

# Program Review Comprehensive Report



## Program Review - Instructional: Mathematics

### Supplemental Reports and Attachments

2014 - 2017

**Comments or Notes:** ncb entered

**Attachments:**

[2014-17\\_MATH\\_PLO\\_INSTRUCTIONAL.pdf](#)

[2014-17\\_MATH\\_SLO\\_DISCIPLINE.pdf](#)

[2014-17\\_INSTRUCTION\\_MATH\\_ResourceRequests.xlsx](#)

[2014\\_17\\_MATH\\_CurriculumRPT.pdf](#)

[2014\\_17\\_MATH\\_SuccessEfficiencyRetentionRPT.pdf](#)

### Program Trends and Updates

2014 - 2017

#### Program Update Section

**Has your unit shifted departments in the PAST 4 years?:** Yes. Starting Spring 2017, the Norco Math Discipline became its own department. We currently have 10 F/T faculty. We have two co-chairs, Jeff Mulari and Bob Prior

**Do you anticipate your unit will shift departments in the NEXT 4 years?:** No.

**New certificates programs created by your unit in the PAST 4 years?:** We have not created any new certificates or programs within our discipline or department.

**New certificate programs anticipated by your unit in the NEXT 4 years?:** None.

**Substantial modifications made to certificates/degrees in the PAST 4 years.:** N/A

**Substantial modifications anticipated to certificates/degrees in the NEXT 4 years.:** Substantial changes to course offerings but not to certificates or degrees.

**Activities in other units that impacted your unit in the PAST 4 years.:** N/A

**Activities in other units that impacted your unit in the NEXT 4 years.:** N/A

#### Previous Program Review Resource Requests

**Resource Requests Received:** A. New Faculty to replace (1) retired faculty, and (2) member who moved to Dean of Instruction position.

B. Reconfiguration of LIB 108 classroom.

**How did the resources received impact student learning?:** A. It allowed us to offer more higher-level math courses.

B. Room is not yet reconfigured ... in process.

**If you requested resources but did not receive them, how did that impact student learning?:** N/A

#### Program Data Highlights Section

**COR Review:** We have a 3rd RCCD Math Discipline Meeting scheduled for April 27th to discuss updating CORs and new course offerings and pathways to become AB 705 compliant by Fall 2019. We will be reviewing the CORs at this meeting and pushing the majority of courses further along the process in the weeks afterward. As we learn more from the state on what is required of us to be compliant, we will need to continue addressing our entire math curriculum. It is possible that every course outline will be updated each year for the next two years.

**Program Metric Highlights:** With the advent of AB 705 implementation, we foresee an increase in all of our metrics -- retention, success, and efficiency -- due in part to (a) a reduction in both online and hybrid offerings of remedial classes, and (b) the extra

support students will be receiving through our co-requisite support classes as well as the reestablishment of the Math Success Center.

**Assessment Report Highlights:** Currently the Math discipline has assessed 104 out of 158 total SLOs, which is 65.8%. This may not sound like a great number, but since the beginning of Fall 2016, we have assessed 89 different SLOs, which is just over 56.3% of all of our SLOs in the last 3 semesters. As for the 54 missing SLO assessments, we have current plans in place to have most, if not all, of these assessed by the end of the Spring 2018 semester. The Math discipline has also completed 50% of the PLOs for the Math ADT and will be looking to complete the remaining before Spring 2020.

## Program Goal: Math Success Center

Establish a new Math Success Center that caters primarily to students placed into introductory transfer-level courses (or their co-requisite support courses) by offering drop-in tutoring, math success workshops, etc.

**Goal Status:** In Progress

**Goal Year(s):** 2018 - 2021

**Start Date:** 07/01/2018

**Completion Date:** 02/01/2019

**How do your goals support the Educational Master Plan?:** Achieving this goal will allow the Math Department to support a greater number of students than are currently being served. We anticipate being the hub for study groups and drop in math tutoring. The Math Success Center will address students' needs/concerns that are peripheral to math class, such as math phobia, math anxiety, and math study skills. All of this is designed to have more students being successful in math, thereby increasing persistence rates, success and retention rates, course completion, transfer preparedness, and transfer rates.

