Program Review - Overall Report

2024 - 2027

Instructional: Mathematics

Overall Trends

Please add any relevant documents here.

What overall trends do you see in success, retention, program of study, educational planning, and awards over the past 3 or more years?
Overall,
From 2020 to 2022 school years, students in Mathematics courses have been about the same from 69.1% to 69.3% in success and increasing from 83.8% to 85.5% in retention over the past 3 years.

Academic Year	2020-21					2021-22					2022-23				
Gender	nrolled	Success	Success Rate	DI	Close Gap	Enrolled	Success	Success Rate	DI	Close Gap	Enrolled	Success	Success Rate	DI	Close Gap
Female	**3,520**	**2,479**	**70.4%**	**0**		**2,398**	**1,664**	**69.4%**	**0**		**2,477**	**1,709**	**69.0%**	**0**	**16**
African American	201	137	68.2%	0	2	144	98	68.1%	0	2	145	92	63.4%	0	9
Asian	362	310	85.6%	0		296	246	83.1%	0		332	275	82.8%	0	
Hispanic	2,165	1,456	67.3%	1	58	1,435	924	64.4%	1	91	1,505	967	64.3%	1	106
Native American	15	11	73.3%	0		Masked Data			0		Masked Data			0	
Pacific Islander	Masked Data			0		10	8	80.0%	0		Masked Data			0	
White	650	486	74.8%	0		409	320	78.2%	0		395	310	78.5%	0	
Two or More	102	69	67.6%	0	2	90	57	63.3%	0	6	79	51	64.6%	0	4
Unknown	19	10	52.6%	0	4	Masked Data			0		16	9	56.3%	0	3
Male	**3,144**	**2,114**	**67.2%**	**1**	**108**	**2,441**	**1,666**	**68.3%**	**0**	**29**	**2,985**	**2,083**	**69.8%**	**0**	
African American	162	82	50.6%	1	31	126	75	59.5%	1	13	139	83	59.7%	1	14
Asian	445	353	79.3%	0		353	272	77.1%	0		490	386	78.8%	0	
Hispanic	1,731	1,125	65.0%	1	95	1,398	902	64.5%	1	85	1,583	1,039	65.6%	1	83
Native American	Masked Data			0		Masked Data			0		Masked Data			0	
Pacific Islander	11	6	54.5%	0	2	Masked Data			0		12	11	91.7%	0	
White	671	471	70.2%	0		450	339	75.3%	0		551	410	74.4%	0	
Two or More	99	63	63.6%	0	6	70	51	72.9%	0		100	74	74.0%	0	
Unknown	23	12	52.2%	0	4	33	18	54.5%	0	5	102	74	72.5%	0	
Unknown	**47**	**41**	**87.2%**	**0**		**36**	**26**	**72.2%**	**0**		**58**	**35**	**60.3%**	**0**	**6**
African American	Masked Data			0		Masked Data			0		Masked Data			0	
Asian	Masked Data			0		Masked Data			0		Masked Data			0	
Hispanic	27	23	85.2%	0		12	9	75.0%	0		25	17	68.0%	0	1
Native American				0					0					0	
[illegible]	[illegible]			0		[illegible]			0					0	
Total	**6,711**	**4,634**	**69.1%**	**0**		**4,875**	**3,356**	**68.8%**	**0**		**5,520**	**3,827**	**69.3%**	**0**	

The students in Mathematics courses have increased in their rate of receiving less than passing (DF) grades during this time.

Success in SLAM Mathematics courses, MAT-12, MAT-5, MAT-25, MAT-11,
FTF,
From 2020 to 2022 school years, students in SLAM Mathematics courses have been about the same from 58.2% to 73.1% in success and increasing from 77.1% to 89.0% in retention over the past 3 years.
The students in Mathematics courses have increased in their rate of receiving less than passing (DF) grades during this time.
ONLINE,
From 2020 to 2022 school years, students in SLAM Mathematics courses have been about the same from 68.3% to 68.5% in success and decreasing from 84.6% to 83.2% in retention over the past 3 years.
The students in Mathematics courses have decreased in their rate of receiving less than passing (DF) grades during this time.

Success in STEM Mathematics courses, MAT-9, MAT-36, MAT-1A, MAT-1B, MAT-1C, MAT-2 , MAT-3,
From 2020 to 2022 school years, students in STEM Mathematics courses have been decreasing from 75.5% to 65.4% in success and decreasing from 86.8% to 84.9% in retention over the past 3 years.
The students in Mathematics courses have decreased in their rate of receiving less than passing (DF) grades during this time.

Program of study, Mathematics
From 2020 to 2022 there was no significant change. But we still need to grow 10% to get back up to pre-Covid levels.

Data Review

Gender by Ethnicity	2019-20	2020-21	2021-22	2022-23
Female	**83**	**78**	**63**	**60**
African-American	7	1	1	2
Asian	7	13	8	8
Hispanic	46	51	40	40
Two or More		1	3	4
Unreported	3			1
White	20	12	11	5
Male	**134**	**122**	**120**	**138**
African-American	2	4	7	4
Asian	15	13	15	20
Hispanic	90	75	68	83
Pacific Islander	1			1
Two or More	1	3	1	5
Unreported	1	1	2	2
White	24	26	27	23
Total	**217**	**200**	**183**	**198**

Educational planning
Percentage of students with a comprehensive ed plan had a significant decline since 2019. This could be attributed to the COVID-19 shut downs.

Student Educational Pan	2019-20	2020-21	2021-22	2022-23	**Total**
Abbreviated and Comprehensive Ed Plan	5.53%	4.50%	3.83%	4.55%	**4.64%**
Abbreviated Ed Plan	2.30%	5.50%	3.83%	3.54%	**3.76%**
Comprehensive Ed Plan	35.02%	26.00%	26.78%	18.18%	**26.69%**
No Ed Plan	57.14%	64.00%	65.57%	73.74%	**64.91%**

Degrees
Decrease from 46 in 2020 to 31 in 2022. It will be worthwhile monitering this as these numbers might naturally creep back to the peak of 48 students as we may not have added many new math majors from 2020 to 2022.

