## COASTLINE



# 2019-2020 <br> Comprehensive Program Review 

## Mathematics

Dr. Lisa Lee, Math Professor/Dept Co-chair
Fred Feldon, Math Professor/Dept Co-chair
Mitchell Alves, Math Professor
Dr. Son Nguyen, Math Instructor
Hao-Nhien Vu, Math Instructor
Dr. Tom Neal, Dean

## Table of Contents

Comprehensive Program Review ..... 0
Mathematics ..... 0
Executive Summary ..... 2
Internal Analysis: Mathematics ..... 3
Success and Retention ..... 5
Student (SLOs) and Program Student Learning Outcome (PSLOs) ..... 10
Curriculum Review ..... 26
External Compliance ..... 30
Program Planning and Communication Strategies ..... 31
Coastline Pathways ..... 31
Implications of Change ..... 31
Forward Strategy. ..... 31
Section 2: Human Capital Planning ..... 32
Staffing ..... 32
Professional Development ..... 32
Forward Strategy ..... 33
Section 3: Facilities Planning ..... 33
Facility Assessment ..... 33
Forward Strategy ..... 33
Section 4: Technology Planning ..... 33
Technology Assessment ..... 33
Forward Strategy ..... 33
Section 6: Prioritization ..... 36
Section 7: Faculty Survey ..... 42
Section 8: Student Survey ..... 53

## Executive Summary

The program review process was completed by Lisa Lee, Department Co-Chair with input from other faculty and students. Program Review surveys from students and faculty and annual institutional planning report contributed to the indication of the needs and suggestions of the Mathematics Department.

From 2018-2019 the Mathematics Department has consistently been one of the top three FTESgenerating disciplines at the college, at one point being number one. The department has five full-time faculty, while adjuncts grew from 24 in 2014 to 30 in 2019, making nearly most sections at maximum capacity. The percentage change in the number of enrollments, FTES, math sections offered, fill rates, and WSCH/FTEF ratio in Mathematics courses showed a moderate increase.

In compliance of AB 705, Math C160, Introduction to Statistics with Support, Math C096 and Math C115, College Algebra with Support, Math C091 have been offered in Spring 2019. In Fall 2019, five classes of Math C160, Introduction to Statistics with Support, Math C096 and two classes of Math C115, College Algebra with Support, Math C091 have been offered in Fall 2019. Each of the classes including online and onsite sections are all filled.

A culture of collegiality has been maintained where every faculty member supports and contributes to the success of everyone else. Although the Coastline campus is not centralized, the Math Department co-chairs maintain constant contact with everyone through e-mails and cell phones. The five full-time faculty meet off-campus for lunch twice a month and the Department Co-Chairs hold mid-semester meetings on a regular basis to keep everyone in touch with each other and what's going on with their classes, within Distance Learning and within the college.

The creation of student learning outcomes (SLOs) for every math course has allowed faculty to engage in a meaningful dialogue about what should be taught and assessed in every math course. Overlap in curriculum was eliminated, especially in the developmental math courses, to help ensure student success. Course names and numbers were changed, in some cases, to help support the common course numbering movement within the district. The Math Department Co-Chairs, Lisa Lee and Fred Feldon, meet on a regular basis with the Math Department Chairs at the other two colleges in the district, to share curriculum and pedagogy and maintain communication. This should prove more and more valuable as inter-district communication increases and inter-district practices are adopted in common to reduce the budget and better serve students. Moreover, in compliance of new Law, AB 705 launched in year 2018, Coastline College Math Department was the lead to call for meeting with the other two colleges' math department in Spring 2019 and Fall 2019.

As $85 \%$ of the enrollment is online, the challenge to maintain distance learning math course success and retention rates has been met with a $20 \%$ higher rate of retention and an almost $15 \%$ higher rate of success than the statewide averages for general math in the distance learning format. This could partly be attributed our student population which is slightly older and perhaps more mature than the statewide average but may also be the result of the department's culture of collaboration, the peer crosstraining within the department and the amount of time we've spent with this method of instruction. Math Department RSI Guideline has been defined and approved by the RSITaskforce.

## Section 1: Program Planning:

Internal Analysis: Mathematics

| Productivity | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ |
| :--- | :---: | :---: | :---: |
| College State-Funded Enrollment | 63,485 | 60,149 | 61,512 |
| Mathematics Enrollment | 5,554 | 5,655 | 5,924 |
| College Student Resident FTES | $6,343.35$ | $5,928.76$ | $6,189.62$ |
| Mathematics Resident FTES | 667.75 | 681.22 | 726.19 |
| Sections | 160 | 160 | 175 |
| Fill Rate | $72.7 \%$ | $75.3 \%$ | $75.8 \%$ |
| WSCH/FTEF 595 Efficiency | 1,592 | 1,413 | 1,501 |
| FTEF/30 | 1.1 | 1.0 | 1.0 |
| Extended Learning Enrollment | 1,110 | 971 | 790 |

The percentage change in the number of Mathematics enrollments in 2017-18 showed a slight increase from 2016-17 and a moderate increase from 2015-16.

The percentage change in 2017-18 resident FTES in Mathematics credit courses showed a moderate increase from 2016-17 and a moderate increase in comparison with resident FTES in 2015-16.

The percentage change in the number of sections in Mathematics courses in 2017-18 showed a moderate increase from 2016-17 and a moderate increase from the number of sections in 2015-16.

The percentage change in the fill rate in 2017-18 for Mathematics courses showed a minimal difference from 2016-17 and a slight increase in comparison with the fill rate in 2015-16.

The percentage change in the WSCH/FTEF ratio in Mathematics courses in 2017-18 showed a moderate increase from 2016-17 and a moderate decrease from 2015-16.

The percentage change in the FTEF/30 ratio for Mathematics courses in 2017-18 showed a slight decrease from 2016-17 and a moderate decrease in comparison with the FTEF/30 ratio in 2015-16.

There was a substantial decrease in the number of Mathematics Extended Learning enrollments in 201718 from 2016-17and a substantial decrease from 2015-16.

| Comparison of Enrollment Trends | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ |
| :--- | :---: | :---: | :---: |
| College State-Funded Enrollment | 63,485 | 60,149 | 61,512 |
| Mathematics Enrollment | 5,554 | 5,655 | 5,924 |
|  |  |  |  |
| Modality $\mathbf{2 0 1 5 - 1 6}$ $\mathbf{2 0 1 6 - 1 7}$ $\mathbf{2 0 1 7 - 1 8}$ <br> Traditional $11.3 \%$ $8.9 \%$ $7.6 \%$ <br> Online $72.7 \%$ $71.3 \%$ $72.4 \%$ <br> Hybrid $1.2 \%$ $1.4 \%$ $1.5 \%$ <br> Correspondence (Cable, Telecourse, Other DL) $14.9 \%$ $18.4 \%$ $18.5 \%$Gender $\mathbf{2 0 1 5 - 1 6}$ $\mathbf{2 0 1 6 - 1 7}$ $\mathbf{2 0 1 7 - 1 8}$ <br> Female $50.9 \%$ $49.5 \%$ $48.4 \%$ <br> Male $47.4 \%$ $48.8 \%$ $49.7 \%$ <br> Unknown $1.6 \%$ $1.6 \%$ $1.9 \%$ |  |  |  |$>.$


| Ethnicity | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ |
| :--- | :---: | :---: | :---: |
| African American | $6.1 \%$ | $6.6 \%$ | $6.5 \%$ |
| American Indian/AK Native | $0.5 \%$ | $0.5 \%$ | $0.5 \%$ |
| Asian | $24.0 \%$ | $22.3 \%$ | $22.0 \%$ |
| Hispanic | $16.7 \%$ | $16.3 \%$ | $18.5 \%$ |
| Pacific Islander/HI Native | $0.2 \%$ | $0.4 \%$ | $0.3 \%$ |
| White | $35.5 \%$ | $36.0 \%$ | $34.6 \%$ |
| Multi-Ethnicity | $15.5 \%$ | $16.8 \%$ | $16.5 \%$ |
| Other/Unknown | $1.5 \%$ | $1.2 \%$ | $1.0 \%$ |


| Age Group | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ |
| :--- | :---: | :---: | :---: |
| 19 or Less | $13.6 \%$ | $13.4 \%$ | $14.0 \%$ |
| 20 to 24 | $28.8 \%$ | $29.3 \%$ | $29.6 \%$ |
| 25 to 29 | $18.1 \%$ | $17.4 \%$ | $17.8 \%$ |
| 30 to 34 | $12.2 \%$ | $10.8 \%$ | $11.4 \%$ |
| 35 to 39 | $7.7 \%$ | $8.3 \%$ | $8.5 \%$ |
| 40 to 49 | $10.2 \%$ | $12.0 \%$ | $10.6 \%$ |
| 50 and Older | $9.4 \%$ | $8.9 \%$ | $8.1 \%$ |

Mathematics courses made up $9.6 \%$ of all state-funded enrollment for 2017-18. The percentage difference in Mathematics course enrollment in 2017-18 showed a slight increase from 2016-17 and a moderate increase from 2015-16. Enrollment in Mathematics during 2017-18 showed 7.6\% of courses were taught traditional (face-to-face), $72.4 \%$ were taught online, $1.5 \%$ were taught in the hybrid modality, and $18.5 \%$ were taught in the correspondence (cable, telecourse, and other distance learning) modality.

In 2017-18, Mathematics enrollment consisted of $48.4 \%$ female, $49.7 \%$ male, and $1.9 \%$ students of unknown gender. In 2017-18, Mathematics enrollment consisted of 6.5\% African American students, 0.5\% American Indian/AK Native students, $22.0 \%$ Asian students, $18.5 \%$ Hispanic students, $0.3 \%$ Pacific Islander/HI Native students, $34.6 \%$ White students, $16.5 \%$ multi-ethnic students, and $1.0 \%$ students of other or unknown ethnicity. The age breakdown for 2017-18 enrollments in Mathematics revealed 14.0\% aged 19 or less, $29.6 \%$ aged 20 to $24,17.8 \%$ aged 25 to 29, 11.4\% aged 30 to $\mathbf{3 4}, 8.5 \%$ aged 35 to 39, 10.6\% aged 40 to 49 , and $8.1 \%$ aged 50 and older.

| Awards | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ |
| :--- | :---: | :---: | :---: |
| College Awarded Degrees | 2,047 | 2,221 | 2,213 |
| Mathematics Degrees | 156 | 151 | 190 |

*Includes General Education with a Focus in Math and Science
The percentage change in the number of Mathematics degrees awarded in 2017-18 showed a substantial increase from 2016-17 and a substantial increase from the number of degrees awarded in 2015-16.

## Success and Retention

| Comparison of Success Rates | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ |
| :--- | :---: | :---: | :---: |
| College State-Funded Success Rate | $66.7 \%$ | $68.6 \%$ | $70.4 \%$ |
| College Institution Set Standard Success Rate | $55.6 \%$ | $56.7 \%$ | $58.3 \%$ |
| Mathematics Success Rate | $59.0 \%$ | $58.1 \%$ | $57.9 \%$ |


| Modality | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ |
| :--- | :---: | :---: | :---: |
| Traditional | $62.4 \%$ | $64.0 \%$ | $67.7 \%$ |
| Online | $57.4 \%$ | $56.9 \%$ | $54.7 \%$ |
| Hybrid | $58.0 \%$ | $55.6 \%$ | $69.3 \%$ |
| Correspondence (Cable, Telecourse, Other DL) | $64.2 \%$ | $60.4 \%$ | $65.5 \%$ |


| Gender | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ |
| :--- | :---: | :---: | :---: |
| Female | $57.6 \%$ | $56.7 \%$ | $56.3 \%$ |
| Male | $60.5 \%$ | $59.6 \%$ | $59.7 \%$ |
| Unknown | $62.2 \%$ | $58.7 \%$ | $50.0 \%$ |


| Ethnicity | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ |
| :--- | :---: | :---: | :---: |
| African American | $44.7 \%$ | $40.1 \%$ | $41.3 \%$ |
| American Indian/AK Native | $55.6 \%$ | $50.0 \%$ | $46.9 \%$ |
| Asian | $69.9 \%$ | $69.2 \%$ | $67.7 \%$ |
| Hispanic | $50.5 \%$ | $51.6 \%$ | $53.2 \%$ |
| Pacific Islander/HI Native | $38.5 \%$ | $56.5 \%$ | $29.4 \%$ |
| White | $60.6 \%$ | $62.7 \%$ | $60.0 \%$ |
| Multi-Ethnicity | $52.8 \%$ | $47.2 \%$ | $52.8 \%$ |
| Other/Unknown | $67.5 \%$ | $61.2 \%$ | $60.3 \%$ |


| Age Group | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ |
| :--- | :---: | :---: | :---: |
| 19 or Less | $62.6 \%$ | $57.8 \%$ | $59.6 \%$ |
| 20 to 24 | $54.2 \%$ | $57.7 \%$ | $54.4 \%$ |
| 25 to 29 | $58.0 \%$ | $56.5 \%$ | $56.3 \%$ |
| 30 to 34 | $59.2 \%$ | $58.2 \%$ | $58.0 \%$ |
| 35 to 39 | $61.7 \%$ | $56.7 \%$ | $58.0 \%$ |
| 40 to 49 | $60.9 \%$ | $59.6 \%$ | $62.1 \%$ |
| 50 and Older | $65.9 \%$ | $62.6 \%$ | $64.9 \%$ |

The percentage difference in the course success rate in Mathematics courses in 2017-18 showed a slight decrease from 2016-17 and a minimal difference from 2015-16. When comparing the percentage point difference in the Mathematics 2017-18 course success rate to the College's overall success average* ( $70.4 \%$ ) and the institution-set standard* ( $58.3 \%$ ) for credit course success, the Mathematics course success rate was substantially lower than the college average and minimally different than the institutionset standard for credit course success.