**This Program Goal Supports the selected EMP Goal(s) and Objective(s):** Goal 1 Objective 1: Improve transfer preparedness (completes 60 transferable units with a 2.0 GPA or higher), Goal 1 Objective 2: Improve transfer rate by 10% over 5 years. , Goal 1 Objective 3: Increase the percentage of basic skills students who complete the basic skills pipeline by supporting the development of alternatives to traditional basic skills curriculum., Goal 1 Objective 4: , Goal 1 Objective 5: , Goal 1 Objective 6: , Goal 1 Objective 7: , Goal 1 Objective 8: , Goal 1 Objective 10: , Goal 2 Objective 1: , Goal 2 Objective 2: , Goal 2 Objective 3: , Goal 2 Objective 4: , Goal 2 Objective 5: , Goal 2 Objective 6:

## Program Goal: Dedicated classrooms for Math

Add two dedicated classrooms for Math

**Goal Status:** In Progress

**Goal Year(s):** 2018 - 2021

**Start Date:** 06/08/2018

**Completion Date:** 01/31/2019

**How do your goals support the Educational Master Plan?:** It is our hope to have dedicated math classrooms that are near the Math Success Center, thereby increasing student engagement with a direct flow from class to Success center. We believe this will also increase students' satisfaction with the support they are receiving. Furthermore, having dedicated classrooms will allow us to decorate and design classrooms that facilitate new teaching strategies, including group activity-based learning.

**This Program Goal Supports the selected EMP Goal(s) and Objective(s):** Goal 2 Objective 1: , Goal 2 Objective 2: , Goal 2 Objective 3: , Goal 2 Objective 4:

## Program Goal: Centralize Math Faculty Offices

Create a space for all full-time math faculty to have offices in one area of the campus so as to have daily faculty engagement and collaboration with respect to AB 705 implementation and other ongoing math issues.

**Goal Status:** In Progress

**Goal Year(s):** 2018 - 2021

**Start Date:** 07/01/2018

**Completion Date:** 06/30/2019

**How do your goals support the Educational Master Plan?:** With the advent of AB 705, the math curriculum will be undergoing some major changes, and it will take a dedicated effort by the full-time Math faculty to be continually engaged in discussion of best practices and course redesign. Having a centralized location for our offices will help facilitate the discussion and our collaborative efforts. We believe these student-centered efforts will spur success in the math classroom and lead to greater preparation for transfer and higher transfer rates overall.

**This Program Goal Supports the selected EMP Goal(s) and Objective(s):** Goal 1 Objective 1: Improve transfer preparedness (completes 60 transferable units with a 2.0 GPA or higher), Goal 1 Objective 2: Improve transfer rate by 10% over 5 years. , Goal

# Program Review - Instructional: Mathematics

1 Objective 3: Increase the percentage of basic skills students who complete the basic skills pipeline by supporting the development of alternatives to traditional basic skills curriculum., Goal 1 Objective 4: , Goal 1 Objective 5: , Goal 1 Objective 6: , Goal 1 Objective 7: , Goal 1 Objective 8: , Goal 1 Objective 10: , Goal 2 Objective 1: , Goal 2 Objective 2: , Goal 2 Objective 3: , Goal 2 Objective 4: , Goal 2 Objective 5: , Goal 2 Objective 6:

## Program Goal: Increase Faculty Participation in Professional Development and Training

To have every full time math faculty trained in best practices as they relate to the co-requisite support classes a la AB705.

**Goal Status:** In Progress

**Goal Year(s):** 2018 - 2021

**Start Date:** 07/01/2018

**Completion Date:** 06/30/2020

**How do your goals support the Educational Master Plan?:** With the advent of AB 705, we anticipate major changes in the classroom as to the ways we teach today's students. We expect there will need to be massive amounts of faculty training through workshops and conferences. We believe students will also benefit from this as we bring back to the classroom that which we have learned.