Data Review

Degrees

Gender x Ethnicity	18-19	19-20	20-21	21-22	22-23
Female	**8**	**16**	**12**	**13**	**11**
Asian	1	1	1	1	3
Black or African American		1		1	
Hispanic/Latino	4	10	8	10	5
Two or More Races			1		
White	3	4	2	1	3
Male	**20**	**27**	**34**	**30**	**19**
Asian	4	6	6	7	2
Black or African American	1				
Hispanic/Latino	9	14	22	20	11
Native Hawaiian or Pacific Islander				1	
White	6	7	6	2	6
Unreported					**1**
Asian					1
Total	**28**	**43**	**46**	**43**	**31**

Disaggregated Student Subgroups

Look at the disaggregated student subgroups in success, retention, program of study, educational planning, and awards for your area. Are there any equity gaps that you will address in the next 3 years?
Retention and Success
In terms of student subgroups in Mathematics courses, from 2020 to 2022, Hispanic students and male African American students are showing gaps in success that are concerning. And Hispanic students (from 2020 to 2022) and African American (2022 only) students are showing gaps in retention that are concerning.

Success gaps, Female Hispanic
2020-2021 67.3% compared to 70.4% overall. 58 close gap.
2022-2023 64.3% compared to 69.0% overall. 106 close gap.
Success gaps, Male Hispanic
2020-2021 65.0% compared to 67.2% overall. 95 close gap.
2022-2023 65.6% compared to 69.8% overall. 83 close gap.
Success gaps, Male African American
2020-2021 50.6.0% compared to 67.2% overall. 31 close gap.
2022-2023 59.7.0% compared to 69.8% overall. 14 close gap.

Data Review

Academic Year	2020-21					2021-22					2022-23				
Gender	Enrolled	Retained	Retention Rate	DI	Close Gap	Enrolled	Retained	Retention Rate	DI	Close Gap	Enrolled	Retained	Retention Rate	DI	Close Gap
Female	**3,520**	**2,967**	**84.3%**	**0**		**2,398**	**2,026**	**84.5%**	**0**		**2,477**	**2,105**	**85.0%**	**0**	**25**
African American	201	172	85.6%	0		144	121	84.0%	0	1	145	114	78.6%	1	11
Asian	362	339	93.6%	0		296	272	91.9%	0		332	310	93.4%	0	
Hispanic	2,165	1,780	82.2%	1	50	1,435	1,182	82.4%	1	37	1,505	1,247	82.9%	1	56
Native American	15	14	93.3%	0		Masked Data			0		Masked Data			0	
Pacific Islander	Masked Data			0		10	9	90.0%	0		Masked Data			0	
White	650	565	86.9%	0		409	359	87.8%	0		395	352	89.1%	0	
Two or More	102	80	78.4%	0	6	90	72	80.0%	0	4	79	65	82.3%	0	3
Unknown	19	15	78.9%	0	1	Masked Data			0		16	12	75.0%	0	2
Male	**3,144**	**2,612**	**83.1%**	**0**	**41**	**2,441**	**2,047**	**83.9%**	**0**	**16**	**2,985**	**2,566**	**86.0%**	**0**	
African American	162	134	82.7%	0	2	126	101	80.2%	0	6	139	117	84.2%	0	2
Asian	445	396	89.0%	0		353	310	87.8%	0		490	441	90.0%	0	
Hispanic	1,731	1,400	80.9%	1	68	1,398	1,145	81.9%	1	45	1,583	1,327	83.8%	1	38
Native American	Masked Data			0		Masked Data			0		Masked Data			0	
Pacific Islander	11	9	81.8%	0	1	Masked Data			0		12	12	100.0%	0	
White	671	576	85.8%	0		450	394	87.6%	0		551	482	87.5%	0	
Two or More	99	75	75.8%	0	9	70	59	84.3%	0		100	90	90.0%	0	
Unknown	23	20	87.0%	0		33	28	84.8%	0		102	89	87.3%	0	
Unknown	**47**	**42**	**89.4%**	**0**		**36**	**31**	**86.1%**	**0**		**58**	**50**	**86.2%**	**0**	
African American	Masked Data			0		Masked Data			0		Masked Data			0	
Asian	Masked Data			0		Masked Data			0		Masked Data			0	
Hispanic	27	24	88.9%	0		12	10	83.3%	0	1	25	22	88.0%	0	
Native American				0					0					0	
Pacific Islander	Masked Data			0		Masked Data			0					0	
White	12	11	91.7%	0		12	12	100.0%	0		18	14	77.8%	0	2
Two or More	Masked Data			0		Masked Data			0		Masked Data			0	
Unknown	Masked Data			0		Masked Data			0		Masked Data			0	
Total	**6,711**	**5,621**	**83.8%**	**0**		**4,875**	**4,104**	**84.2%**	**0**		**5,520**	**4,721**	**85.5%**	**0**	

Academic Year	2020-21					2021-22					2022-23				
Gender	nrolled	Success	Success Rate	DI	Close Gap	Enrolled	Success	Success Rate	DI	Close Gap	Enrolled	Success	Success Rate	DI	Close Gap
Female	**3,520**	**2,479**	**70.4%**	**0**		**2,398**	**1,664**	**69.4%**	**0**		**2,477**	**1,709**	**69.0%**	**0**	**16**
African American	201	137	68.2%	0	2	144	98	68.1%	0	2	145	92	63.4%	0	9
Asian	362	310	85.6%	0		296	246	83.1%	0		332	275	82.8%	0	
Hispanic	2,165	1,456	67.3%	1	58	1,435	924	64.4%	1	91	1,505	967	64.3%	1	106
Native American	15	11	73.3%	0		Masked Data			0		Masked Data			0	
Pacific Islander	Masked Data			0		10	8	80.0%	0		Masked Data			0	
White	650	486	74.8%	0		409	320	78.2%	0		395	310	78.5%	0	
Two or More	102	69	67.6%	0	2	90	57	63.3%	0	6	79	51	64.6%	0	4
Unknown	19	10	52.6%	0	4	Masked Data			0		16	9	56.3%	0	3
Male	**3,144**	**2,114**	**67.2%**	**1**	**108**	**2,441**	**1,666**	**68.3%**	**0**	**29**	**2,985**	**2,083**	**69.8%**	**0**	
African American	162	82	50.6%	1	31	126	75	59.5%	1	13	139	83	59.7%	1	14
Asian	445	353	79.3%	0		353	272	77.1%	0		490	386	78.8%	0	
Hispanic	1,731	1,125	65.0%	1	95	1,398	902	64.5%	1	85	1,583	1,039	65.6%	1	83
Native American	Masked Data			0		Masked Data			0		Masked Data			0	
Pacific Islander	11	6	54.5%	0	2	Masked Data			0		12	11	91.7%	0	
White	671	471	70.2%	0		450	339	75.3%	0		551	410	74.4%	0	
Two or More	99	63	63.6%	0	6	70	51	72.9%	0		100	74	74.0%	0	
Unknown	23	12	52.2%	0	4	33	18	54.5%	0	5	102	74	72.5%	0	
Unknown	**47**	**41**	**87.2%**	**0**		**36**	**26**	**72.2%**	**0**		**58**	**35**	**60.3%**	**0**	**6**
African American	Masked Data			0		Masked Data			0		Masked Data			0	
Asian	Masked Data			0		Masked Data			0		Masked Data			0	
Hispanic	27	23	85.2%	0		12	9	75.0%	0		25	17	68.0%	0	1
Native American				0					0					0	
[illegible]	[illegible]			0		[illegible]			0					0	
Total	**6,711**	**4,634**	**69.1%**	**0**		**4,875**	**3,356**	**68.8%**	**0**		**5,520**	**3,827**	**69.3%**	**0**	

SLAM

In terms of student subgroups in SLAM Mathematics courses, from 2020 to 2022, Hispanic students and male African American students are showing gaps in success that are concerning.

Success gaps, Female Hispanic

2021-2022 62.3% compared to 64.4% overall. 39 close gap.

2022-2023 64.9% compared to 70.1% overall. 77 close gap.

Success gaps, Female African American

2022-2023 59.8% compared to 70.1% overall. 11 close gap.

Success gaps, Male Hispanic

2020-2021 58.0% compared to 64.4% overall. 46 close gap.

2022-2023 66.8% compared to 70.1% overall. 26 close gap.

Success gaps, Male African American

2020-2021 45.2% compared to 64.4% overall. 15 close gap.

STEM

In terms of student subgroups in STEM Mathematics courses, from 2020 to 2022, Hispanic students and male African American students are showing gaps in success that are concerning.

Success gaps, Female Hispanic

Data Review

2021-2022 61.1% compared to 66.9% overall. 30 close gap.
2022-2023 56.1% compared to 65.4% overall. 40 close gap.

Success gaps, Male Hispanic

2020-2021 70.7% compared to 75.7% overall. 59 close gap.
2022-2023 62.0% compared to 65.4% overall. 39 close gap.

Success gaps, Male African American

2022-2023 53.3% compared to 65.4% overall. 6 close gap.

Program of Study and Educational Planning

The number of students who have declared a major in Mathematics went from 200 to 198 in 3 years. However we had 217 prior to moving to remote learning in SP 2020. If only considering the last 3 years, our growth has remained flat.

This lower declared math majors may be an accounting issue as only 18.18% of our math majors in 2022-2023 met with a counselor to create an comprehensive ed plan compare with 35% in 2019-2020.

Gender by Ethnicity	2019-20	2020-21	2021-22	2022-23
Female	**83**	**78**	**63**	**60**
African-American	7	1	1	2
Asian	7	13	8	8
Hispanic	46	51	40	40
Two or More		1	3	4
Unreported	3			1
White	20	12	11	5
Male	**134**	**122**	**120**	**138**
African-American	2	4	7	4
Asian	15	13	15	20
Hispanic	90	75	68	83
Pacific Islander	1			1
Two or More	1	3	1	5
Unreported	1	1	2	2
White	24	26	27	23
Total	**217**	**200**	**183**	**198**

Data Review

Student Educational Pan	2019-20	2020-21	2021-22	2022-23	**Total**
Abbreviated and Comprehensive Ed Plan	5.53%	4.50%	3.83%	4.55%	**4.64%**
Abbreviated Ed Plan	2.30%	5.50%	3.83%	3.54%	**3.76%**
Comprehensive Ed Plan	35.02%	26.00%	26.78%	18.18%	**26.69%**
No Ed Plan	57.14%	64.00%	65.57%	73.74%	**64.91%**

Degrees
The lack of growth would be concernig if not for the school shut downs. This data could represent the affects school clusures had on STEM students.

Degrees

Gender x Ethnicity	18-19	19-20	20-21	21-22	22-23
Female	**8**	**16**	**12**	**13**	**11**
Asian	1	1	1	1	3
Black or African American		1		1	
Hispanic/Latino	4	10	8	10	5
Two or More Races			1		
White	3	4	2	1	3
Male	**20**	**27**	**34**	**30**	**19**
Asian	4	6	6	7	2
Black or African American	1				
Hispanic/Latino	9	14	22	20	11
Native Hawaiian or Pacific Islander				1	
White	6	7	6	2	6
Unreported					**1**
Asian					1
Total	**28**	**43**	**46**	**43**	**31**

If there are any concerning trends over the past 3 or more years, or if equity gaps exist, what is your action plan to address them?
Success and retention.
We have faculty involved in grants and communities of practice researching and implementing stategies for improved success. At this point, it has been difficult to rely on the data as to determine if the success and/or retention rates are improving due to the changes. As the college remains open, we hope to study the affects of our teaching stategies. If they are proven effective, they will be shared with the department.
For now, we will continue to work together and implement stategies that have worked for other community college math faculty.
Program of Study and Educational Planning and Degrees awarded.
We hope the decline over 2019 to 2022 has already has begun correcting itself. We will have more data to consider once we have access to the 2023-2024. This will allow us to determine if we have rebounded or are still rebounding.

Closing thoughts
Math underwent major changes in 2019-2020 due to AB705 implementation. These changes were effective for SLAM courses.
On the STEM side, we created MAT-9 and MAT-36 to allow students a pathway to get to MAT-1A (Calculus). We are only in our second year offering these classes, but AB1705 may restrict us from continue this pathway.
Beginning Summer 2025 we will likely see another round of major changes due to AB-1705. We may see our math offerings on the STEM side go from a two-course path to Calculus to having students begin with Calculus and/or Calculus with Calculus support course.

Data Review

Please add any relevant documents here.

Program/Unit Goals

Improving success rates in SLAM courses

Program/Unit Goal
SLAM success rates

Goal Cycle
2024 - 2027

What are you doing now in support of this goal?
We offer all of our SLAM courses with a support option.

We have faculty communities of practice working on how we can best serve are students in these classes.

We have faculty attending workshops to learn from our state-wide math colleagues.

We offered a workshop to inform and support our Stats faculty with strategies that work to improve student success.

What are your plans (3-year) regarding this goal?
We would like to continue to grow in our practices that support student success and retention.

Continuing to meet with faculty regularly to share lessons and/or stategies that work.

Continue to send faculty to math specific professional development where we can learn and share what we have learned with other math faculty in our state.

Offer yearly professional development for our current math faculty to learn about teaching strategies, etc.

Please add any relevant documents here.

Mapping
Educational Master Plan (2020-2025): *undefined*

- **2025 Objective 2.1 - KPI 4 (Academic Affairs):** Increase number of degrees completed by 15% annually (✔)
- **2025 Objective 2.2 - KPI 5 (Academic Affairs):** Increase number of certificates completely by 15% annually (✔)
- **2025 Objective 3.1 - KPI 8 (Student Services):** Reduce the equity gap for African American students by 40% (✔)
- **2025 Objective 3.2 - KPI 9 (Student Services):** Reduce the equity gap for Latinx students by 40% (✔)
- **2030 Goal 4: Professional Development:** Implement Professional Development around Guided Pathways and equity framework; foster a culture of ongoing improvement. (✔)

Improving success rates in STEM courses

Program/Unit Goal
Increasing STEM success rates

Goal Cycle
2024 - 2027

What are you doing now in support of this goal?
We created a new two-course pathway to Calculus that was implemented FA 22.

The new path consisted of taking a new course, MAT-9, and then taking MAT-36 for entry into MAT-1A (Calculus).

We offer a support class for MAT-9 that can be taken concurrently that offers remediation.

We have faculty communities of practice working on how we can best serve are students in these classes.

We have faculty attending workshops to learn from our state-wide math colleagues.

We offered a workshop to inform and support our Stats faculty with strategies that work to improve student success.

What are your plans (3-year) regarding this goal?
We would like to continue to grow in our practices that support student success and retention.

Continuing to meet with faculty regularly to share lessons and/or stategies that work.

Continue to send faculty to math specific professional development where we can learn and share what we have learned with other math faculty in our state.

Program/Unit Goals

Offer yearly professional development for our current math faculty to learn about teaching strategies, etc.

Please add any relevant documents here.

Mapping

Educational Master Plan (2020-2025): *undefined*

- **2025 Objective 2.1 - KPI 4 (Academic Affairs):** Increase number of degrees completed by 15% annually (✔)
- **2025 Objective 2.2 - KPI 5 (Academic Affairs):** Increase number of certificates completely by 15% annually (✔)
- **2025 Objective 3.1 - KPI 8 (Student Services):** Reduce the equity gap for African American students by 40% (✔)
- **2025 Objective 3.2 - KPI 9 (Student Services):** Reduce the equity gap for Latinx students by 40% (✔)
- **2030 Goal 4: Professional Development:** Implement Professional Development around Guided Pathways and equity framework; foster a culture of ongoing improvement. (✔)

Increase program awareness

Program/Unit Goal

Recruit students by offering more dual enrollment options

Goal Cycle

What are you doing now in support of this goal?

We currently offer MAT-1A at two of our local high schools. We have increased offerings from one to two sections.

We also offer MAT-1B for those students who successfully complete MAT-1A. We typically offer two sections.

We also offer SLAM courses, one section of MAT-12 and one section of MAT-25.

What are your plans (3-year) regarding this goal?

Continue to offer the current amount of sections are our partnering high schools.

Maximize the amount of sections we can offer with our current partners.

Continue to look for additional high schools to partner with that are local to our college.

Please add any relevant documents here.

Mapping

Educational Master Plan (2020-2025): *undefined*

- **2025 Objective 6.1 (Academic Affairs):** Establish and expand relationships with regional educational institutions (✔)
- **2025 Objective 6.6 (Student Services):** Develop regional outreach and recruitment systems (✔)
- **2030 Goal 1: Access:** Expand college access by increasing both headcount and FTES (✔)

CRC course offerings

Program/Unit Goal

Continue to offer courses at the CRC

Goal Cycle

2024 - 2027

What are you doing now in support of this goal?

We currently offer the following courses with support:

MAT-12 and MAT-112

MAT-5 and MAT-105

Program/Unit Goals

MAT-9 and MAT-109

We increased our course offerings in FA 22. We offered two MAT-12/112 sections and one MAT-5/105 sectsions. SP 23 continued with offering the same schedule. We also added a SU MAT-12/112.

In FA 23, we offered that same schedule as FA 22 and SP 23.

In SP 24, we added a fourth class to the schedule by offering MAT-9/109 in the evening.

What are your plans (3-year) regarding this goal?

We are limited by what the CRC allows us to do, but we want to continue to offer three to four sections each term with one or two summer sections.

If growth is allowed, we will move forward with offering as many sections as we can support.

Please add any relevant documents here.

Mapping

Educational Master Plan (2020-2025): *undefined*

- **2025 Objective 6.4 (Academic Affairs):** Work toward reducing recidivism through incarcerated student education (✔)
- **2025 Objective 6.5 (Office of the President):** Position the college's image and reputation as a leading academic institution in the region (✔)

Professional development for faculty

Program/Unit Goal

Provide math specific growth opportunities for math faculty

Goal Cycle

What are you doing now in support of this goal?

We are offering communities of practice which our faculty may participate.

Stats workshop.

What are your plans (3-year) regarding this goal?

Continue to offer stats workshops for our faculty.

Resume offering workshops for our STEM teaching faculty. This is up utmost importance as we transition to AB1705 implementation begining July 1 2025.

Please add any relevant documents here.

Mapping

Educational Master Plan (2020-2025): *undefined*

- **2030 Goal 4: Professional Development:** Implement Professional Development around Guided Pathways and equity framework; foster a culture of ongoing improvement. (✔)

Curriculum

Are all your courses current (within four years)?
No

What percentage of your courses are out of date?
10% or less

If you have courses that are not current, are they in the curriculum process?
Yes

For out of date courses that are not already in progress of updating, what is your plan?
MAT-136 is being deleted. Should be deleted by the end of SP24.
MAT-42 is no longer offered due to AB705. This course needs to be deleted or repurposed for use as MAT-1A support as a result of new placements starting SU 25 due to AB1705.
MAT-32 is not taught by Mathematics faculty at Norco, but was updated 5/6/20. It is in the process of being updated and approved by SP 24.

Do you have proposals in progress for all the DE courses you intend to file?
Yes

Do you require help to get your courses up to date?
No

Please add any relevant documents here.

Credit for Prior Learning

Equity Related Professional Development Questions

1. Which equity-related professional development trainings have members of your area participated in to improve student learning, student support, and/or college support?
We had a group of 4 faculty participate in the Equity Accelerator workshop series. We also had faculty participation in the Puente 2024 Math Justice Community of practice. We have also ran our own community of practice for math faculty focused on teaching STEM and SLAM courses. We have also ran a one day workshop on teaching statistics with an equity lens.

2. What knowledge or skills/techniques have members in your area implemented from these trainings and what changes have you seen?
Focus on active learning, groupwork, culturally relevant pedagogy, and new assessment methods. Statistically, these are the practices that have the most success at making an impact in many statewide studies.

3. What additional equity-related professional development/trainings do you seek to better support your area?
Future community of practice workshops to help support our faculty as we fully implement AB1705. A one day workshop on teaching MAT-1A with support after AB1705.

Please add any relevant documents here.

Assessment

Basic overview, all math CORs

Date
03/04/2024

Observation

What did you notice?
We started our cycle for assess during FA 22 and expect to have all SLOs initially assessed by SP 24 or FA 25. This will be followed by reassessments for the SLOs that did not meet the benchmark.

Course(s)
MAT-5, MAT-105, MAT-12, MAT-112, MAT-25, MAT-125, MAT-9, MAT-109, MAT-36, MAT-136, MAT-10, MAT-1A, MAT-1B, MAT-1C, MAT-2, MAT-3

SLO(s)
1, 2, 3, 4, and any others

Discussion/Analysis
This is a work in progress with most faculty opting to assess all SLOs during SP 24, rather than spreading over the FA-22 to SP-24 cycle. Follow-up cycle begins FA 24. Cycle will repeat FA 25.

Please paste any relevant screenshots here.
MAT-5, SLO-1, 2, 3, completed cycle.

MAT-12 in progress, to be completed SP 24

MAT-42 has not been offered

MAT-32 has been taught by Philosophy.

Please add any relevant documents here.

Resource Requests

Statcrunch access for dual enrollment MAT-12 students

Resource Year
2024 - 2027
What resources do we already have?
Yes, we have this resource for FA 22 to SP 23, but it requires 6-month or year-long subscription.
What resources do you need?
Renewal of subscription.
$ Amount Requested
200
Resource Type
ITEM: Equipment, Services, Software, Furniture
Please summarize how this request supports one or more EMP Goals, Equity goals, your program plans or goals, and/or is supported by outcomes assessment data.

This request for my area is Priority #:

Is this request
New
For Administrative Use Only
Funding Status
No Action-Insufficient funding
Notes

Council Ranking
1
2025-26 Council Ranking

Mapping
Instructional: Mathematics: *undefined*
- **Improving success rates in SLAM courses:** SLAM success rates (✔)

Hand-held white boards

Resource Year
2024 - 2027
What resources do we already have?
No
What resources do you need?
Class set of hand held white boards
$ Amount Requested
200
Resource Type
ITEM: Instructional Supplies
Please summarize how this request supports one or more EMP Goals, Equity goals, your program plans or goals, and/or is supported by outcomes assessment data.

This request for my area is Priority #:

Is this request

Resource Requests

For Administrative Use Only
Funding Status
In Progress
Notes

Council Ranking
4
2025-26 Council Ranking

Mapping
Instructional: Mathematics: *undefined*
- **Improving success rates in SLAM courses:** SLAM success rates (✔)
- **Improving success rates in STEM courses:** Increasing STEM success rates (✔)

Additional white boards for math dedicated classroom.