When comparing the percentage point difference between instructional modalities to the overall Mathematics success rate for 2017-18, the success rate was moderately higher for traditional (face-toface) Mathematics courses, slightly lower for online courses, substantially higher for hybrid courses, and moderately higher for correspondence (cable, telecourse, and other distance learning) courses.

When comparing the percentage point difference between genders to the overall Mathematics success rate for 2017-18, the success rate was slightly lower for female students in Mathematics courses, slightly higher for male students, and moderately lower for students of unknown gender.

When comparing the percentage point difference between ethnicity groups to the overall Mathematics success rate for 2017-18, the success rate was substantially lower for African American students in Mathematics courses, substantially lower for American Indian/AK Native students, moderately higher for Asian students, slightly lower for Hispanic students, substantially lower for Pacific Islander/HI Native students, minimally different for White students, moderately lower for multi-ethnic students, and slightly higher for students of other or unknown ethnicity.

When comparing the percentage point difference between age groups to the overall Mathematics success rate for 2017-18, the success rate was slightly higher for students aged 19 or less in Mathematics courses, slightly lower for students aged $\mathbf{2 0}$ to 24, slightly lower for students aged $\mathbf{2 5}$ to $\mathbf{2 9}$, minimally different for students aged $\mathbf{3 0}$ to $\mathbf{3 4}$, minimally different for students aged $\mathbf{3 5}$ to $\mathbf{3 9}$, slightly higher for students aged 40 to 49 , and moderately higher for students aged 50 and older.

| Comparison of Retention Rates | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ |
| :--- | :---: | :---: | :---: |
| College State-Funded Retention Rate | $83.4 \%$ | $83.7 \%$ | $85.1 \%$ |
| College Institution Set Standard Retention Rate | $69.9 \%$ | $70.9 \%$ | $71.1 \%$ |
| Mathematics Retention Rate | $76.9 \%$ | $76.5 \%$ | $77.4 \%$ |


| Modality | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ |
| :--- | :---: | :---: | :---: |
| Traditional | $84.0 \%$ | $80.9 \%$ | $85.8 \%$ |
| Online | $75.3 \%$ | $76.0 \%$ | $75.1 \%$ |
| Hybrid | $75.4 \%$ | $75.3 \%$ | $83.0 \%$ |
| Correspondence (Cable, Telecourse, Other DL) | $79.2 \%$ | $76.3 \%$ | $82.4 \%$ |


| Gender | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ |
| :--- | :---: | :---: | :---: |
| Female | $76.6 \%$ | $76.9 \%$ | $76.7 \%$ |
| Male | $77.0 \%$ | $75.8 \%$ | $78.3 \%$ |
| Unknown | $81.1 \%$ | $83.7 \%$ | $74.1 \%$ |


| Ethnicity | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ |
| :--- | :---: | :---: | :---: |
| African American | $73.5 \%$ | $65.1 \%$ | $70.5 \%$ |
| American Indian/AK Native | $74.1 \%$ | $80.8 \%$ | $84.4 \%$ |
| Asian | $81.5 \%$ | $82.6 \%$ | $82.6 \%$ |
| Hispanic | $74.2 \%$ | $71.7 \%$ | $77.1 \%$ |
| Pacific Islander/HI Native | $69.2 \%$ | $69.6 \%$ | $70.6 \%$ |
| White | $77.5 \%$ | $79.1 \%$ | $77.4 \%$ |
| Multi-Ethnicity | $72.5 \%$ | $72.0 \%$ | $73.3 \%$ |
| Other/Unknown | $78.3 \%$ | $77.6 \%$ | $82.8 \%$ |


| Age Group | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ |
| :--- | :---: | :---: | :---: |
| 19 or Less | $82.9 \%$ | $80.9 \%$ | $81.8 \%$ |
| 20 to 24 | $74.9 \%$ | $78.6 \%$ | $76.7 \%$ |
| 25 to 29 | $75.3 \%$ | $74.6 \%$ | $74.9 \%$ |
| 30 to 34 | $76.8 \%$ | $75.1 \%$ | $76.5 \%$ |
| 35 to 39 | $75.9 \%$ | $70.4 \%$ | $73.7 \%$ |
| 40 to 49 | $76.1 \%$ | $74.8 \%$ | $79.6 \%$ |
| 50 and Older | $78.9 \%$ | $76.3 \%$ | $80.4 \%$ |

The percentage difference in the retention rate in Mathematics courses in 2017-18 showed a slight increase from 2016-17 and minimal difference from 2015-16. When comparing the percentage point difference in the Mathematics 2017-18 retention rate to the College's overall retention average* (85.1\%) and the institution-set standard* (71.1\%) for credit course success, the Mathematics retention rate was moderately lower than the college average and moderately higher than the institution-set standard for credit course success.

When comparing the percentage point difference between instructional modalities to the overall Mathematics retention rate for 2017-18, the retention rate was moderately higher for traditional (face-to-face) Mathematics courses, slightly lower for online courses, moderately higher for hybrid courses, and slightly higher for correspondence (cable, telecourse, and other distance learning) courses.

When comparing the percentage point difference between genders to the overall Mathematics retention rate for 2017-18, the retention rate was minimally different for female students in Mathematics courses, minimally different for male students, and slightly lower for students of unknowngender.

When comparing the percentage point difference between ethnicity groups to the overall Mathematics retention rate for 2017-18, the retention rate was moderately lower for African American students in Mathematics courses, moderately higher for American Indian/AK Native students, moderately higher for Asian students, minimally different for Hispanic students, moderately lower for Pacific Islander/HI Native students, minimally different for White students, slightly lower for multi-ethnic students, and moderately higher for students of other or unknown ethnicity.

When comparing the percentage point difference between age groups to the overall Mathematics retention rate for 2017-18, the retention rate was slightly higher for students aged 19 or less in Mathematics courses, minimally different for students aged 20 to 24, slightly lower for students aged 25 to 29 , minimally different for students aged 30 to 34 , slightly lower for students aged 35 to $\mathbf{3 9}$, slightly higher for students aged 40 to 49, and slightly higher for students aged 50 and older.
*Note: College term success and retention averages and institution-set standards are computed annually and recorded in the college Key Performance Indicators (KPI) Scorecard.

Data Source: Banner Student Information System
Calculation Categories

| Language | Range |
| :--- | :--- |
| Minimal to No Difference | $<1.0 \%$ |
| Slight Increase/Decrease | Between $1.0 \%$ and $5.0 \%$ |
| Moderate Increase/Decrease | Between $5.1 \%$ and $10.0 \%$ |
| Substantial Increase/Decrease | $>10.0 \%$ |

## Transition to OER

In department transitioned to OER and MyOpen Math in 2017. The reason for the transition was to save the cost of course materials for students. Both digital textbook and online access are free to Coastline math students.

## Student (SLOs) and Program Student Learning Outcome (PSLOs)

Table: SLO Assessment and Plan


All the faculty who reported SLOs in their course participated in the Math Department Discussions forum in Canvas, shared their outcomes and recommended actions with the colleagues who taught the same course. Faculty members had made suggestions on how to improve their outcomes with
higher satisfaction rates.
The discussions, suggestions and reflections were posted by both full-time and part-time faculty members at Math Department Canvas Discussions forum in order to share with the whole math department.

Here are some examples:

## COURSE SLO ASSESSMENT REPORT, Coastline Community College

Department: Math
Semester: Spring 2017
Course: Liberal Arts Math, Math C100, CRN \#92680 16-Weeks Online; and CRN \#92682 8-Weeks Online Faculty Member: Fred Feldon

| Course SLO | Method of Assessment | Outcomes | Recommendations |
| :---: | :---: | :---: | :---: |
| Upon completion of the course students will be able to: <br> Apply mathematics and quantitative reasoning to management of personal finance and other real-world applications. | Midterm Exam, Final Exam, and final course grade | CRN \#92680: <br> 80\% Successfully achieved Outcome 3 \% Partially achieved Outcome 17\% Did not achieve Outcome <br> CRN \#92682: <br> 67\% Successfully achieved Outcome <br> 0 \% Partially achieved Outcome 33\% Did not achieve Outcome <br> Total: 74\% Successfully achieved Outcome 0\% Partially achieved Outcome 26\% Did not achieve Outcome | After gathering evidence, reviewing and interpreting results, I recommend for next semester: <br> Research pedagogy, techniques, and support systems that might help students in accelerated classes increase their chance of successfully completing the course. <br> Create custom instructional aids such as videos for students that cover the specific topics and content most frequently missed which lower their scores on assessments, such as expected value, logarithmic and exponential functions, logistic growth, and confusing saving plan formulas with loan payment formulas, etc. <br> Survey students midway through the semester, to capture perceptions of their learning and the educational environment (the class, the instructor, the college) that supports it. <br> Share outcomes and recommendations with other faculty to solicit feedback and finalize recommendations |

# COURSE SLO ASSESSMENT REPORT, Coastline Community College 

Department: Math
Semester: Spring 2017
Course: Math C280 Calculus 3 CRN \#80200
Faculty Member: Mike Everett

| Course SLO | Method of Assessment | Outcomes | Recommended Actions |
| :---: | :---: | :---: | :---: |
| Upon completion of the course, students will have the necessary quantitative reasoning skills to become an informed citizen, to understand major issues in life, to achieve success and advance in their career, and to understand the mathematics they may encounter in other college courses. Upon completion of the course students will be able to: <br> 1. Apply multiple integrals, principles of differential calculus, and integration to solve problems involving vector fields and calculate partial derivatives. | Midterm \& Final Exam | 1) On Question \#1 of the midterm, students evaluated the unit tangent vector and the curvature of a given curve: $65 \%$ of the students successfully achieved the outcome, $19 \%$ of the students partially achieved the outcome, and $16 \%$ of the students did not achieve the outcome. <br> 2) On Question \#5 of the final exam, students found the volume of a paraboloid bounded by a plane: $42 \%$ of the students successfully achieved the outcome, $35 \%$ of the students partially achieved the outcome, and $23 \%$ of the students did not achieve the outcome. <br> 3) On Question \#12 of the final exam, students utilized Green's Theorem to evaluate a given line integral: 61\% of the students achieved the outcome, $23 \%$ of the students partially achieved the outcome, and $16 \%$ of the students did not achieve the outcome. | 1) I am planning to add a media assignment including short videos and assessment questions to provide consistent support with vector valued functions <br> 2) I am planning to add a discussion board assignment next semester on functions with several variables as a reinforcement activity for this concept. <br> 3) I am planning to address common conceptual errors within an email assignment next semester on vector calculus as a reinforcement activity for this concept. |

Course: Basic Mathematics, Math C008, Pre-Algebra16-Weeks, CRN \#87093 \& CRN 87046 8-Week Online
Faculty Member: Junko Forbes

| Course SLO | Method of Assessment <br> \& Outcomes | Recommended Actions |
| :--- | :--- | :--- |
| Upon completion of the <br> course students will be able <br> to: Evaluate algebraic <br> expressions involving the <br> real number system and <br> solve simple algebraic <br> equations. | Midterm Exam, Final Exam, and <br> final course grade | 79\% Successfully <br> achieved Outcome <br> N/A <br> $21 \%$ Did not achieve Outcome | | After gathering evidence, |
| :--- |
| reviewing and interpreting |
| results, I recommend for next |
| semester: 1. Create a more |
| interactive environment in the |
| discussion board by requiring |
| students to explain their work |
| instead of simply posting their |
| answers. Focus discussion |
| board questions on the specific |
| topics most frequently missed |
| by students on exams. 2. Setup |
| a consistent support system by |
| weekly feedback on each |
| student's progress, feedback |
| on assignments/exam results |
| to increase retention rates and |
| students' chance of |
| successfully |
| completing the course. |

Course: Math C185, Calculus 2, CRN \# CRN \#80024 16-Weeks Cable
Faculty Member: Jose Villalobos

| Course SLO | Method of Assessment <br> \& Outcomes | Recommended Actions |
| :--- | :--- | :--- |
| Upon completion of the course, <br> students will have the necessary <br> quantitative reasoning skills to <br> become an informed citizen, to <br> understand major issues in life, <br> to achieve success and advance <br> in their career, and to <br> understand the mathematics <br> they may encounter in other <br> college courses. Upon <br> completion of the course <br> students will be able to solve <br> first-order differential equations; <br> apply higher-level integration <br> skills; and determine the <br> convergence or divergence of <br> sequences, series, and power <br> series. | Outcome, 13 \% Partially <br> achieved Outcome, and 33\% <br> Did not achieve Outcome. | After gathering evidence, <br> reviewing and interpreting <br> results, my goals for the <br> following semester are the <br> following: 1. To create more <br> activities with emphasize in <br> Algebra and trigonometry. 2. <br> Have a deeper review of <br> Calculus I basis (specially <br> substitution) at the beginning <br> of the class. |

Course: Basic Mathematics, Math C005, CRN \#80475 16-Weeks Cable
Faculty Member: Henri Feiner
$\left.\begin{array}{|l|l|l|}\hline \text { Course SLO } & \begin{array}{l}\text { Method of Assessment \& } \\ \text { Outcomes }\end{array} & \text { Recommended Actions } \\ \hline \begin{array}{l}\text { Upon completion of the } \\ \text { course students will be able } \\ \text { to: } \\ \text { Perform basic mathematical } \\ \text { operations and apply it to } \\ \text { consumer applications. }\end{array} & \begin{array}{l}\text { Midterm Exam, Final Exam, and } \\ \text { final course grade }\end{array} & \begin{array}{l}\text { Outcome } \\ \text { N/A }\end{array} \\ \text { 21\% Did not achieve Outcome gathering } \\ \text { evidence, reviewing and } \\ \text { interpreting results, } \\ \text { I recommend for next semester: } \\ \text { 1. More frequent reporting } \\ \text { to students. } \\ \text { 2. Communicate false steps } \\ \text { on midterm and final. } \\ \text { 3. Share outcomes and } \\ \text { recommendations with } \\ \text { other faculty. }\end{array}\right\}$

## COURSE SLO ASSESSMENT REPORT, Coastline Community College

Department: Math, Semester: Fall 2017
Course: Basic Mathematics, Math C005, CRN \#80878 12-Weeks Online
Faculty Member: Junko Forbes

| Course SLO | Method of Assessment \& Outcomes | Recommended Actions |
| :---: | :---: | :---: |
| Upon completion of the course students will be able to: <br> Perform basic mathematical operations and apply it to consumer applications. | Midterm Exam, Final Exam, and final course grade CRN \#80878: $35 \%$ Successfully achieved Outcome, 25\% Partially achieved Outcome, and 40\% Did not achieve Outcome. | After gathering evidence, reviewing and interpreting results, I recommend for next semester: 1. A Consistent support system through weekly feedback on each student's progress, feedback on assignments/exam results to increase retention rates and students' chance of successfully completing the course. 2. Create discussion board questions that require students to explain their work instead of simply asking them to solve problems. Focus discussion board questions on the specific topics most frequently missed by students. <br> 3. Survey students midway through the semester, to capture perceptions of their learning and the educational environment (the class, the instructor, the college) that supports it. 4. Share outcomes and recommendations with other faculty to solicit feedback and finalize recommendations. |

# COURSE SLO ASSESSMENT REPORT, Coastline Community College 

Department: Math
Semester: Spring 2018
Course: Combined Basic Mathematics and Pre-Algebra, Math C044, CRN \#93031 16 Weeks Onsite
Faculty Member: Hao-Nhien Vu

| Course SLO | Method of Assessment | Outcomes | Recommendations |
| :---: | :---: | :---: | :---: |
| Upon completion of the course students will be able to: <br> 1. Correctly perform basic operations on whole numbers, integers, fractions, decimals, and rational numbers. | Homework, Quizzes, Midterm Exam, Final Exam, and final course grade | 90\% Successfully achieved Outcome <br> 10\% Partially achieved Outcome | After gathering evidence, reviewing and interpreting results, I recommend for next semester: <br> 1. Research pedagogy, techniques, and support systems that might help students in accelerated classes increase their chance of successfully completing the course. <br> 2. Increase the use of affective domain tools and techniques to support students' confidence in their math skills <br> 3. Survey students midway through the semester, to capture perceptions of their learning and the educational environment (the class, the instructor, the college) that supports it. <br> 4. Share outcomes and recommendations with other faculty to solicit feedback and finalize recommendations. <br> 5. Increase support for students with limited English skills. |

# COURSE SLO ASSESSMENT REPORT, Coastline Community College 

Department: Math
Course: Spring 18 Math 280
Faculty Member: Mike Everett

| Course SLO | Method of Assessment | Outcomes | Recommended Actions |
| :---: | :---: | :---: | :---: |
| Upon completion of the course, students will have the necessary quantitative reasoning skills to become an informed citizen, to understand major issues in life, to achieve success and advance in their career, and to understand the mathematics they may encounter in other college courses. Upon completion of the course students will be able to: <br> 1. Apply multiple integrals, principles of differential calculus, and integration to solve problems involving vector fields and calculate partial derivatives. | Midterm \& Final Exam | 1) On Question \#1 of the midterm, students evaluated the unit tangent vector and the curvature of a given curve: $75 \%$ of the students successfully achieved the outcome, $10 \%$ of the students partially achieved the outcome, and $15 \%$ of the students did not achieve the outcome. <br> 2) On Question \#5 of the final exam, students found the volume of a paraboloid bounded by a plane: $64 \%$ of the students successfully achieved the outcome, $24 \%$ of the students partially achieved the outcome, and $12 \%$ of the students did not achieve the outcome. <br> 3) On Question \#12 of the final exam, students utilized Green's Theorem to evaluate a given line integral: 74\% of the students achieved the outcome, $18 \%$ of the students partially achieved the outcome, and $8 \%$ of the students did not achieve the outcome. | 1) The new media assignment seemed to reinforce the concept. I recommend adding a follow-up discussion assignment to provide further support. <br> 2) The new discussion board appeared to improve students' performance on the final exam. I recommend having students work in pairs on this assignment to increase discussion and reinforce key concepts. <br> 3) The discussion board assignment which addressed common conceptual errors really seemed to help. I recommend adding similar assignments to assist students with concepts such as linear approximation and gradient. |

# COURSE SLO ASSESSMENT REPORT, Coastline Community College 

Department: Math
Course: Spring 18 Math 100
Faculty Member: Mike Everett

| Course SLO | Method of Assessment | Outcomes | Recommended Actions |
| :---: | :---: | :---: | :---: |
| Upon completion of the course, students will have the necessary quantitative reasoning skills to become an informed citizen, to understand major issues in life, to achieve success and advance in their career, and to understand the mathematics they may encounter in other college courses. Upon completion of the course students will be able to: <br> 1. Apply mathematics and quantitative reasoning to management of personal finance and other realworld applications | Midterm \& Final Exam | 1) On Question \#9 of the midterm, students evaluated compound interest for a savings account: $90 \%$ of the students successfully achieved the outcome, 10 \% of the students partially achieved the outcome, and $0 \%$ of the students did not achieve the outcome. <br> 2) On Question \#13 of the final exam, students analyzed the savings from itemized deductions versus the standard deduction: 75\% of the students successfully achieved the outcome, 13\% of the students partially achieved the outcome, and $13 \%$ of the students did not achieve the outcome. <br> 3) On Question \#15 of the final exam, students analyzed a game situation using probability: $62 \%$ of the students achieved the outcome, $25 \%$ of the students partially achieved the outcome, and $13 \%$ of the students did not achieve the outcome. | 1) The additional discussion board assignment seemed to reinforce the concept. I recommend continuing this discussion board assignment in ongoing semesters. <br> 2) The new media assignment should continue to be used as there was significant improvement in this area. <br> 3) The discussion board assignment which addressed common conceptual errors really seemed to help. I recommend a follow-up discussion board assignment to seek out continued improvement in this area. |

## COURSE SLO ASSESSMENT REPORT, Coastline Community College

## Department: Math

Semester: Spring 2018
Course: Intermediate Algebra, Math C030, CRN \#92778 16-Weeks Online.
Faculty Member: Thomas Cao

| Course SLO | Method of Assessment | Outcomes | Recommendations |
| :---: | :---: | :---: | :---: |
| Upon completion of the course students will be able to: Apply the concept of a function; solve and graph quadratic, rational, radical, exponential, and logarithmic functions at a pre- collegiate level. | Midterm Exam, Final Exam, and final course grade | CRN <br> \#92778: <br> 68\% <br> Successfully <br> achieved <br> Outcome 21\% <br> Partially <br> achieved <br> Outcome <br> 11\% Did <br> not achieve <br> Outcome | After gathering evidence, reviewing and interpreting results, I recommend for next semester: <br> 1. Research pedagogy, techniques, and support systems that might help students in accelerated classes increase their chance of successfully completing the course. <br> 2. Integrate RSIs for specific topics and content most frequently missed which lower their scores on assessments, such as expected value, logarithmic and exponential functions, logistic growth, and confusing word problems, etc. <br> 3. Discuss with math department for different methods of assessment to increase SLOs 4. Share outcomes and recommendations with other faculty to solicit feedback and finalize recommendations. |

COURSE SLO ASSESSMENT REPORT, Coastline Community College
Department: Math
Course: Spring 18 Math C030, 16-week online, CRN 92670
Faculty Member: James Yang

| Course SLO | Method of Assessment | Outcomes | Recommended Actions |
| :---: | :---: | :---: | :---: |
| Upon completion of the course students will be able to: 1. Apply the concept of a function; solve and graph quadratic, rational, radical, exponential, and logarithmic functions at a precollegiate level. | Midterm Exam, Final Exam, and final course grade | 50\% Successfully achieved <br> Outcome 7 \% Partially achieved Outcome 43\% Did not achieve Outcome | After gathering evidence, reviewing and interpreting results, I recommend for next semester: 1. Research pedagogy, techniques, and support systems that might help students increase their chance of successfully completing the course. 2. Include more resources including more practices in areas where students feel difficult with, such as radical, exponential, logarithmic functions and their graphs. 3 . Use the assessments such as the midterm exam to predict and prevent students who are struggling and monitor their progress in the course. <br> 4. Share outcomes and recommendations with other faculty to solicit feedback and finalize recommendations. |

Course: Math C160 -- Section: 80705 --Introduction To Statistics
Faculty Member: Mutsuno Ryan

| Course SLO | Method of Assessment | Outcomes | Recommendations |
| :---: | :---: | :---: | :---: |
| Upon completion of the course students will be able to: <br> 1. Collect, analyze, and summarize sample data; write inferences; make predictions; and solve problems involving analysis of variance. | Midterm <br> Exam and <br> Final Exam | CRN \#80705: $90 \%$ <br> Successfully achieved Outcome 3 \% <br> Partially achieved Outcome 7\% Did not achieve Outcome | After gathering evidence, reviewing and interpreting results, I recommend for next semester: <br> 1.I would like to introduce more real-life examples that are relevant to today's social issues that involve studies that have statistical conclusions. <br> 2.I will include more topical discussions that are statistically based so that the students continue include themselves in the analysis. <br> 3.I would like to collaborate more with other faculty for ideas that make statistical analysis more relevant in today's world. |

Course: PreAlgebra, Math 008, CRN 80476
Faculty Member: Jessica Kuang

| Course SLO | Method of Assessment | Outcomes | Recommendations |
| :---: | :---: | :---: | :---: |
| Upon completion of the course students will be able to: <br> Evaluate algebraic expressions involving the real number system and solve simple algebraic equations. | Final Exam; final course grade | CRN \#80476 CABLE Course: <br> 79\% Successfully achieved Outcome 15\% Partially achieved Outcome 6\% Did not achieve Outcome | After gathering evidence, reviewing and interpreting results, I recommend for next semester: <br> This course will no longer be offered due to AB705, so the following recommendation is for cable course in general. Change the modality of this course to online (limited edition for incarcerate students), so students could interact with the instructors easily - I do believe that this will happen in two years. Provide live review sections, so students could be better prepared for the exams. |

Course: Combo Elementary and Intermediate Algebra, Math C45, CRN \#81182 16-Weeks Online Faculty Member: Duy Tran

| Course SLO | Method of Assessment | Outcomes | Recommendations |
| :---: | :---: | :---: | :---: |
| completion of the course students will be able to: <br> 1. Set up and solve a linear equation or inequality; explain the answer to an application problem. <br> 2. Solve quadratic, polynomial, rational, radical, exponential, and logarithmic equations. <br> 3. Apply the concept of a function; solve and graph quadratic, rational, radical, exponential, and logarithmic functions at a collegiate level. | Midterm <br> Exam, Final Exam, and final course grade | 57\% Successfully achieved Outcome 24\% Partially achieved Outcome 19\% Did not achieve Outcome | 1. Research pedagogy, techniques, and support systems that might help students in accelerated classes increase their chance of successfully completing the course. 2. Create custom instructional aids such as videos for students that cover the specific topics and content most frequently missed which lower their scores on assessments, such as exponential, logarithmic, radical, quadratic functions. <br> 3. Have 2 midterms +1 final exam instead of 1 midterm and 1 final to assess the student's learning throughout the semester. 4. Have an embedded tutor to help students for MyMathLab assignments. 5. Provide individual weekly video feedback on Canvas's speedgrader for weekly discussion prompt. 6. Provide tips for math test taking strategies to help students reducing anxieties when taking tests. |

Course: Math C160, CRN 81104 --Introduction to Statistics, Hybrid
Faculty Member: Lisa Lee
$\left.\begin{array}{|l|l|l|l|}\hline \text { Course SLO } & & & \\ \hline & \begin{array}{l}\text { Method of } \\ \text { Assessment }\end{array} & \text { Outcomes } & \text { Recommendations } \\ \begin{array}{l}\text { Upon completion of the } \\ \text { course students will be } \\ \text { able to: } \\ \text { Collect, analyze, and } \\ \text { summarize sample data; } \\ \text { write inferences; make } \\ \text { predictions; and solve } \\ \text { problems involving } \\ \text { analysis of variance. }\end{array} & \begin{array}{l}\text { Final Exam } \\ \text { and final } \\ \text { course grade }\end{array} & \begin{array}{l}88 \% \text { Successfully } \\ \text { achieved Outcome, } \\ 8 \% \text { Partially achieved } \\ \text { Outcome, and } \\ 4 \% \text { Did not achieve } \\ \text { Outcome }\end{array} & \begin{array}{l}\text { After gathering evidence, } \\ \text { reviewing and interpreting } \\ \text { results, I recommend for next } \\ \text { semester: } \\ \text { 1. Collect and analyze real } \\ \text { data. } \\ \text { 2. Require Hands-on Activity }\end{array} \\ \text { Projects. } \\ \text { 3. Offer In-Class Activity related } \\ \text { to real-life applications. } \\ \text { 4. Use a technology to solve } \\ \text { the problem, such as TI-84 Plus } \\ \text { or Statistical software. }\end{array}\right\}$

Course: Math C045 Introduction to Statistics CRN \#80412
Faculty Member: Lisa Lee

| Course SLO | Method of Assessment | Outcomes | Recommended Actions |
| :---: | :---: | :---: | :---: |
| Upon completion of the course students will be able to: <br> 1. Set up and solve a linear equation or inequality; explain the answer to an application problem. <br> 2. Solve quadratic, polynomial, rational, radical, exponential, and logarithmic equations. <br> 3. Apply the concept of a function; solve and graph quadratic, rational, radical, exponential, and logarithmic functions at a collegiate level. | Midterm, Final Exam and Final Course Grade | 73\% Successfully achieved Outcome, 17\% Partially achieved Outcome, 10\% Did not achieve Outcome | 1) Add a media assignment including short videos and assessment questions to provide consistent support to students. <br> 2) Add a discussion board assignment next semester on Rational and Logarithmic problems to reinforce related concepts. <br> 3) Address common conceptual mistakes as one of required assignments at the Discussions forum next semester. |

Table: PSLO Results for the AA Math and Science Degree 2016-2019

| PSLOs | N | Able and <br> Confident | Able and <br> Somewhat <br> Confident | Able and <br> Not <br> Confident | Not <br> Able |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Adequately explain thinking and mathematical <br> processes, and justify mathematical solutions <br> effectively and accurately. | 16 | $68.8 \%$ | $25.0 \%$ | $6.3 \%$ | $0.0 \%$ |

The data shows that nearly 70\% of graduates met the PSLO associated with the AA Math and Science Degree.

There were not enough graduates with the AD-T in Mathematics to collect the post-graduation PSLO data. Plans for spring 2020 is to conduct a survey or an assessment of students in the 200-level math courses which are required for the AD-T in Mathematics.

## Curriculum Review

Table: Curriculum Review

| Course | Title | Term Reviewed | Status |
| :---: | :---: | :---: | :---: |
| MATH C005 | Basic Mathematics | Spring 2008 | Will suspended as spring 2020 |
| MATH C008 | Pre-Algebra | Fall 2016 | Active |
| MATH C020 | Plane Geometry | Fall 2009 | Suspended as fall 2019 |
| MATH C030 | Intermediate Algebra | Summer 2017 | Active |
| MATH C044 | Combined Basic Mathematics and Pre-Algebra | Fall 2019 | Suspended as fall 2019 |
| MATH C045 | Combined Elementary and Intermediate Algebra | Spring 2015 | Active |
| MATH C046 | Statistics Pathway 1 | Fall 2016 | Active |
| MATH C070 | Intermediate Algebra and Trigonometry | Spring 2008 | Suspended as fall 2019 |
| MATH 091 | Support for College Algebra | Spring 2019 | Active |
| MATH 096 | Support for introduction to Statistics | Spring 2019 | Active |
| MATH C100 | Liberal Arts Mathematics | Fall 2015 | Active |
| MATH C103 | Statistics for Elementary Teachers | Spring 2015 | Active |
| MATH C104 | Mathematics for Elementary Teachers | Spring 2018 | Active |
| MATH C106 | Geometry for Elementary Teachers | Spring 2015 | Active |
| MATH C115 | College Algebra | Spring 2018 | Active |
| MATH C120 | Trigonometry | Spring 2018 | Active |
| MATH C140 | Business Calculus | Fall 2018 | Active |
| MATH C146 | Statistics Pathway 2 | Fall 2016 | Active |
| MATH C150 | Finite Mathematics with Applications | Spring 2015 | Active |
| MATH C160 | Introduction to Statistics | Fall 2019 | Active |
| MATH C170 | Pre-Calculus | Spring 2010 | Active |
| MATH C180 | Calculus 1 | Spring 2018 | Active |
| MATH C185 | Calculus 2 | Spring 2016 | Active |
| MATH C280 | Calculus 3 | Spring 2018 | Active |
| MATH C285 | Introduction to Linear Algebra and Differential Equations | Spring 2018 | Active |

The Math department offers one degree which is an Associate of Science Transfer (AS-T) degree in Mathematics. The degree uses transfer model curriculum and is consistently reviewed by the faculty to ensure PSLOs and courses are consistent with the standard as specified by the CCCCO.

In addition, the Science Department developed an Associate of Arts degree with an area of emphasis Science and Math. The departments collaborate to ensure that the degree is consistent with the course offerings at the college.

AB 705 is a bill signed by the Governor on October 13, 2017 that took effect on January 1, 2018. The bill requires that a community college district or college maximize the probability that a student will enter and complete transfer-level coursework in English and math within a one year timeframe and use, in the placement of students into English and math courses, one or more of the following: high school coursework, high school grades, and high school grade point average.

The bill also authorizes the Board of Governors to establish regulations governing the use of measures, instruments and placement models to ensure that these measures, instruments and placement models achieve the goal of maximizing the probability that a student will enter and complete transfer-level coursework in English and math.

In compliance of AB 705, Math Department is not offering those math courses that are numbered lower than Math C030. However, they are not suspended yet as fall 2019. Starting this fall, math department has offered seven college level math courses without prerequisites. Five of them are Math C160, Introduction Statistics with Support, Math C096, and two classes of College Algebra, Math C115 with Support, Math C091. If AB 705 continues to the next year, math department will consider further action to request the suspension of those course with the lower level than Math C030.

## Progress on Initiative(s)

Table: Progress on Forward Strategies

| Initiative(s) | Status | $\begin{array}{c}\text { Progress Status } \\ \text { Description }\end{array}$ | Outcome(s) |
| :--- | :--- | :--- | :--- |
| $\begin{array}{l}\text { Hire two full-time math instructors due } \\ \text { to the top ranking of FTEs, 14.8, in the } \\ \text { entire college and 147 LHEs taught by } \\ \text { adjunct instructors. }\end{array}$ | Completed | $\begin{array}{l}\text { 2015-16 a new math } \\ \text { faculty was hired and a } \\ \text { second was hired in 2016- } \\ 17 .\end{array}$ | $\begin{array}{l}\text { The college was able to } \\ \text { offer more math } \\ \text { courses. There has been } \\ \text { an increase in courses } \\ \text { offered. }\end{array}$ |
| $\begin{array}{l}\text { Establish Math Academy or Bridge } \\ \text { Program in summer and winter sessions } \\ \text { to prepare students before classes start; } \\ \text { and to increase the math success and } \\ \text { retention rate, especially for STAR and } \\ \text { STAR2 programs. }\end{array}$ | Completed | $\begin{array}{l}\text { In summer 2015, a math } \\ \text { boot camp was help at } \\ \text { NBC to help incoming } \\ \text { students. The program } \\ \text { was closed in 2017-18 }\end{array}$ | $\begin{array}{l}\text { The results were that } \\ \text { students placed into } \\ \text { higher math courses. } \\ \text { However, the labs need } \\ \text { to be longer to cover } \\ \text { more material. }\end{array}$ |
| $\begin{array}{l}\text { Create "Pathway" curriculum to help } \\ \text { students succeed in college level math } \\ \text { courses at a faster pace. }\end{array}$ | Completed | $\begin{array}{l}\text { The math faculty created } \\ \text { Coastline pathways and } \\ \text { has approved it and is } \\ \text { waiting for state } \\ \text { approval. }\end{array}$ | $\begin{array}{l}\text { The College offered } \\ \text { MATH C046 and MATH } \\ \text { C146 with success rates } \\ \text { of 72\% in MATH C046 } \\ \text { and 86\% in MATH C146. }\end{array}$ |
| $\begin{array}{l}\text { The program is changing }\end{array}$ |  |  |  |
| due to AB 705. |  |  |  |$\}$


| Initiative(s) | Status | Progress Status Description | Outcome(s) |
| :---: | :---: | :---: | :---: |
| tutors shall be recommended by math instructors or interviewed by a math instructor prior to hiring. |  |  |  |
| Discuss implementation of a STEM or STEAM Program and provide appropriate permanent office space for full-time faculty at the Newport Beach Center. | Completed | 6 offices were opened spring 2017 | Faculty are using the offices. |
| Provide more technology training programs for math faculty. | Completed | 2014-15 PIEAC and <br> budget allocated professional development funds to explore new trainings. In 2015-2016 the instructors attended annual national conferences. In 2016-17 the faculty attended three conferences. In 2017-18 five faculty attended national and state level conferences. In 2018-19 four faculty attended state and national level conference with a focus on AB 705. | The instructor learned of newer technology and strategies in their courses for flipping courses |
| Participate with the college bookstore and the textbook publishing companies to help lower the cost of textbooks to students, and to more clearly outline all the options available to students for instructional materials; investigate free or low-cost online educational resources to help lower the cost of textbooks to students. | Completed | In spring 2015 the math faculty met at the AllCollege Meeting in a breakout discipline focused session where discussion occurred around the textbook. In 2015-16 the faculty have been reviewing OER textbooks. The program invested in OER in 201617. In 2017-18 and 201819 the program adopted courses with OER. | Faculty are in courses using OER which has reflected in higher retention and success. |
| Equip classrooms where math is taught with furniture and equipment that promote active leaning, such as mobile chairs with laptops and individual student whiteboards. | In-progress | The college purchased student whiteboards and there is a 2015-2016 request going to budget for approval. In 2016-17 it was requested but not funded. In 2017-18 it was requested but not funded. The request was made in 2018-19 to PIEAC | N/A |


| Initiative(s) | Status | Progress Status <br> Description | Outcome(s) |
| :--- | :--- | :--- | :--- |
| Modify the math placement system to <br> include a student's recent performance <br> in math classes that do not transfer <br> (such as high school students). | Completed | and is awaiting <br> notification | Multiple measures have <br> been piloted in summer <br> 2015 and are awaiting <br> courses performance <br> results in fall 2015. <br> Multiple measures are <br> getting approved at <br> Academic Senate for <br> implementation in <br> summer 2017. From 2017 <br> to 2019 the program <br> completed the planning <br> and transition to meet <br> the state's AB 705 <br> requirement. |
| Student placement is <br> being informed by <br> MMAP. The department <br> is in full compliance with <br> AB 705 |  |  |  |
| Increase program effectiveness and <br> continue meet student demand for <br> math courses and additionally to <br> develop contextualized courses. | In-progress | While the department <br> proposed full-time <br> position in 2017 and <br> 2018, the decision was <br> made to not fill the <br> additional position. | N/A |

## External Compliance

In October 2017, Governor Brown signed AB 705 (Irwin) into law and fundamentally changed how assessment, placement, and basic skills instruction would happen in the California community colleges. At the time of the law's signing, no one really knew how it would be implemented and what the impact would be on colleges. While many unanswered questions still remain, we now have a much better sense of what colleges are required to do and the different options that they have available as they implement the law locally.

## Placement in Mathematics

AB 705 requires colleges to use high school performance data-overall GPA, courses taken, or course grades-to be the primary measure when placing students, if transcript data is available. If official transcript data is not available, colleges can use self-reported information that can be collected by CCCApply or as part of a guided self-placement process.

The California Community Colleges Chancellor's Office and the Academic Senate for California Community Colleges published a joint memo on July 10, 2018 that outlined default placement for transfer-level composition, statistics and liberal arts mathematics, and business and STEM mathematics courses. All of these default placement recommendations require colleges to place transfer-directed students with an $11^{\text {th }}$ grade high school GPA-no matter what that GPA may be-into transfer-level courses unless the college can demonstrate that placing the students into a pre-transfer level course gives them at least as good of a chance of passing a transfer-level course in one year.

For any student without transcript data, colleges can use guided self-placement to place students into courses. At its meeting on September 7, 2018, the ASCCC Executive Committee approved three documents for distribution related to guided self-placement and steps that colleges might consider including in their local processes. No statewide guidelines have been created for guided self-placement, so each college may develop a process that is designed to meet the needs of its own student population.

Coastline Math Faculty developed MATH C091 to support MATH C115 (College Algebra) and developed MATH C096 to support MATH C160. The College has also adopted a guided self-placement process. As a result, the college is compliant with the AB 705.

## Program Planning and Communication Strategies

The program meets twice a term to discuss the SLOs with all of the full-time and part-time faculty. Every other week (Fridays) there is a lunch meeting to discuss the program, innovative practices, problem solving and general operations. The department also hosts a mid-semester meeting to ensure that the faculty are on track in their courses and to collaborate and share ideas.

## Coastline Pathways

Different faculty members have participated in the Coastline Pathways events. The program is very interested in the structured pathway (program mapping) for the Mathematics AD-T and faculty advising.

## Implications of Change

The data shows that there has been a stagnant number of first-time to college student seeking an AD-T in Mathematics. Similar, the results show the College awards an average of three Mathematics AD-Ts annually (2016-17 and 2018-19). However, Coastline awarded 183 degrees in Liberal Arts Degrees: Science and Mathematics in 2018-19, which has increased from 122 in 2014-15. Therefore, a need exists to market the Math AD-T to students.

Currently, the program does not have a structured pathway to ensure that students will complete the Mathematics AD-T within two to three years. There is a need to establish a model that includes a clear course taking pattern for the completion of the Math AD-T, which incorporates faculty advising.

## Forward Strategy

Develop a fully online structured pathway that will ensure that students complete the Mathematics ADT within two to three years. The model should include clear course taking patterns and incorporate inperson and online faculty advising.

Develop contextualized course materials, activities, and exams that support applied learning of mathematics.

Continue to strengthen courses success by embedding interactive technology (e.g., zoom) and equipment (e.g., mobile furniture) to supports collaborative learning.

## Section 2: Human Capital Planning

## Staffing

Table X Staffing Plan

| Year | Administrator /Management | F/T Faculty | P/T Faculty | Classified | Hourly |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Previous year | Dean | 5 | 32 |  |  |
| Current year | Dean | 5 | 28 |  |  |
| 1 year | Dean | 6 | 25 |  |  |
| 2 years | Dean | 6 | 25 |  |  |
| 3 years | Dean | 6 | 28 |  |  |

In 2015-16, a new full-time faculty member was hired and started in fall 2016. In 2016-17, a new full-time faculty member was hired and started in fall 2017. In 2017-18 and 2018-19 a math faculty position was request but not funded. It is anticipated that there will be growth in the part-time pool in two to three years and the growth in college enrollments and pathways supports the need for new full-time positions 2020. Additionally, as the college move towards guided pathways, there is a continuous need to meet the general education requirement of quantitative reasoning and provide additional support to the continuous development of supplemental and contextualized courses. Therefore, there is a need at add an additional full-time faculty member.

## Professional Development

Table. Professional Development

| Name (Title) | Professional Development | Outcome |
| :--- | :--- | :--- |
| Lisa Lee, Fred Feldon, <br> Mitchell Alves, Son Nguyen, <br> Hao-Nhien Vu | American Mathematical Association for <br> Two -Year Colleges (AMATYC) | Learned about acceleration <br> strategies and how to <br> engage students online |
| Lisa Lee, Fred Feldon, <br> Mitchell Alves, Hao-Nhien <br> Vu | AB 705 Workshop | Workshops and <br> Presentations <br> on In-class and Post-class |
| Lisa Lee, Fred Feldon, <br> Mitchell Alves, Son Nguyen, <br> Hao-Nhien Vu | CMC3 South | Workshops and <br> Presentations about AB <br> 705 |
| Son Nguyen | Random Physical Systems Seminar, 2018 <br> Dec 11-15 | Got some very interesting <br> research ideas that I would <br> like to pursue. If it works <br> out, then these would be <br> very nice results. |
| Hao-Nhien Vu | United States Conference on Teaching <br> Statistics, May 16-18, 2019 | numerous resources, <br> datasets, teaching tools <br> and approaches that have <br> been shared with the all <br> full-time as well as adjunct <br> faculty teaching Statistics. |

## Forward Strategy

To effectively develop a fully online structured Mathematics AD-T pathway that incorporates faculty advising, contextualized courses, and utilizes interactive technology there is a clear need for an additional full-time tenured faculty member.

In addition, to completely develop and implement the new structured pathway model in Mathematics, there is a need for faculty to participate in professional development to learn best practices and adopt new tools for ensuring program success.

## Section 3: Facilities Planning

## Facility Assessment

Currently, math is taught at all college learning centers, Early College High School, online and in the telecourse modality. Based on a request in 2015-16, in spring 2017, an office suite was developed for the full-time faculty at the Newport Beach Center. An ongoing request since 2014-15 is to invest in mobile classroom furniture to promote an active learning environment.

## Forward Strategy

To effectively develop contextualized course and utilizes interactive technology and equipment, there is need to invest in mobile furniture for classrooms.

## Section 4: Technology Planning

## Technology Assessment

Based on a request in 2015-16, in fall 2016, the college purchased and installed laptops and a storage cart at the Newport Beach Center. Through the utilization of Bond Measure M funds, all the learning centers have been updated with smartboard technology to support a more innovative learning environment. In spring 2017, the department obtained smartcard to teach MATH C115 and has shown positive increases in student success. In fall 2017, the department adopted my open math (MOM) as free open-source online math course management system. The system has been embedded into Canvas to support course instruction. In 2018-19, the department was one of the first in the state to offer AB-705 related and support courses online.

## Forward Strategy

To effectively develop a fully online structured Mathematics AD-T pathway that incorporates faculty advising, contextualized courses, and utilizes interactive technology there is a clear need to adopt Zoom, digital 3D models for calculus with laptops, an effective online proctoring tool, and Desmos online software.

## Section 5: New Initiatives

Initiative 1: Support the continuous improvement in the AB-705 implementation in alignment to Coastline Pathways

- Collect, analyze data and adjust the current AB705 mandated mathematics placement program.
- Work with the Guided Coastline Committee to create an optimal experience for Coastline students in mathematics courses.
- Continue to host events related to mathematics instruction and/or research.


## Describe how the initiative supports the college mission:

Individually mobile classroom furniture takes the traditional static classroom seating with rows of tables and chairs designed for lecture and updates it to the active learning environment every professor is trying to achieve. It provides access, supports student success and achievement, encourages active learning and flexibility in the classroom, and creates healthy physical, social, and emotional environments for teaching and learning. This will also increase equity in the classroom and benefit all ages, genders, ethnicities, and students of all socioeconomic backgrounds, by fostering collaboration and an open learning space.

## What college goal does the initiative support? Select one

x Student Success, Completion, and AchievementInstructional and Programmatic Excellence
$\square$ Access and Student Support
x Student Retention and Persistence
$\square$ Culture of Evidence, Planning, Innovation, and Change
$\square$ Partnerships and Community Engagement
$\square$ Fiscal Stewardship, Scalability, and Sustainability
What Educational Master Plan objective does the initiative support? Select all that apply
$x$ Increase student success, retention, and persistence across all instructional delivery modalities with emphasis in distance education.Provide universal access to student service and support programs.
x Strengthen post-Coastline outcomes (e.g., transfer, job placement).
$\square$ Explore and enter new fields of study (e.g., new programs, bachelor's degrees).
$\square$ Foster and sustain industry connections and expand external funding sources (e.g., grants, contracts, and business development opportunities) to facilitate programmatic advancement.
$x$ Strengthen community engagement (e.g., student life, alumni relations, industry and academic alliances).
$\square$ Maintain the College's Asian American and Native American Pacific Islander Serving Institution (AANAPISI)
designation and pursue becoming a designated Hispanic Serving Institution (HSI).

## How does this initiative play a part in Coastline Pathways?

The direct alignment to Coastline Pathways is in both Phase 1, including learning communities, holistic wellness, academic persistence, communication and engagement; and Phase 2, including student outreach and recruitment, and student success.

What evidence supports this initiative? Select all that apply
$x$ Learning Outcome (SLO/PSLO) assessment
x Internal Research (Student achievement, program performance)
$x$ External Research (Academic literature, market assessment, audit findings, compliance mandates)

## Describe how the evidence supports this initiative.

It provides access, supports student success and achievement, encourages active learning and flexibility in the classroom, and creates healthy physical, social, and emotional environments for teaching and
learning. This will also increase equity in the classroom and benefit all ages, genders, ethnicities, and students of all socioeconomic backgrounds, by fostering collaboration and an open learning space.

## Recommended resource(s) needed for initiative achievement:

No funding was provided in the past, however Steelcase Furniture Company provided a classroom set of mobile furniture installed at NBC at no cost, in exchange for marketing and promotional cooperation. The classroom is in high demand. More mobile furniture is needed.

What is the anticipated outcome of completing the initiative?
Increasing Retention and Success rates
Provide a timeline and timeframe from initiative inception to completion.
Equip one class with mobile furniture in Spring 2020 and equip the second classroom in Spring 2021.

Initiative 2: Strengthen Partnership with Student Success Center

- Create a math assistance center run by the math department where the focus would be giving students help with math content since that will not be the focus of the student success center.
- Work with the Faculty Success Center to create professional development for mathematics faculty.
- Work with the Student Success Center to ensure high quality mathematics tutoring provided to Coastline's mathematics students.
- If the focus of the SSC is to specialized in helping students develop soft skills such as learning skills and good study habits, then the department would like for us to make that available for students so they best understand what services they will receive from tutoring


## Describe how the initiative supports the college mission:

Individually mobile classroom furniture takes the traditional static classroom seating with rows of tables and chairs designed for lecture and updates it to the active learning environment every professor is trying to achieve. It provides access, supports student success and achievement, encourages active learning and flexibility in the classroom, and creates healthy physical, social, and emotional environments for teaching and learning. This will also increase equity in the classroom and benefit all ages, genders, ethnicities, and students of all socioeconomic backgrounds, by fostering collaboration and an open learning space.

## What college goal does the initiative support? Select one

x Student Success, Completion, and Achievement
Instructional and Programmatic Excellence
$\square$ Access and Student Support
x Student Retention and Persistence
$\square$ Culture of Evidence, Planning, Innovation, and Change
$\square$ Partnerships and Community Engagement
$\square$ Fiscal Stewardship, Scalability, and Sustainability

What Educational Master Plan objective does the initiative support? Select all that apply
$x$ Increase student success, retention, and persistence across all instructional delivery modalities with emphasis in distance education.
$\square$ Provide universal access to student service and support programs.
x Strengthen post-Coastline outcomes (e.g., transfer, job placement).
$\square$ Explore and enter new fields of study (e.g., new programs, bachelor's degrees).
$\square$ Foster and sustain industry connections and expand external funding sources (e.g., grants, contracts, and business development opportunities) to facilitate programmatic advancement.
$x$ Strengthen community engagement (e.g., student life, alumni relations, industry and academic alliances).
$\square$ Maintain the College's Asian American and Native American Pacific Islander Serving Institution (AANAPISI) designation and pursue becoming a designated Hispanic Serving Institution (HSI).

## How does this initiative play a part in Coastline Pathways?

The direct alignment to Coastline Pathways is in both Phase 1, including learning communities, holistic wellness, academic persistence, communication and engagement; and Phase 2, including student outreach and recruitment, and student success.

What evidence supports this initiative? Select all that apply
x Learning Outcome (SLO/PSLO) assessment
x Internal Research (Student achievement, program performance)
$x$ External Research (Academic literature, market assessment, audit findings, compliance mandates)

## Describe how the evidence supports this initiative.

It provides access, supports student success and achievement, encourages active learning and flexibility in
the classroom, and creates healthy physical, social, and emotional environments for teaching and learning. This will also increase equity in the classroom and benefit all ages, genders, ethnicities, and students of all socioeconomic backgrounds, by fostering collaboration and an open learning space.

## Recommended resource(s) needed for initiative achievement:

No funding was provided in the past, however Steelcase Furniture Company provided a classroom set of mobile furniture installed at NBC at no cost, in exchange for marketing and promotional cooperation. The classroom is in high demand. More mobile furniture is needed.

What is the anticipated outcome of completing the initiative?
Increasing Retention and Success rates
Provide a timeline and timeframe from initiative inception to completion.
Equip one class with mobile furniture in Spring 2020 and equip the second classroom in Spring 2021.

Initiative 3: Explore ways to combine math courses, develop new math courses, and offer math courses across different modalities

- Explore ways to group classes into "Math for Liberal Arts majors (100)," "Math for Computer Science majors (150)," "Math for Teachers" "Calculus prep," "Stats-type," "Basic Calc," "Advanced Math w/ lots of one-time students (280, 285)," etc.
- Create and offer a Calculus Boot Camp to students entering Calculus 1.
- Create and offer an Honors Introduction to Statistics Course.
- Create and offer a summer program for high students with a focus on mathematics and/or mathematics related topics.
- Work towards a full offering of mathematics courses onsite and through cable instruction. In Fall 2019 Coastline Community College does not have cable offerings of Math C045, Math C046, Math C091, Math C096, Math C104, Math C106, Math C280, \& Math C285 and onsite offerings of Math C091, Math C100, Math C104, Math C106, Math C140, Math C170, Math C185, Math C280, \& Math C285
- Equip classroom with mobile furniture to promote interactive learning


## Describe how the initiative supports the college mission:

Individually mobile classroom furniture takes the traditional static classroom seating with rows of tables and chairs designed for lecture and updates it to the active learning environment every professor is trying to achieve. It provides access, supports student success and achievement, encourages active learning and flexibility in the classroom, and creates healthy physical, social, and emotional environments for teaching and learning. This will also increase equity in the classroom and benefit all ages, genders, ethnicities, and students of all socioeconomic backgrounds, by fostering collaboration and an open learning space.

What college goal does the initiative support? Select one
x Student Success, Completion, and Achievement
$\square$ Instructional and Programmatic Excellence
$\square$ Access and Student Support
x Student Retention and Persistence
$\square$ Culture of Evidence, Planning, Innovation, and Change
$\square$ Partnerships and Community Engagement
$\square$ Fiscal Stewardship, Scalability, and Sustainability

What Educational Master Plan objective does the initiative support? Select all that apply
$x$ Increase student success, retention, and persistence across all instructional delivery modalities with emphasis in distance education.
$\square$ Provide universal access to student service and support programs.
x Strengthen post-Coastline outcomes (e.g., transfer, job placement).
$\square$ Explore and enter new fields of study (e.g., new programs, bachelor's degrees).
$\square$ Foster and sustain industry connections and expand external funding sources (e.g., grants, contracts, and business development opportunities) to facilitate programmatic advancement.
$x$ Strengthen community engagement (e.g., student life, alumni relations, industry and academic alliances).
$\square$ Maintain the College's Asian American and Native American Pacific Islander Serving Institution (AANAPISI) designation and pursue becoming a designated Hispanic Serving Institution (HSI).

## How does this initiative play a part in Coastline Pathways?

The direct alignment to Coastline Pathways is in both Phase 1, including learning communities, holistic wellness, academic persistence, communication and engagement; and Phase 2, including student outreach and recruitment, and student success.

What evidence supports this initiative? Select all that apply
$x$ Learning Outcome (SLO/PSLO) assessment
x Internal Research (Student achievement, program performance)
x External Research (Academic literature, market assessment, audit findings, compliance mandates)
Describe how the evidence supports this initiative.
It provides access, supports student success and achievement, encourages active learning and flexibility in the classroom, and creates healthy physical, social, and emotional environments for teaching and learning. This will also increase equity in the classroom and benefit all ages, genders, ethnicities, and students of all socioeconomic backgrounds, by fostering collaboration and an open learning space.

## Recommended resource(s) needed for initiative achievement:

No funding was provided in the past, however Steelcase Furniture Company provided a classroom set of mobile furniture installed at NBC at no cost, in exchange for marketing and promotional cooperation. The classroom is in high demand. More mobile furniture is needed.

What is the anticipated outcome of completing the initiative?
Increasing Retention and Success rates

Provide a timeline and timeframe from initiative inception to completion.
Equip one class with mobile furniture in Spring 2020 and equip the second classroom in Spring 2021.

List and prioritize resource requests based on the requests from the initiatives

| Initiative | Resource(s) | Est. Cost | Funding Type | Health, Safety Compliance | Evidence | College Goal | To be Completed by | Priority |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Explore ways to combine math courses, develop new math courses, and offer math courses across different modalities. <br> Support the continuous improvement in the AB-705 implementation alignment Coastline Pathways | Two Full- <br> time <br> Faculty |  | Ongoing | No | Internal Research, External Research, SLOs | Student Success, Completion, and Achievement; Student Retention and Persistence | 2020-21 | 1 |
|  | Mobile furniture in classrooms |  | One- <br> Time | No | Internal Research, External Research, SLOs | Student Success, Completion, and Achievement; Student Retention and Persistence | 2020-21 | 2 |
| Strengthen <br> Partnership with <br> Student Success <br> Center | Math Lab/ <br> Assistance Center |  | One- <br> Time | No | Internal Research, External Research, SLOs | Student Success, Completion, and Achievement; Student Retention and Persistence | 2020-21 | 3 |

## Prioritization Glossary

Initiative:
Resource(s):
Est. Cost:
Funding Type:
Health, Safety Compliance:
Evidence:

College Goal:
To be completed by:
Priority:

Provide a short description of the plan
Describe the resource(s) needed to support the completion of the initiative Estimated financial cost of the resource(s)
Specify if the resource request is one-time or ongoing Specify if the request relates to health or safety compliance issue(s) Specify what data type(s) supported the initiative (Internal research, external research, or service outcomes)
Specify what College goal the initiative aligns with
Specify year of anticipated completion
Specify a numerical rank to the initiative

## Mathematics Program Review Faculty Survey 2019

Q1
At which location or in which delivery mode are you currently teaching classes in this program. (Mark all that apply, including Extended Learning Program classes.)

| ANSWER CHOICES | RESPONSES |
| :--- | ---: |
| Coastline Garden Grove Center | $5.88 \%$ |
| Coastline Le-Jao Center | 1 |
| Coastline Newport Beach Center | $5.88 \%$ |
| Online | 1 |
| Telecourse/Cable/Video | $35.29 \%$ |
| Responses: I am not teaching this semester. | $68.24 \%$ |
| $2 / 7 / 2020$ 2:18 PM | 15 |
| Other (please specify) | $11.76 \%$ |

Total Respondents: 17

Most instructors are teaching classes online, it's about 88\%. About 35\% of instructors are teaching at Coastline Newport Beach Center if they have an onsite class.

Q2
Please rate your level of satisfaction with each of the following as related to this program. (Skip any item that is not applicable to you.)

|  | VERY SATISFIED | SATISFIED | DISSATISFIED | VERY DISSATISFIED | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Currency of the curriculum (up to date in relation to transfer standards and SLOs) | $\begin{array}{r} 40.00 \% \\ 6 \end{array}$ | $\begin{array}{r} 60.00 \% \\ 9 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | 15 |
| Variety of classes | $\begin{array}{r} 64.29 \% \\ 9 \end{array}$ | $\begin{array}{r} 35.71 \% \\ 5 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | 14 |
| Delivery modes appropriate to student needs | $\begin{array}{r} 66.67 \% \\ 10 \end{array}$ | $\begin{array}{r} 26.67 \% \\ 4 \end{array}$ | $\begin{array}{r} 6.67 \% \\ 1 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | 15 |
| Relevance of classes to student needs | $\begin{array}{r} 57.14 \% \\ 8 \end{array}$ | $\begin{array}{r} 42.86 \% \\ 6 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | 14 |
| Extent to which faculty and staff meet the needs of culturally diverse students | $\begin{array}{r} 73.33 \% \\ 11 \end{array}$ | $\begin{array}{r} 26.67 \% \\ 4 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | 15 |
| Extent to which faculty and staff meet the needs of nontraditional students (e.g., older adults, working adults, active duty military, etc.) | $\begin{array}{r} 80.00 \% \\ 12 \end{array}$ | $\begin{array}{r} 20.00 \% \\ 3 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | 15 |
| Overall quality of | $\begin{array}{r} 86.67 \% \\ 13 \end{array}$ | $\begin{array}{r} 13.33 \% \\ 2 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | 15 |


|  | VERY SATISFIED | SATISFIED | DISSATISFIED | VERY DISSATISFIED | TOTAL |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| the <br> program |  |  |  |  |  |  |
| Your own | $78.57 \%$ | $21.43 \%$ | $0.00 \%$ | $0.00 \%$ |  |  |
| success <br> teaching in <br> the | 11 | 3 | 0 | 0 | 14 |  |
| program |  |  |  |  |  |  |

## Comments(1)

Pearson MyLab seems to cause more issues in classes than any other learning management system (LMS) I have used. Every student complains about entering online homework in any LMS, not just Pearson, sure. But Pearson's interface is very out of date and not just in the homework. The discussions and the webpages themselves are clunk and require 2 or 3 leggy loading screens every time you want to write one equation into a discussion post. Pictures cannot be attached to discussion posts inline, which affects readability. There are long load times between pages, and between moving from one homework problem to the next. These issues aren't standard in other LMS's. There are plenty of issues like these and they affect how much students are willing to participate in a course. I feel like the amount of homework problems in the classes we offer can vary wildly, from 10 problems in an assignment to 50 or 60 (assuming each problem takes a similar amount of time). How do we make this more standard? The difficulty doesn't seem standard either. I've taught both C030 and C115 courses, and in the assignments where the topics happen to overlap directly, the CO30 had a harder set of problems than C115. It took a lot on manual editing to circumvent this issue. I am willing to put the work in to fix this issue in my courses, but it made me very aware of the variety of assignments being offered by our department. AB705 has an overall positive effect in that more students pass transfer-level courses. Plenty of good students need access and they would have been barred from enrollment before AB705. However, I'm also not entirely sure we should just advise all new students enroll into transfer-level math. Corequisite support is a start, but would some students fair better starting below transfer-level? This is a conversation I'm interested in having and a topic I would like to learn more about.

## Q3

Please rate your level of satisfaction with each of the following as related to this program. (Skip any item that is not applicable to you.)

## VERY SATISFIED SATISFIED DISSATISFIED VERY DISSATISFIED TOTAL

| Adequacy of | $80.00 \%$ | $20.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| instructional | 12 | 3 | 0 | 0 | 15 |
| facilities |  |  |  |  |  |


|  | VERY SATISFIED | SATISFIED | DISSATISFIED | VERY DISSATISFIED | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Quality of general instructional equipment (audio-visual, instructor classroom computer and projector, etc.) | $\begin{array}{r} 73.33 \% \\ 11 \end{array}$ | $\begin{array}{r} 26.67 \% \\ 4 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | 15 |
| Support for the program and classes from Dean and support staff for your discipline | $\begin{array}{r} 86.67 \% \\ 13 \end{array}$ | $\begin{array}{r} 13.33 \% \\ 2 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | 15 |
| Support for you, your classes, and the program from your department chair | $\begin{array}{r} 86.67 \% \\ 13 \end{array}$ | $\begin{array}{r} 13.33 \% \\ 2 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | 15 |
| Responsiveness and helpfulness of Coastline's Distance Learning Department in meeting your needs as a DL instructor | $\begin{array}{r} 80.00 \% \\ 12 \end{array}$ | $\begin{array}{r} 20.00 \% \\ 3 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | 15 |
| Extent to which the <br> CourseCompass tools and options allow you to teach | $\begin{array}{r} 50.00 \% \\ 7 \end{array}$ | $\begin{array}{r} 42.86 \% \\ 6 \end{array}$ | $\begin{array}{r} 7.14 \% \\ 1 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | 14 |

$\left.\begin{array}{l|rrrrrl} & \text { VERY SATISFIED SATISFIED } & \text { DISSATISFIED VERY DISSATISFIED TOTAL } \\ \hline \text { your class(es) in } & & & & & \\ \text { the way you }\end{array}\right)$

1. Math Department needs a MathLab supervised by the Math faculty, in term of math tutor quality and hiring process. Currently many complaints filed by students from different level of math classes, that they did not receive helps from the tutoring service since most tutors do not have adequate math knowledge.
2. We need to have the Mathematics Lab as other institutions to help math students more effectively. 2/7/2020 8:22 AM

Q4
Do you teach classes for Coastline's Extended Learning Program?