**This Program Goal Supports the selected EMP Goal(s) and Objective(s):** Goal 1 Objective 1: Improve transfer preparedness (completes 60 transferable units with a 2.0 GPA or higher), Goal 1 Objective 2: Improve transfer rate by 10% over 5 years. , Goal 1 Objective 3: Increase the percentage of basic skills students who complete the basic skills pipeline by supporting the development of alternatives to traditional basic skills curriculum., Goal 1 Objective 4: , Goal 1 Objective 5: , Goal 1 Objective 6: , Goal 1 Objective 7: , Goal 1 Objective 8: , Goal 1 Objective 10: , Goal 5 Objective 5:

## Program Goal: Establish Community of Practice Meetings

Support all faculty who teach co-requisite support classes, a la AB705, by offering continual (weekly) discussion and planning meetings.

**Goal Status:** In Progress

**Goal Year(s):** 2018 - 2021

**Start Date:** 07/01/2019

**Completion Date:** 06/30/2020

**How do your goals support the Educational Master Plan?:** We expect to continually update what is happening in the co-requisite support classes fostered by AB 705. This will occur through weekly faculty dialog about what is working/not working in the classroom and what can be done to enhance or altered to provide the desired learning environment. Students will benefit from the interactive group work as well as from other innovative approaches.

Faculty benefit from having support for trying new teaching techniques and creating/assessing their own best practices in the student-centered classroom.

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## Program Goal: AB 705 Math Coordinator

Create the position of an AB 705 Math Coordinator to oversee all aspects of AB 705 Math implementation, including, but not limited to,

- Oversight of the creation of new Course Outlines of Record.
- Acting as the liaison between Norco College and the Math Discipline throughout RCCD.
- Acting as the liaison between Norco College and the State Chancellor's Office.
- Acting as the AB705 Mathematics compliance resource for the Norco College community at large.
- Keeping up to date with the latest pedagogy and best practices for student-centered learning environment
- Coordinating the Community of Practice Meetings for the co-requisite support classes.
- Coordinating the faculty development trainings for best practices of presenting the co-requisite support classes.

# Program Review - Instructional: Mathematics

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- Coordinating on-going (weekly) training of faculty through Community of Practice workshops (for the co-requisite support classes).
- Interfacing with Norco's Institutional Research to conduct studies of success rates, effectiveness of in-class activities, and to determine which remedial math classes should be re-implemented to foster student success.
- Liaison with Norco counselors for proper student placement (guided placement) and MMAP interpretations.

**Goal Status:** In Progress

**Goal Year(s):** 2018 - 2021

**Start Date:** 05/15/2018

**Completion Date:** 07/31/2018

**How do your goals support the Educational Master Plan?:** We believe everyone will benefit from having one person oversee the operation and implementation of the math portion of the AB 705 mandates. Faculty benefit from having an organized system in place and ready to go in time for Fall 2019 implementation, including professional development for utilizing best practices in the student-centered classroom.

Students benefit from more support in and out of the classroom; we should expect to see increased persistence rates, success and retention rates, course completion, transfer preparedness, and transfer rates.

The college as a whole will benefit because the math faculty are dedicated to being a model school for this state-mandated program.

**This Program Goal Supports the selected EMP Goal(s) and Objective(s):** Goal 1 Objective 1: Improve transfer preparedness (completes 60 transferable units with a 2.0 GPA or higher), Goal 1 Objective 2: Improve transfer rate by 10% over 5 years. , Goal 1 Objective 3: Increase the percentage of basic skills students who complete the basic skills pipeline by supporting the development of alternatives to traditional basic skills curriculum., Goal 1 Objective 4: , Goal 1 Objective 5: , Goal 1 Objective 6: , Goal 1 Objective 7: , Goal 1 Objective 8: , Goal 1 Objective 10: , Goal 5 Objective 5: , Goal 6 Objective 1: