

# Ohlone College

## Program Review Report

- **Program Description and Scope:**

- *Program Review Title:* Math
- *Academic year:* 2015/2016
- *Review Type:* Instructional Disciplines
- *Program/Departments:* Mathematics (17000)
- *Authority Code:* 44-Dean, Science, Engineering, and Mathematics
- *External Regulations:* Yes\_ No X
- *Provide a brief narrative that describes the instructional program/discipline:*

The primary function of the Mathematics program is to serve students in the completion of their General Education math requirements. In addition, the department plays a fundamental role in serving the Natural, Life, and Physical Science majors' mathematical needs, both with transfer and non-transfer level courses. It also serves the needs of other majors with courses such as Statistics, Finite Math, and Business Calculus.

- **College Mission:**

- *Mission Statement:*

Ohlone College responds to the educational needs of our diverse community and economy by offering high quality instruction supporting basic skills, career development, university transfer, and personal enrichment and by awarding associate degrees and certificates to eligible students in an innovative, multicultural environment where successful learning and achievement are highly valued, supported, and continually assessed.
- *Program Relation to College Mission:*
  - Basic Skill
  - University Transfer
  - Personal Enrichment
- *State Your Program Mission/Purpose:*

The mission of the Ohlone Math Department is to provide math instruction for basic skills, university transfer, and personal enrichment in an environment where student learning is the primary goal.

- *Briefly Describe Program Accomplishments:*

The Math Department has several accomplishments:

- A better than average success rate in Basic Skills courses: 64% success rate for Ohlone vs. 54% for state in Fall 2014.
- An increasing number of sections of courses at the level of Calculus and

higher.

- A large Summer session program
- A long term history of both full-time and adjunct faculty who are committed to serving both department and college-wide needs.

- **Achievement and Resource Data Analysis:**

1. *Research Questions:*

1. A major factor in the lower success rates in math is the rate of student withdrawals, often approaching one fourth of enrollment. Is this something that can be addressed?
2. Success rates in all math courses except MATH-159 are below the college-set standard for success. Is there anything special happening in MATH-159 to promote student success that could be employed by other courses?
3. African American students are disproportionately impacted in math. Are there any strategies that can be employed to increase their success rates?

- **Resource Assessment Summary:**

1. *Academic Year:* 2013-14
2. *Activity Center Fund 10 Budget Allocation:* \$2378876.00
3. *FTEs:* Fall: 516 Spring: 504 Summer: 125
4. *WSCH/FTEF:* Fall: 606 Spring: 572 Summer: 142
5. *Course Sections Offered:* Fall: 116 Spring: 116 Summer: 28
6. *Sections Taught FT Faculty:* Fall: 56 Spring: 50 Summer: 13
7. *Sections Taught PT Faculty:* Fall: 59 Spring: 66 Summer: 15

- **Human Resources:**

1. *# of FT Faculty:* 11
2. *# of PT Faculty:* 43
3. *# of Classified Staff:* 1
4. *# of Administrators:* 0
5. *% Faculty release/reassigned time:* 45.00%
6. *Technology:*
  - Specialized Software
  - Laptops
  - Desktops
7. *Physical Resources:*
  - General Classrooms
  - Tutoring/Learning Center

- **Program Analysis PSLOs - Student Learning:**

*(Key: I-Introduced, P-Practiced with Feedback, M-Demonstrated at the Mastery Level)*

1. *PSLO Matrix:*

<b>Course</b>	<b>PSLO-1</b>	<b>PSLO-2</b>	<b>PSLO-3</b>	<b>PSLO-4</b>
MATH 101A	M	M	P	P
MATH 101B	M	M	P	P
MATH 101C	M	M	M	M
MATH 103	M	M		M
MATH 104	M	M	M	M
MATH 111	M	M	P	P
MATH 151	I	I	I	I
MATH 151A	I	I	I	I
MATH 151B	I	I	I	I
MATH 152	I	P	I	I
MATH 152A	I	P	I	I
MATH 152B	I	P	I	I
MATH 153	I	P	I	I
MATH 155	I	I	I	I
MATH 156	P	I	I	P
MATH 159	P	P		P
MATH 163	P	P	I	
MATH 166	P	P	P	P
MATH 167	P	P	P	P
MATH 181	P	P	I	P
MATH 188	P	P	P	P
MATH 190	I	I	I	I
MATH 190A	I	I	I	I
MATH 190B	I	I	I	I
MATH 191	I	I	I	I
MATH 199	I	I	I	I

2. *Please Indicate the PSLO(s) which you are reporting on:*

- At a level appropriate to his/her educational goals or major, the student will be able to apply mathematical tools and concepts in solving word/situation-based problems.
- At a level appropriate to his/her educational goals or major, the student will be able to solve mathematical equations.
- At a level appropriate to his/her educational goals or major, the student will be able to demonstrate the qualitative behavior of graphs.