| ANSWER CHOICES | RESPONSES |
| :--- | :---: |
| Yes | $29.41 \%$ |
|  | 5 |
| No | $70.59 \%$ |
|  | 12 |
| TOTAL | 17 |

Q5
Please indicate your level of satisfaction with each of the following items.

|  | VERY SATISFIED | SATISFIED | DISSATISFIED | VERY DISSATISFIED | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: |
| The way in which you are able to deliver instruction for Extended Learning students | $\begin{array}{r} 80.00 \% \\ 4 \end{array}$ | $\begin{array}{r} 20.00 \% \\ 1 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | 5 |
| The support you receive from the Extended Learning Program staff | $\begin{array}{r} 100.00 \% \\ 5 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | 5 |
| Comments(1) |  |  |  |  |  |

Military/Extended Program staff never lost any exam in the past 18 years, excellent staff support to faculty, especially Ms. Minerva Guray.

| Q6 |  |
| :--- | ---: |
| Do any of your classes serve incarcerated students? |  |
| ANSWER CHOICES | RESPONSES |
| Yes | $11.76 \%$ |
|  | 2 |
| No | $88.24 \%$ |
|  | 15 |

Q7
Please indicate your level of satisfaction with each of the following items.

|  | VERY SATISFIED | SATISFIED | DISSATISFIED | VERY DISSATISFIED | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: |
| The way in which you are able to deliver instruction for incarcerated students | $\begin{array}{r} 50.00 \% \\ 1 \end{array}$ | $\begin{array}{r} 50.00 \% \\ 1 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | 2 |
| The support you receive from the Incarcerated Service Support Team | $\begin{array}{r} 100.00 \% \\ 2 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | 2 |

Q8
Please indicate your preferences regarding scheduling options for courses in this program.

|  | PREFERRED | NOT PREFERRED |  | TOTAL |
| :---: | :---: | :---: | :---: | :---: |
| 16-week classes | 87.50\% | 12.50\% | 0.00\% |  |
|  | 14 | 2 | 0 | 16 |
| 12-week classes | 35.71\% | 57.14\% | 7.14\% |  |
|  | 5 | 8 | 1 | 14 |
| 8-week classes | 29.41\% | 64.71\% | 5.88\% |  |
|  | 5 | 11 | 1 | 17 |
| 4-week classes | 26.67\% | 46.67\% | 26.67\% |  |
|  | 4 | 7 | 4 | 15 |
| Intensive weekend classes | 7.69\% | 30.77\% | 61.54\% |  |
|  | 1 | 4 | 8 | 13 |
| Intensive week-long classes that meet daily | 0.00\% | 23.08\% | 76.92\% |  |
|  | 0 | 3 | 10 | 13 |

## Comments(1)

Summer session should be offered in 6 weeks, just like our sister colleges, or any other community college.

Q9
Please indicate your preferred delivery formats for classes in this program.

|  | PREFERRED | OK | NOT PREFERRED | TOTAL |
| :--- | ---: | :--- | ---: | ---: | ---: | ---: |
| Classroom | $33.33 \%$ | $53.33 \%$ | $13.33 \%$ |  |
| Online | 5 | 8 | 2 | 15 |
|  | $94.12 \%$ | $0.00 \%$ | $5.88 \%$ |  |
| Telecourse/Cable/Video | 16 | 0 | 1 | 17 |
|  | $14.29 \%$ | $35.71 \%$ | $50.00 \%$ |  |
| Hybrid (combination of | 2 | 5 | 7 | 14 |
| classroom and online) | $25.00 \%$ | $56.25 \%$ | $18.75 \%$ |  |

Q10
Please indicate the methods you most often use to measure/assess whether students are achieving the outcomes you expect in your course(s).

|  | FREQUENTLY | SOMETIMES | RARELY | NOT AT ALL | TOTAL |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Participation | $100.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |  |


|  | FREQUENTLY | SOMETIMES | RARELY | NOT AT ALL | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 16 | 0 | 0 | 0 | 16 |
| Objective tests (multiple choice, true/false, short answer, etc.) | $\begin{array}{r} 81.25 \% \\ 13 \end{array}$ | $\begin{array}{r} 12.50 \% \\ 2 \end{array}$ | $\begin{array}{r} 6.25 \% \\ 1 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | 16 |
| Written assignments | $\begin{array}{r} 43.75 \% \\ 7 \end{array}$ | $\begin{array}{r} 25.00 \% \\ 4 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | $\begin{array}{r} 31.25 \% \\ 5 \end{array}$ | 16 |
| Essay tests | $\begin{array}{r} 14.29 \% \\ 2 \end{array}$ | $\begin{array}{r} 28.57 \% \\ 4 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | $\begin{array}{r} 57.14 \% \\ 8 \end{array}$ | 14 |
| Skill demonstration | $\begin{array}{r} 56.25 \% \\ 9 \end{array}$ | $\begin{array}{r} 31.25 \% \\ 5 \end{array}$ | $\begin{array}{r} 12.50 \% \\ 2 \end{array}$ | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | 16 |
| Case studies | $\begin{array}{r} 7.14 \% \\ 1 \end{array}$ | $\begin{array}{r} 35.71 \% \\ 5 \end{array}$ | $\begin{array}{r} 14.29 \% \\ 2 \end{array}$ | $\begin{array}{r} 42.86 \% \\ 6 \end{array}$ | 14 |
| Individual projects | $\begin{array}{r} 12.50 \% \\ 2 \end{array}$ | $\begin{array}{r} 56.25 \% \\ 9 \end{array}$ | $\begin{array}{r} 18.75 \% \\ 3 \end{array}$ | $\begin{array}{r} 12.50 \% \\ 2 \end{array}$ | 16 |
| Group projects | $\begin{array}{r} 31.25 \% \\ 5 \end{array}$ | $\begin{array}{r} 37.50 \% \\ 6 \end{array}$ | $\begin{array}{r} 12.50 \% \\ 2 \end{array}$ | $\begin{array}{r} 18.75 \% \\ 3 \end{array}$ | 16 |
| Student self-report of application of knowledge/skill to daily life | $\begin{array}{r} 18.75 \% \\ 3 \end{array}$ | $\begin{array}{r} 62.50 \% \\ 10 \end{array}$ | $\begin{array}{r} 6.25 \% \\ 1 \end{array}$ | $\begin{array}{r} 12.50 \% \\ 2 \end{array}$ | 16 |
| Pre and post tests of abilities | $\begin{array}{r} 43.75 \% \\ 7 \end{array}$ | $\begin{array}{r} 43.75 \% \\ 7 \end{array}$ | $\begin{array}{r} 6.25 \% \\ 1 \end{array}$ | $\begin{array}{r} 6.25 \% \\ 1 \end{array}$ | 16 |
| Portfolios | $\begin{array}{r} 0.00 \% \\ 0 \end{array}$ | $\begin{array}{r} 14.29 \% \\ 2 \end{array}$ | $\begin{array}{r} 21.43 \% \\ 3 \end{array}$ | $\begin{array}{r} 64.29 \% \\ 9 \end{array}$ | 14 |
| Grading rubrics for assignments/observations | $\begin{array}{r} 60.00 \% \\ 9 \end{array}$ | $\begin{array}{r} 26.67 \% \\ 4 \end{array}$ | $\begin{array}{r} 6.67 \% \\ 1 \end{array}$ | $\begin{array}{r} 6.67 \% \\ 1 \end{array}$ | 15 |

Q11
What steps, if any, have you taken to incorporate student learning outcomes (SLOs) into your course? (Mark all that apply.)

| ANSWER CHOICES | RESPONSES |
| :--- | ---: |
| I haven't yet identified expected student learning outcomes. | $0.00 \%$ |
| I am attempting to identify expected SLOs but need some assistance. | 0 |
| I am working with other faculty in my discipline to identify expected SLOs. | $0.00 \%$ |


| ANSWER CHOICES | RESPONSES |
| :---: | :---: |
| I have identified expected SLOs. | 66.67\% |
|  | 10 |
| My course outline has been updated by me or someone else to include expected SLOs. | 86.67\% |
|  | 13 |
| I have developed a plan for assessing SLOs. | 80.00\% |
|  | 12 |
| I assess students on expected SLOs no less than once a year. | 73.33\% |
|  | 11 |
| I use results from SLO assessments to modify my instruction. | 66.67\% |
|  | 10 |
| I discuss results from SLO assessments with other faculty in my department so that we can make | 60.00\% |
| decisions about teaching and assessment, needed resources, planning, and budgeting based on actual learning outcomes. | 9 |
| Q12 <br> Which best describes your use of Coastline's Virtual Library? |  |
|  |  |
| ANSWER CHOICES | RESPONSES |
| I use the Virtual Library myself and/or give regular or extra credit assignments to my students that require use of the Virtual Library. | $\begin{array}{r} 11.76 \% \\ 2 \end{array}$ |
| I neither use the Virtual Library nor require my students to use the Virtual Library. | 88.24\% |
|  | 15 |

Q13
Please indicate the reasons that either you do not use the Virtual Library or that you do not require your students to use it.

|  | PRIMARY REASONS | SECONDARY REASONS | NOT A FACTOR | TOTAL |
| :--- | ---: | ---: | ---: | ---: | ---: |
| I didn't know Coastline had | $15.38 \%$ | $23.08 \%$ | $61.54 \%$ |  |
| a Virtual Library. | 2 | 3 | 8 | 13 |
| I don't know how to access | $8.33 \%$ | $33.33 \%$ | $58.33 \%$ |  |
| the Virtual Library. | 1 | 4 | 7 | 12 |
| The log-in procedure is too | $15.38 \%$ | $23.08 \%$ | $61.54 \%$ |  |
| complicated. | 2 | 3 | 8 | 13 |
| I don't understand the <br> organization of content in <br> the Virtual Library. | $23.08 \%$ | $15.38 \%$ | $61.54 \%$ |  |
| I can't remember my log-in <br> and password. | 3 | 2 | 8 | 13 |


|  | PRIMARY REASONS | SECONDARY REASONS | NOT A FACTOR | TOTAL |
| :--- | ---: | ---: | ---: | :---: |
| I do not require research | $50.00 \%$ | $21.43 \%$ | $28.57 \%$ |  |
| assignments in my classes. | 7 | 3 | 4 | 14 |
| I don't have time to <br> review/grade library <br> assignments/research <br> papers. | $8.33 \%$ | $8.33 \%$ | $83.33 \%$ |  |
| Other | 1 | 1 | 10 | 12 |
|  |  |  |  |  |
| Comments(2) | $25.00 \%$ | $12.50 \%$ | $62.50 \%$ |  |

1. I assign outside material for students to access, which I have discovered on my own and are very course- and disciplinespecific.
2. Students can do research through multimedia easily
Q14
In which of the following professional development activities have you participated within the past two
years? (Mark all that apply.)

| ANSWER CHOICES | RESPONSES |
| :--- | ---: |
| CCC All-College Meeting in Fall and Spring | $93.75 \%$ |
| Discipline-related workshops | 15 |
| Coastline Summer Technology Institute | $68.75 \%$ |
| Other technology-related workshops | 11 |
| Student learning outcomes workshops/training | $50.00 \%$ |
| Other workshops | 8 |
| Membership in professional associations | $68.75 \%$ |
| Professional conferences | 11 |
| Graduate classes/program | $31.25 \%$ |
| Other classes | 5 |


| ANSWER CHOICES | RESPONSES |
| :--- | ---: |
| Professional training, including certification programs | 2 |
| Discipline-related reading | $12.50 \%$ |
| Technology-related reading | $56.25 \%$ |
| None of the above | $96.25 \%$ |
| Other | 9 |

## Q16

List the college, district, statewide, and/or professional committees on which you have served during the past three years.

1. Academic Senate, Professional Development Institute (PDI), College Professional Development Leadership, Instructional Council, Statewide Academic Senate Plenary, AB 705, Election Committee
2. American Mathematical Association of Two-Year Colleges (AMATYC), California Mathematics Council of Community Colleges (CMC3), Innovative Teaching and Learning Committee (ITLC), Coastline Academic Senate, Coastline Student Success Committee, various Tenure Review Committees (TERC) for full-time faculty.
3. Santa Monica College, California State University Dominguez Hills

Q17
What specific types of training or guidance, if any, do you believe would help you to improve the quality of instruction in your classes so that you can better help students achieve desired learning outcomes?

1. AB 705 workshop in Sacramento, OEI Training with online course content designer from Sacramento
2. Continued funding for professional development including reimbursement for registration, travel, and hotel for professional conferences specifically related to my discipline and pertinent to the College.
Q18
Are there other courses in this program that you would like Coastline to offer?

## N/A

Q19
As part of this review, the program will be identifying new five-year goals for the program. Please suggest one or more goals that you believe would be important for the program to pursue.