Resource Year
2024 - 2027
What resources do we already have?
Yes, but we would like white boards on all possible walls.
What resources do you need?

$ Amount Requested
600
Resource Type
ITEM: Equipment, Services, Software, Furniture
Please summarize how this request supports one or more EMP Goals, Equity goals, your program plans or goals, and/or is supported by outcomes assessment data.

This request for my area is Priority #:

Is this request

For Administrative Use Only
Funding Status
In Progress
Notes

Council Ranking
3
2025-26 Council Ranking

Mapping
Instructional: Mathematics: *undefined*
- **Improving success rates in SLAM courses:** SLAM success rates (✔)
- **Improving success rates in STEM courses:** Increasing STEM success rates (✔)

Resource Requests

LRC - Augment base budget for Tutor salaries to support Tutorial Services Operations

Resource Year
2024 - 2027

What resources do we already have?
Approximately $24,000 allocated budget/year

What resources do you need?
Additional general fund budget to support current tutorial services needs for students

$ Amount Requested
255,000

Resource Type
BUDGET: Request Ongoing Funding (Support, Mktg)

Please summarize how this request supports one or more EMP Goals, Equity goals, your program plans or goals, and/or is supported by outcomes assessment data.
Directly supports EMP goal 7, objectives 7.6 and 7.7. Tutoring supports student access, success, and equity and helps students stay enrolled and complete their college courses. Tutoring data from recent ANCOVA study and success rates by ethnicity show a significant increase in student success as a result of tutoring.

This request for my area is Priority #:
2

Is this request
Revised

For Administrative Use Only

Funding Status

Notes

Council Ranking

2025-26 Council Ranking

Mapping
Instructional: Mathematics: *undefined*

- **Improving success rates in SLAM courses:** SLAM success rates (✔)
- **Improving success rates in STEM courses:** Increasing STEM success rates (✔)

Embedded Tutoring for AB1705 Implementation

Resource Year
2024 - 2027

What resources do we already have?
Roughly $20,000 from the tutoring budget is spent on embedding tutoring in math courses

What resources do you need?
A tutoring budget specifically for the implementation of embedded tutoring in STEM courses post AB-1705.

$ Amount Requested
40,000

Resource Type
BUDGET: Request Ongoing Funding (Support, Mktg)

Please summarize how this request supports one or more EMP Goals, Equity goals, your program plans or goals, and/or is supported by outcomes assessment data.

Resource Requests

Directly supports EMP goal 7, objectives 7.6 and 7.7. Tutoring supports student access, success, and equity and helps students stay enrolled and complete their college courses. Tutoring data from recent ANCOVA study and success rates by ethnicity show a significant increase in student success as a result of tutoring. Recent webinars have shown success with AB1705 implementation when direct access to calculus 1A is paired with a corequisite support course with embedded tutoring.

This request for my area is Priority #:

Is this request
New

For Administrative Use Only
Funding Status

Notes

Council Ranking

2025-26 Council Ranking

Mapping
Instructional: Mathematics: *undefined*

- **Improving success rates in SLAM courses:** SLAM success rates (✔)
- **Improving success rates in STEM courses:** Increasing STEM success rates (✔)

Norco College Test Proctoring Center

Resource Year
2024 - 2027

What resources do we already have?
None. Faculty do this during office hours or on their own time.

What resources do you need?
If we can use existing space inside the LRC, we will primarily need 1 or more designated staff in order to manage the testing services.

$ Amount Requested
36,000

Resource Type
BUDGET: Request Ongoing Funding (Support, Mktg)

Please summarize how this request supports one or more EMP Goals, Equity goals, your program plans or goals, and/or is supported by outcomes assessment data.
Currently there are no support services to implement a test proctoring center on campus. Students who miss testing days tend to be our students belonging to disproportionally impacted subgroups. By doing so, faculty will be able to offer students an equitable opportunity to take exams outside of classroom time. Currently students who miss an exam may not be able to retake an exam which leads to failure or withdrawal in courses. This directly impacts EMP Goal 2.1, 2.2, to increase success and achievement rates at the college and also Objective Goal 12.1 to become a comprehensive college.

This request for my area is Priority #:

Is this request
New

For Administrative Use Only
Funding Status

Notes

Resource Requests

Council Ranking

2025-26 Council Ranking

Mapping
Instructional: Mathematics: *undefined*

- **Improving success rates in SLAM courses:** SLAM success rates (✔)
- **Improving success rates in STEM courses:** Increasing STEM success rates (✔)

Technology updates

Resource Year
2024 - 2027
What resources do we already have?
Computers and projectors
What resources do you need?
Updated or NEW computers and projectors in Math dedicated WEQ rooms.
$ Amount Requested
9,000
Resource Type
ITEM: Equipment, Services, Software, Furniture
Please summarize how this request supports one or more EMP Goals, Equity goals, your program plans or goals, and/or is supported by outcomes assessment data.

This request for my area is Priority #:

Is this request
New
For Administrative Use Only
Funding Status
No Action-Insufficient funding
Notes

Council Ranking
2
2025-26 Council Ranking

Mapping
Instructional: Mathematics: *undefined*

- **Improving success rates in SLAM courses:** SLAM success rates (✔)
- **Improving success rates in STEM courses:** Increasing STEM success rates (✔)

Stats software for use in all stats courses

Resource Year
2026 Update
What resources do we already have?

Resource Requests

What resources do you need?

$ Amount Requested
600
Resource Type
ITEM: Instructional Supplies
Please summarize how this request supports one or more EMP Goals, Equity goals, your program plans or goals, and/or is supported by outcomes assessment data.

This request for my area is Priority #:

Is this request

For Administrative Use Only
Funding Status

Notes

Council Ranking

2025-26 Council Ranking

Mapping
Instructional: Mathematics: *undefined*

- **Improving success rates in SLAM courses:** SLAM success rates (✔)

Resource Request

What resources do we already have?
N/A

Potential Funding Source(s)
FPDC

What resources do you need?
Conference attendance funding for two faculty memebers

Request related to EMP goal or Assessment?
EMP Goal 2
EMP Goal 3
EMP Goal 4
EMP Goal 7

$ Amount Requested
5,000

Resource Type
FACULTY: Professional Development

The evidence to support this request can be found in:
Data Review
Program/Unit Goals
Equity
Assessment

This request for my area is Priority #:

Professional Development Activity Funding Request Application

Attendee and Activity Information

Has this professional development request been discussed and approved by your department chair?
Yes

Date of Request
09/11/2024

Activity Date(s)
November, 7-9, 2024

Attendee Name
Svetlana Borissova and Bibiana Lopez

Position
Full-time Faculty

Discipline
Mathematics

Name of Activity and Organization/Sponsor
2024 Transforming STEM Higher Education Conference by the American Association of Colleges & Universities (AAC&U)

Link to Activity Website
https://www.aacu.org/event/2024-stem

Location
Out-of-state

Faculty Professional Development Requests

City, State
Arlington, VA

Have you sought any other co-sponsorship (other internal and/or external funding)?
No

If yes, list source and total dollar amount.

Estimated Costs ($)

Registration
2,000

What is included with Registration?
Access to the conference sessions for two attendees

Air Travel or Mileage (65.5 cents/mile)
1,100

Hotel (tax included)
1,300

Airport Parking

Ground Transportation

Meals ($75/day maximum)
400

Hotel Parking

Incidentals
200

Total Costs
5,000

Justification for Funding Request

Select the categories of professional development that best support your request. (Check all that apply)
Improvement of teaching
Retraining to meet changing institutional needs
Maintenance of current academic/technical knowledge & skills
Development of innovations in instructional and administrative techniques & program effectiveness
Courses and training implementing equity minded practices
Other activities determined to be related to educational and professional development

Briefly describe the objective of the activity and how it will benefit you and the work you do for the college. If this activity aligns with the objectives of any special programs, grants, or plans (e.g., Equity, AB 705, Guided Pathways, STEM, etc.) please explain.
Exploring new ideas, learning, networking, and getting inspiration for the work related to implementing AB 1705, growing and expanding equitable practices for STEM students, improving the Math for Transfer program, and executing the Student Equity Plan goals related to math discipline. These objectives are related to the EMP Goals 2,3,4,7.

How do you plan to share the information gained from the activity to your department/division? See "Dissemination Plan Ideas" document for ways to disseminate information and check all that apply.
Facilitate a conversation
Develop professional learning materials
Change something in your classroom
Share at a department meeting

Faculty Professional Development Requests

Briefly explain your selection above.
We plan to share the information at the Math Discipline Community of Practice meeting and school meeting. We'll incorporate the information into the MAT-1A (Calculus I) faculty workshops and learning materials that are being planned and prepared. We'll post the information in the math discipline Canvas shell for easy access by all math faculty.

Is there anything else you would like to add?
The above cost is for two attendees - Svetlana Borissova and Bibiana Lopez

Approve and Submit
Proof of approval is uploaded, ready to submit?
Yes

Please upload proof of approval for travel from your department chair or Dean.
Re_ Travel Approval Request.pdf

For Administrative Use Only

Funding Status

Notes

2024 - 2027

Resource Request

What resources do we already have?

Potential Funding Source(s)
FPDC
Equity

What resources do you need?
conference fees, hotel, transportation

Request related to EMP goal or Assessment?
EMP Goal 2
EMP Goal 3
EMP Goal 4

$ Amount Requested
3,575

Resource Type
FACULTY: Professional Development

The evidence to support this request can be found in:
Equity

This request for my area is Priority #:

Professional Development Activity Funding Request Application

Attendee and Activity Information
Has this professional development request been discussed and approved by your department chair?
Yes

Date of Request
09/27/2024

Faculty Professional Development Requests

Activity Date(s)
March 9 -12 2025

Attendee Name
Caroline Hutchings

Position
Full-time Faculty

Discipline
Math

Name of Activity and Organization/Sponsor
AHSIE Conference

Link to Activity Website
https://www.ahsieconference.org/

Location
Out-of-state

City, State
Chicago, IL

Have you sought any other co-sponsorship (other internal and/or external funding)?
No

If yes, list source and total dollar amount.

Estimated Costs ($)

Registration
990

What is included with Registration?
breakfast, lunch, and workshops

Air Travel or Mileage (65.5 cents/mile)
1,200

Hotel (tax included)
750

Airport Parking
90

Ground Transportation
300

Meals ($75/day maximum)
200

Hotel Parking
45

Incidentals

Total Costs
3,575

Justification for Funding Request

Select the categories of professional development that best support your request. (Check all that apply)
Improvement of teaching
Retraining to meet changing institutional needs
Development of innovations in instructional and administrative techniques & program effectiveness
Courses and training implementing equity minded practices

Faculty Professional Development Requests

Briefly describe the objective of the activity and how it will benefit you and the work you do for the college. If this activity aligns with the objectives of any special programs, grants, or plans (e.g., Equity, AB 705, Guided Pathways, STEM, etc.) please explain.
AHSIE is the Alliance of Hispanic Serving Institution Educators and the focus of the conference is equity and inclusion. This activity aligns with Equity by providing new innovative ways to have an inclulsive equitible classroom.

How do you plan to share the information gained from the activity to your department/division? See "Dissemination Plan Ideas" document for ways to disseminate information and check all that apply.
Develop a Flex day activity
Facilitate a conversation
Provide adjunct training
Change something in your classroom
Share at a department meeting

Briefly explain your selection above.
As the lead for statistics I plan to share the information with the other faculty that are teaching statistics. The statistics COR recently underwent changes for the CCN template and it is important to look to implement the changes using equitible pedagogy.

Is there anything else you would like to add?

Approve and Submit
Proof of approval is uploaded, ready to submit?
Yes

Please upload proof of approval for travel from your department chair or Dean.
Re_ Travel Approval Request.pdf

For Administrative Use Only

Funding Status

Notes

2026 Update

Resource Request

What resources do we already have?

Potential Funding Source(s)
General Fund

What resources do you need?

Request related to EMP goal or Assessment?

$ Amount Requested
212,178

Resource Type
FACULTY: New Full time Faculty (Associate faculty requested through Department Chair and Dean)

The evidence to support this request can be found in:
Data Review

This request for my area is Priority #:
1

Faculty Hiring Resource Request Form

Department Information
Department Chair Email:
Jeffrey.mulari@norcocollege.edu

Faculty Requesting Email:
Jeffrey.mulari@norcocollege.edu

Faculty Position Requested:
Mathematics

This request is for:
Growth position in existing program

In what sections of your program review can the objectives and justifications for a new faculty hire be found?
Data Review

Statistical Data - Please email Research@norcocollege.edu to request assistance with completing questions requesting data, dashboards are under development.
Student Enrollment
Provide the total number of students enrolled in the discipline for each term in the last three years:
FA 22, 2337
SP 23, 2300
FA 23, 2907
SP 24, 2570
FA 24, 2924
SP 25, 2743

Provide the percent capacity/fill rate for each semester in the discipline for the last three years:
FA 22, 2337
SP 23, 2300
FA 23, 2907
SP 24, 2570

Faculty Hiring Resource Requests

FA 24, 2924
SP 25, 2743

Provide the average class size at Census for each semester for the last three years:
FA 22, 29
SP 23, 34
FA 23, 35
SP 24, 33
FA 24, 35
SP 25, 34

Provide the efficiency (WSCH/FTEF) for the last three years:

Instructional Data
Total number of sections offered in the discipline for the primary semesters in the previous year:

Are any of the sections cross-listed?

If so, how many?

Total number of units offered in the discipline for the primary semesters in the previous year:

Proportion of full-time vs adjunct instruction
Full-time instructors by headcount currently in the discipline:
10

Full-time instructors by FTEF:

Associate faculty instructors by headcount currently in the discipline:

Associate faculty instructors by FTEF:

Total FTEF reassign NOT reoccurring each year (do not include dept. chair):

How many additional full-time faculty can this discipline support towards reaching a 75/25 full-time to adjunct ratio?

Educational Program - Responses should provide detailed information specifically addressing what is asked. This section will be scored as a whole, so please avoid redundancy, there will be no advantage to restating the same information in multiple answers. Please do not include data that is already included in the above sections. Also, the information you provide should reflect justifications in program review sections. (50 Points)
Describe how this discipline/program/unit contributes to the Educational Master Plan with regard to the Goals and Objectives. If relevant to this application, provide data for certificates, degrees, employment opportunities, etc…

Indicate what this new hire will contribute to your department or discipline that currently cannot be accomplished by the existing faculty.

Explain the impact this hire will have on other disciplines, programs, and the college.

Explain the impact if this faculty position is NOT hired.

Please describe any other factors not already addressed that reinforce the need for a full-time faculty hire.

Please add any relevant documents here.

Instructional Summary - Complete this section for Instructional Faculty only

1. How many additional full-time faculty can this discipline support towards reaching a 75/25 full time to adjunct ratio?

2. How many approved hires within this discipline are currently unfilled?

3. How many growth positions in this discipline are being requested and prioritized before this position?

4. Complete the calculation = (1-2-3) =

5. How many full-time faculty were employed in the discipline in the most recent Fall term?

6. Department Relative need total:

Counseling Summary - Complete this section for Counseling Faculty only

1. The number of students for the most recent Fall term relevant to your program.

2. How many full-time faculty are in your discipline, including retiring faculty?

3. How many growth positions in this discipline are being requested and prioritized before this position?

4. Calculation: (2) + (3) =

5. Please provide a state-mandated or institutional set student per faculty target ratio.

6. Complete the calculation using the above questions [(1)-(5)x(4)]/(5)=

7. Relevant Need: (6/4)=

Library Summary- Complete this section for Library Faculty only

1. The number of FTES for the most recent Fall term.

2. How many full-time faculty are in your discipline, including retiring faculty?

3. How many growth positions in this discipline are being requested and prioritized before this position?

4. Calculation: (2) + (3) =

5. The state-mandated or institutional set FTE per faculty ratio.

6. Complete the calculation using the above questions [(1)-(5)x(4)]/(5)=

7. Relevant Need: (6/4)=

Submit

Ready to Submit?

For Administrative Use Only

Funding Status

APC Ranking

Notes

2024 - 2027

Program Review Reflections

What would make program review meaningful and relevant for your unit?
I think some of our requests for classroom upgrades and tutoring funded by the general budget have not gone anywhere. It seems the way to finance some requests is to find our own one time money and not through program review.

What questions do we need to ask to understand your program plans, goals, needs?
Our program has been in response mode since AB705 implementation in Fall 2019, getting through the effects of the pandemic and online teaching in a discipline that is normally fully in-person, and now implementing AB1705 in Fall 2025. Most of our direction, goals, curriculum updates, and resource requests are in response to preparing for AB1705.

What types of data do you need to support your program plans, goals, needs?
We currently have a dashboard from the district office that has answered most, if not all, of our current data questions.

If there are any supporting documents you would like to attach, please attach them here.

Submission

All parts of my Program Review have been completed and it is ready for review.
Yes