

Due to cuts in the PT instructional budget we had to make reductions in the overall course offerings. We missed out on enrollment because students wanted more courses to be offered.

Action: What actions does your program plan to take in order to achieve your goals?

As mentioned in our plan for FTES growth, the department will work on a comprehensive retention strategy. We have also added additional options for students needing to complete their Math requirement. These include new transfer level classes, which are also in the GE patterns, such as Quantitative Reasoning and Financial Literacy. We intend promoting these as alternate options for non-STEM majors.

Needs: What does your program need to execute this action plan?

The department is fortunate to receive funding for retreats through the Basic Skills funds. We hope to have continued access to these funds to support our retreats which provides a space for the entire department including both FT and PT faculty to work on the comprehensive retention plan. In addition we will be working with Counseling and Marketing to promote our new class offerings.

## B.3 - Productivity

Goals: What is your program's goal with respect to productivity?

The productivity goal for the department is around 500.

Observation & Inferences: What do you observe in the data above in relation to your goals? What do you want the college to understand about the productivity in your program?

Other than AY 2021-22, the department's productivity has been well above 500, which is higher than the college target. This has been possible due to the 40-person seat count for most of our classes, which ensures a productivity of 600 when the class is fully enrolled.

Action: What actions does your program plan to take in order to achieve your goals?

The department is subject to the regulatory impact of laws such as AB 705 and 1705. While the laws are aligned with the department's goals of providing equitable access to transfer level classes, we need to ensure students in those classes are also successful. Department faculty have been actively engaging in various professional development activities related to pedagogy, assessments, grading etc. The laws have placed an increased demand on faculty to be more creative with their teaching methodologies and provide and build individualized support systems for students. Due to these reasons, large class sizes are increasingly proving to be unsustainable. The department plans to renegotiate the class sizes from 40 to 35. This will still continue to ensure

productivity numbers well above 500. But also provide an opportunity for faculty to engage in more meaningful way with their students.

Needs: What does your program need to execute this action plan?

The department will work with De Anza Math department and Faculty Association to renegotiate the seat counts for the classes.

### C. Enrollment by Student Demographics

#### Enrollment Distribution

Enr Distribution by Student Demographics  
Science Tech Engin & Math - Mathematics-FD

##### Student Headcounts by Gender

	2018-19		2019-20		2020-21		2021-22		2022-23	
	Enr	Percent	Enr	Percent	Enr	Percent	Enr	Percent	Enr	Percent
Female	4,010	44%	3,899	45%	3,667	45%	2,929	44%	2,591	41%
Male	5,074	55%	4,695	54%	4,314	53%	3,657	54%	3,578	57%
Non-Binary	0	0%	7	0%	3	0%	0	0%	0	0%
Unknown gender	77	1%	91	1%	108	1%	125	2%	145	2%
<b>Total</b>	<b>9,161</b>	<b>100%</b>	<b>8,692</b>	<b>100%</b>	<b>8,092</b>	<b>100%</b>	<b>6,711</b>	<b>100%</b>	<b>6,314</b>	<b>100%</b>

##### Student Headcounts by Race/Ethnicity

	2018-19		2019-20		2020-21		2021-22		2022-23	
	Enr	Percent	Enr	Percent	Enr	Percent	Enr	Percent	Enr	Percent
Asian	3,404	37%	3,257	37%	2,724	34%	2,266	34%	2,143	34%
Black	362	4%	326	4%	328	4%	265	4%	245	4%
Filipinx	440	5%	369	4%	368	5%	277	4%	219	3%
Latinx	2,423	26%	2,289	26%	2,146	27%	1,757	26%	1,643	26%
Native American	17	0%	31	0%	39	0%	19	0%	30	0%
Pacific Islander	113	1%	117	1%	101	1%	77	1%	71	1%
Unknown ethnicity	139	2%	295	3%	317	4%	334	5%	356	6%
White	2,263	25%	2,008	23%	2,069	26%	1,716	26%	1,607	25%
<b>Total</b>	<b>9,161</b>	<b>100%</b>	<b>8,692</b>	<b>100%</b>	<b>8,092</b>	<b>100%</b>	<b>6,711</b>	<b>100%</b>	<b>6,314</b>	<b>100%</b>

#### C.1 - Enrollment by Gender

Goals: What is your program’s goal with respect to enrollment by gender?

The department's goals are to be more aligned with the college's gender demographics which is 53% female and 43% male.

Observation & Inferences: What do you observe in the data above in relation to your goals? What do you want the college to understand about enrollment by gender in your program?

We find that the percentage of male students is more than female students. The department is under the intended gender demographic ratio.

Action: What actions does your program plan to take in order to achieve your goals?

The department needs to carefully study why female students are enrolling at a smaller number than male students. When developing the comprehensive retention plan, the department will be attentive to this fact and ensure that the plan takes into account this gender imbalance.

Needs: What does your program need to execute this action plan?

The department needs to work with Institutional Research & Planning to understand the reasons why more female students are not enrolling in Math classes.

### C.2 - Enrollment by Ethnicity

Goals: What is your program's goal with respect to enrollment by ethnicity?

The program's goals are to closely mirror the college's ethnic demographic which is:

- Asian: **27%**
- Black: **5%**
- Filipinx: **4%**
- Latinx: **29%**
- Native American: **<1%**
- Pacific Islander: **1%**
- White: **27%**

Observation & Inferences: What do you observe in the data above in relation to your goals? What do you want the college to understand about enrollment by ethnicity in your program?

The department's ethnic demographic mirrors the college's ethnic demographic. What might be hidden in these percentages is the demographics by course.

Action: What actions does your program plan to take in order to achieve your goals?

While there might not be a need for an action plan on the data presented here, the hypothesis is that we need more disproportionately impacted students in STEM prep math classes.

Needs: What does your program need to execute this action plan?

Nothing at this time.

### D. Overall Student Course Success

#### Student Population Areas of Focus

Limits: Course Credit Status Credit

Course Success  
Science Tech Engin & Math - Mathematics-FD

	2018-19		2019-20		2020-21		2021-22		2022-23	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
Success	6,010	66%	6,184	71%	5,860	72%	4,790	71%	4,856	77%
Non Success	1,982	22%	1,396	16%	1,091	13%	967	14%	821	13%
Withdrew	1,169	13%	1,112	13%	1,141	14%	954	14%	637	10%
Total	9,161	100%	8,692	100%	8,092	100%	6,711	100%	6,314	100%

### Course Success for Black, Latinx, and Filipinx Students

	2018-19		2019-20		2020-21		2021-22		2022-23	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
Success	1,703	53%	1,752	59%	1,738	61%	1,197	59%	1,271	68%
Non Success	957	30%	726	24%	573	20%	452	22%	358	19%
Withdrew	565	18%	506	17%	531	19%	385	19%	233	13%
Total	3,225	100%	2,984	100%	2,842	100%	2,034	100%	1,862	100%

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

	2018-19		2019-20		2020-21		2021-22		2022-23	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
Success	4,307	73%	4,432	78%	4,122	79%	3,593	77%	3,585	81%
Non Success	1,025	17%	670	12%	518	10%	515	11%	463	10%
Withdrew	604	10%	606	11%	610	12%	569	12%	404	9%
Total	5,936	100%	5,708	100%	5,250	100%	4,677	100%	4,452	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.

#### D.1 - Student Course Success

Goals: What is your program’s goal with respect to student course success?

The department's goals are that students will success at a 100% rate.

Observation & Inferences: What do you observe in the data in relation to your goals? What do you want the college to understand about the student course success in your program?

While the 2022-23 academic year shows a large increase in the success percentage at 77%, in general the department's success percentage has been around 70%. We are unable to attribute the increased success of 77% to any pro-active measures that were placed into effect and wonder if this data point might be an outlier. But looking at the four years prior to that, the 70% average success percentage is well below our goal of a 100% success.

Action: What actions does your program plan to take in order to achieve your goals?

As mentioned in other sections, the department will work on a comprehensive retention plan to improve overall course success.

Needs: What does your program need to execute this action plan?

The department is fortunate to receive funding for retreats through the Basic Skills funds. We hope to have continued access to these funds to support our retreats which provides a space for the entire department including both FT and PT faculty to work on the comprehensive retention plan.

#### D.2 - Course Success by Modality

Click the link below to view the program's Course Success by Modality data

[https://foothilldeanza-my.sharepoint.com/:f/g/personal/10771097\\_fhda\\_edu/EvAWIA883IZEvnoRGBXt4RkBzT8NbCHSRANRq3TVkHj\\_TA?e=LjaKXc](https://foothilldeanza-my.sharepoint.com/:f/g/personal/10771097_fhda_edu/EvAWIA883IZEvnoRGBXt4RkBzT8NbCHSRANRq3TVkHj_TA?e=LjaKXc)

Goals: What is your program's goal with respect to course success by modality?

The program's goals are to have a 100% success in all modalities.

Observation & Inferences: What do you observe in the data in relation to your goals? What do you want the college to understand about course success by modality in your program?

The data is unclear. We have the same success rates for asynchronous online courses as we do for in-person classes.

Action: What actions does your program plan to take in order to achieve your goals?

As mentioned before, the department will be working on a comprehensive retention plan. The plan will intentionally focus on the different modalities offered by the department.

Needs: What does your program need to execute this action plan?

The department requests the college to provide professional development opportunities (for both PT and FT faculty) teaching classes in different modalities aimed towards pedagogy, assessments, instructional materials, grading, and identifying student needs.

The department also requests a dedicated Counselor with expertise in STEM counseling and Math education to work closely with the faculty and receive referrals from faculty.

## E. Disproportionate Impact

Click the link below to view the program's Disproportionate Impact data

[https://foothilldeanza-my.sharepoint.com/:f/g/personal/10771097\\_fhda\\_edu/EvAWIA883IZEvnoRGBXt4RkBzT8NbCHSRANRq3TVkHj\\_TA?e=LjaKXc](https://foothilldeanza-my.sharepoint.com/:f/g/personal/10771097_fhda_edu/EvAWIA883IZEvnoRGBXt4RkBzT8NbCHSRANRq3TVkHj_TA?e=LjaKXc)

Identify the groups that are experiencing a disproportionate impact in the most recent year (please provide the percentage point gap and the number of additional successes needed to erase the percentage point gap for each group).

Latinx, foster youth, disabled students, and low-income students are experiencing disproportionate impact.

Goals: What is your program's goal with respect to disproportionate impact?

The program's goals are that no student group experiences a disproportionate impact.

Observation & Inferences: What do you observe in the data in relation to your goals? What do you want the college to understand about the disproportionate impact in your program?

As mentioned above Latinx, foster youth, disabled students, and low-income students are experiencing disproportionate impact. Several other groups including Black students are negatively impacted.

Action: What actions does your program plan to take in order to achieve your goals?

In light of AB1705 we will be making support classes for our Calculus series with a multipronged approach. We are discussing embedded tutors, no-cost textbooks, and different ways of handling assessments for abled and disabled students. We need to discuss these methods with the experts in the DRC and those in EOPS for foster youth. We also want to expand our MPS program as it has been proven to provide access to math success for

students who would otherwise not have passed. To do this we need to keep the MPS counselor we had last year, but transferred to De Anza and add another counselor. We understand that requesting a counselor (new hire) is the purview of the counseling department but we want to express the value and the need for 2 in the math department.

Needs: What does your program need to execute this action plan?

We need the process for getting help in the classroom to be more streamlined such as qualifying students for work study by administration before the start of the quarter. Instructors need time to investigate no-cost materials so that the default is not a \$200 textbook. To address how to assess students, professional development will play a key role in understanding its disproportionate impact on students. We would like to engage EOPS, DRC and MESA to support more student groups and reduce the barriers to success. All of these needs require time together as a department. We have now instituted an all-day retreat 3 times a year required for all full-time faculty and optional and paid for all part-time faculty. As mentioned above we need 2 MPS counselors to keep the MPS program running and thriving.

## F. Regular and Substantive Interaction

If your program has any courses that are approved for distance education, describe how regular and substantive interaction was incorporated in those courses. (List each course)

We believe that RSI is going through other processes on campus right now, however, we can easily document our RSI with our students in all of our distance ed classes.

## G. Summary

Use this opportunity to reflect on your discussions above and include any closing thoughts.

The math department will create a comprehensive retention plan focusing on Issue 9 in the Strategic Vision for Equity. While many of the action items from this program review will be in that retention plan we want to focus on a few that could change the disproportionate impact on students of color. As we create extensive supports for our students in light of AB 1705, we need equal support from administration to smooth the way for some of the more tedious campus processes that can bury a great program. We want to increase the budget to allow for more sections to meet student demand and while we are not petitioning for a new math hire we do want to increase our MPS program which requires counseling staff. In order to do all of these innovations we need to reduce the class size and work with FA and De Anza to accomplish this in the presence of additional demands from AB1705. We are thankful for the retreats that are paid for so that the math department can have time together to hone in on the change that needs to be made to work toward that 100% success rate for all students regardless of race.

This form is not yet ready.