- At a level appropriate to his/her educational goals or major, the student will be able to manipulate mathematical expressions.
3. *Analyze and summarize your assessment findings? What in the data jumped out?*

For assessment of PSLO #4 please see the report done by Prof. Honma for Math 155.

For assessment of PSLO #4 please see the report done by Prof. Bitzer for Math 159.

For assessment of PSLO #3 please see the report done by Prof. Bloom for Math 188.

4. *Give examples of assessments used for your PSLO analysis:*

see attached

5. *Describe input from Program Advisory Committee (if applicable):*

not applicable

6. *Comments:*

none

- **Program Improvement Objectives**

1. *Based on the program data analysis and PSLO analysis, identify your Program Improvement Objective(s): What are you going to do? Why are you going to do it?*

Increase the success/completion rate of students in all courses by increasing the amount of tutorial services.

*Notes (optional): Please include any notes related to your PIO. (2500 Character limit)*

*Program PIO will address the following:*

- Student Learning & Achievement
- Course Completion

- Success Rates

*How will you assess the effectiveness of your PIO:*

Compare the success and completion rates of our courses on a year-to-year basis and also against the statewide average as we increase the amount of tutorial services available to students. The source of the data will be DataMart. The data will be kept in the file 2014-success-rate.xlsx, uploaded to Curricunet.

**PIO Action Plan:**

*How will you accomplish this?*

Using the success rates found in DataMart, we will have already found that increasing the amount of tutorial services increases student success rates in Basic Skills Courses. The next step is to broaden the scope of what was learned from the Basic Skills program and enact the following: (1) Increase the number of classes with embedded tutoring. (2) Increase the number of hours tutoring is available in the Math Learning Center on both campuses. (3) Ensure that a lab coordinator is available at all hours of operation of the MLC on both campuses. (4) Increase the number of students participating in the tutor training program.

*What is your timeline?*

ongoing

*Who is going to do this?*

The Math Learning Center supervisor will coordinate tutoring schedules with the math faculty. The department faculty will maintain the records and be more involved in requesting embedded tutors.

*PIO Status:*

- In-Progress
- Revised

*Closing the loop - Describe the results of your PIO implementation or completion:*

(1) Existing software licenses have been maintained for several years. (2)

Construction of the portable buildings in Newark and Fremont have included the installation of new projection systems. (3) Some projection systems in the Newark Center have been upgraded.

*Conclusion: Complete if PIO has been completed*

*Fiscal Resources Status:*

- Staff position requested: lab tech not funded as of 6/22/15. Student tutors and embedded tutor request - potential funding equity funds, basic skills and fund 10.

**PIO Resources:**

- Resource: Staff/Administrative Position  
Position Title: Instructional Assistant Math Learning Center  
FTE: 1.0  
Est. Cost: \$54,000.00
- Resource: Tutors - Students  
Description: Student Tutors  
FTE: n/a  
Est. Cost: \$3,000.00
- Resource: Tutors - Students  
Description: Embedded Tutors  
FTE: n/a  
Est. Cost: \$5,000.00

2. *Based on the program data analysis and PSLO analysis, identify your Program Improvement Objective(s): What are you going to do? Why are you going to do it?*

Maintain modern computing facilities in both the Math Learning Center and the classrooms used for math instruction.

*Notes (optional): Please include any notes related to your PIO. (2500 Character limit)*

*Program PIO will address the following:*

- Student Learning & Achievement
- Course Completion
- Success Rates

*How will you assess the effectiveness of your PIO:*

Modern computing facilities are an integral part of the current math curriculum.

**PIO Action Plan:**

*How will you accomplish this?*

This will be accomplished by all faculty informing the dean when computing facilities are aging.

*What is your timeline?*

ongoing

*Who is going to do this?*

It is a responsibility of all faculty to inform the dean when computing facilities are aging.

*PIO Status:*

- In-Progress

*Closing the loop - Describe the results of your PIO implementation or completion:*

(1) Existing software licenses have been maintained for several years. (2) Construction of the portable buildings in Newark and Fremont have included the installation of new projection systems. (3) Some projection systems in the Newark Center have been upgraded.

*Conclusion: Complete if PIO has been completed*

*Fiscal Resources Status:*

- No fiscal resources requested.

**PIO Resources:**

**Attached Files:**

- [Evaluation of SLOs Table #1.xlsx](#)
- [Comments on the Math 152 SLOs Evaluation.docx](#)
- [Math 190 SLOA Report Spring 2012.doc](#)
- [Math 191 SLOA Report Spring 2012.doc](#)
- [m188.pdf](#)
- [2014-success-rate.xlsx](#)
- [philosophy1.pdf](#)
- [2014spring-sloa-math188.docx](#)
- [2014spring-sloa-math159.doc](#)
- [2014springl-sloa-math155.doc](#)
- [summary1.pdf](#)