1. Hire two full time math faculty.
2. Open a Math Lab supervised by a math faculty to provide our students a better math tutoring service. 3. Open two more Computer Lab room for math classes.
3. Offer $100 \%$ online math classes.
4. Provide Tech Support to online students in 24/7.
5. Fill our classrooms with furniture that promotes active learning, such as individually mobile classroom furniture.
6. We do need to have the Mathematics Lab as other institutions to help math students more effectively.
7. Special topics courses for advanced students.

Q20
Do you have any other comments or suggestions for improving the program?

1. Have a Math Lab room separately from other discipliners for tutoring math students.
2. A Math Lab supervised by a Math Faculty to improve and support the program.
3. I think the coastline math program is very comprehensive in teaching students and training teachers.

Mathematics Program Review Faculty Survey 2019

## Q1 At what location or in what delivery mode are you taking your current class(es) in this specific program? (Mark all that apply.)

|  | Answered: 131 | Skipped: 0 |  |
| :---: | :---: | :---: | :---: |
| ANSWER CHOICES |  | RESPONSES |  |
| Coastline Garden Grove Center |  | 10.69\% | 14 |
| Coastline Westminster/Le-Jao Center |  | 6.87\% | 9 |
| Coastline Newport Beach Center |  | 13.74\% | 18 |
| Online |  | 80.15\% | 105 |
| Telecourse/Cable |  | 0.00\% | 0 |
| Other (please specify) |  | 4.58\% | 6 |

Total Respondents: 131

| $\#$ | OTHER (PLEASE SPECIFY) | DATE |
| :--- | :--- | :--- |
| 1 | Online but not current student | 6/23/2019 10:56 AM |
| 2 | In person OCC | $4 / 7 / 20192: 56$ PM |
|  | Comprehensive Program Review Math | 53 |


| 3 | Early College High School |  |
| :--- | :--- | :--- |
| 4 | OCC | $3 / 28 / 20198: 59$ PM |
| 5 | I do online. I've done testing at least both these locations. Latest one I did was at the Garden Grove | $3 / 28 / 20198: 52$ PM |
|  | Center for my midterm. |  |

## Q2 Are you presently enrolled in a basic skills math class or a degree applicable class?

| ANSWER CHOICES | RESPONSES |  |
| :---: | :---: | :---: |
| Basic Skills or Math Assessment (Math 004, 005, 006, 008, 010, 080) | 12.80\% | 16 |
| Option I Degree--Not Transferable (Math 030, 040) | 17.60\% | 22 |
| Transfer/Degree-Applicable (Math Math 100 and above) | 69.60\% | 87 |
| TOTAL |  | 125 |

## Q3 Please rank up to three reasons why you are taking classes in this program at Coastline.

|  | 1ST REASON | 2ND REASON | 3RD REASON | TOTAL |
| :---: | :---: | :---: | :---: | :---: |
| To satisfy A.A. or A.S. degree requirements | 60.26\% | 33.33\% | 6.41\% |  |
|  | 47 | 26 | 5 | 78 |
| To satisfy transfer requirements | 56.10\% | 40.24\% | 3.66\% |  |
|  | 46 | 33 | 3 | 82 |
| To earn a certificate | 5.88\% | 41.18\% | 52.94\% |  |
|  | 1 | 7 | 9 | 17 |
| To prepare for a new job or improve job skills | 18.92\% | 37.84\% | 43.24\% |  |
|  | 7 | 14 | 16 | 37 |
| For personal interest | 19.35\% | 25.81\% | 54.84\% |  |
|  | 6 | 8 | 17 | 31 |
| Convenience | 18.18\% | 30.30\% | 51.52\% |  |
|  | 6 | 10 | 17 | 33 |
| Other | 50.00\% | 5.00\% | 45.00\% |  |
|  | 10 | 1 | 9 | 20 |

## Q4 To what extent do the classes you are taking in this program meet your expectations?



| 10 | Proctors are hard to find in my area, I drive an hour to meet them and they charge me a minimum of 70 dollars when it takes me 45 minutes to finish the test | 3/31/2019 1:15 PM |
| :---: | :---: | :---: |
| 11 | Class has not yet started | 3/30/2019 9:03 PM |
| 12 | My professor, Mr. Can, does not help his students succeed. He is dismissive of their concerns and refuses to work with them. He did not provide students with help to prepare for the midterm. His adamancy of failing any student who does not pass the midterm is horrible considering there is still eight weeks to go in a class they paid in full for. He is short-toned in his correspondence. He wouldn't post the midterm answer key even though many, many students expressed that they'd completed the midterm practice exam and wanted to know what questions they got right or wrong in order to know if they knew what they were doing and if they were on the right road to passing the midterm. | 3/30/2019 9:00 PM |
| 13 | Class Strats on Monday and textbook information as not been updated on the bookstore's website. | 3/30/2019 11:56 AM |
| 14 | I am finding that online math classes are not the best options for a student who struggles with math, as there is not an in person lecture to have things explained properly. | 3/29/2019 9:58 AM |
| 15 | The teacher fails to properly instruct the class, and we are forced to teach ourselves. Over half of our class has dropped the class because Bing Cheng cannot properly teach the material. | 3/28/2019 9:01 PM |
| 16 | My class doesn't start until April 1st | 3/28/2019 8:20 PM |
| 17 | After dropping the calculus 1 class twice, I decided to attend a classroom setting, after 3/28/2019 with a Coastline counselor. Since I reside in Northern California I'm taking this class at a community colleg desire is to take calculus 2 on-line at Coastline but that all depends on the online difficulty. Higher mathe challenging when you are attempting to learn it "on your own". I took advantage of the remote tutors du precalculus, but Coastline dropped that availability. | 5:46 PM discussion ege in Folsom. My matics is very uring my |
| 18 | I thought that the professor would actually lecture, instead of moderate forums. The professor is good, however he only teaches though replying to student posts online | 3/28/2019 3:45 PM |
| 19 | A lot of homework online hard to keep up | 3/28/2019 3:44 PM |
| 20 | The workload is extreme. I am spending 30-40 hours a week to keep up in this class. Also the quizzes are not available online, you have to find the questions in the online textbook (not easy), transfer them to paper, do them out and then scan them back into the system. Also there is no midterm or final prep part of the class. In other classes they tell you what will be covered on the finals and midterms, so you can study accordingly. | 3/28/2019 2:59 PM |
| 21 | The text and support are not overly user friendly; extrapolating is difficult. Discussion does not further understanding as little involvement from professor. Students directed to supplemental instruction from internet. Midterm not aligned with curriculum; finally, although questions $r$ encouraged, responses do not cover how answers obtained. Im reading text, diligent at homework, and probably spending 25 or more hours on homework and instruction. I tutor for a living at a high school and am otherwise a 4.0 student (including in math) | 3/28/2019 2:24 PM |
| 22 | I think the instructor is very nice and accommodating, however there are other students that have to correct her work on occasion and the language barrier can be difficult. | 3/28/2019 2:19 PM |

# Q5 Please indicate your status or interest in each of the following A.A. degree Areas of Emphasis. 

Answered: 108 Skipped: 23<br>Presently working on $\square$ Interested but haven't started yet $\square$ Not interested

|  | PRESENTLY WORKING ON | INTERESTED BUT HAVEN'T STARTED YET | NOT INTERESTED | TOTAL |
| :---: | :---: | :---: | :---: | :---: |
| American Studies | 9.76\% | 12.20\% | 78.05\% |  |
|  | 8 | 10 | 64 | 82 |
| Arts and Humanities | 18.82\% | 18.82\% | 62.35\% |  |
|  | 16 | 16 | 53 | 85 |
| Communications | 15.29\% | 22.35\% | 62.35\% |  |
|  | 13 | 19 | 53 | 85 |
| Physical Education and Health | 4.94\% | 16.05\% | 79.01\% |  |
|  | 4 | 13 | 64 | 81 |
| Science and Math | 53.26\% | 7.61\% | 39.13\% |  |
|  | 49 | 7 | 36 | 92 |
| Social and Behavioral Sciences | 32.61\% | 16.30\% | 51.09\% |  |
|  | 30 | 15 | 47 | 92 |

## Q6 Please indicate your status or interest in each of the following A.A. degree Majors.

| $\square$ Presently working on Interested but haven't started yet |  | Not interested |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | PRESENTLY WORKING ON | INTERESTED BUT HAVEN'T STARTED YET | NOT INTERESTED | TOTAL |
| Art | 6.17\% | 12.35\% | 81.48\% |  |
|  | 5 | 10 | 66 | 81 |
| Business Administration | 16.87\% | 15.66\% | 67.47\% |  |
|  | 14 | 13 | 56 | 83 |
| Economics | 8.86\% | 17.72\% | 73.42\% |  |
|  | 7 | 14 | 58 | 79 |
| English | 15.66\% | 7.23\% | 77.11\% |  |
|  | 13 | 6 | 64 | 83 |
| French | 2.47\% | 12.35\% | 85.19\% |  |
|  | 2 | 10 | 69 | 81 |
| Gerontology | 1.28\% | 6.41\% | 92.31\% |  |
|  | 1 | 5 | 72 | 78 |
| Health and Fitness | 6.33\% | 11.39\% | 82.28\% |  |
|  | 5 | 9 | 65 | 79 |
| History | 10.13\% | 7.59\% | 82.28\% |  |
|  | 8 | 6 | 65 | 79 |
| Human Services | 9.88\% | 11.11\% | 79.01\% |  |
|  | 8 | 9 | 64 | 81 |
| Liberal Studies (for Teaching) | 13.41\% | 7.32\% | 79.27\% |  |
|  | 11 | 6 | 65 | 82 |
| Mathematics | 44.94\% | 3.37\% | 51.69\% |  |
|  | 40 | 3 | 46 | 89 |
| Psychology | $18.82 \%$ | $16.47 \%$ | 64.71\% |  |
|  | $16$ | $14$ | $55$ | 85 |
| Spanish | 4.94\% | 19.75\% | 75.31\% |  |
|  | 4 | 16 | 61 | 81 |
| Sociology | 10.00\% | 17.50\% | 72.50\% |  |
|  | 8 | 14 | 58 | 80 |


| Q7 Please rate your level of satisfaction with each of the following as related |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| to classes in this program. (Skip an to you.) | items <br> Dissatisf | at are <br> Very | t applicab <br> ssatisfied | e |  |
|  | VERY <br> SATISFIED | SATISFIED | DISSATISFIED | VERY <br> DISSATISFIED | TOTAL |
| Quality of instruction | 47.92\% | 34.38\% | 12.50\% | 5.21\% |  |
|  | 46 | 33 | 12 | 5 | 96 |
| Variety of classes | 45.05\% | 48.35\% | 4.40\% | 2.20\% |  |
|  | 41 | 44 | 4 | 2 | 91 |
| Relevance of classes to your academic or vocational needs | 52.22\% | 40.00\% | 4.44\% | 3.33\% |  |
|  | 47 | 36 | 4 | 3 | 90 |
| Relevance of assignments and exams to the course material you are studying | $\begin{array}{r} 45.16 \% \\ 42 \end{array}$ | $\begin{array}{r} 48.39 \% \\ 45 \end{array}$ | $\begin{array}{r} 5.38 \% \\ 5 \end{array}$ | 1.08\% | 93 |
| Clarity and comprehensiveness of the instructions for completing assignments | 48.94\% | 38.30\% | 7.45\% | 5.32\% |  |
|  | 46 | 36 | 7 | 5 | 94 |
| Adequacy of instructional facilities | 47.62\% | 47.62\% | 2.38\% | 2.38\% |  |
|  | 40 | 40 | 2 | 2 | 84 |
| Staff support for the program and classes | 39.08\% | 49.43\% | 6.90\% | 4.60\% |  |
|  | 34 | 43 | 6 | 4 | 87 |
| Extent to which faculty and staff meet the needs of culturally diverse students | 48.75\% | 46.25\% | 3.75\% | 1.25\% |  |
|  | 39 | 37 | 3 | 1 | 80 |
| Extent to which faculty and staff meet the needs of nontraditional students (e.g., older adults, working adults, active duty military, etc.) | 53.57\% | 34.52\% | 8.33\% | 3.57\% |  |
|  | 45 | 29 | 7 | 3 | 84 |
| Overall quality of the program | 46.74\% | 41.30\% | 9.78\% | 2.17\% |  |
|  | 43 | 38 | 9 | 2 | 92 |
| Your own success in the program | 43.96\% | 36.26\% | 14.29\% | 5.49\% |  |
|  | 40 | 33 | 13 | 5 | 91 |

There was almost no instruction from the teacher, although, assignments and due dates were very clear. It would have been helpful if teachers had recorded lectures of them doing math problems. That would be helpful so students can know what areas to study and what types of problems will be on the tests. A lot of times the homowork from the online math modules did not align with the types of problems the teacher put the tests. So I found myself working through math problems I had never seen before. Other than that the classes are great, I'm very happy that cccd offers these distance learning courses, especially, in more advanced math subjects. I would be specially interested if cccd offered physics for engineering with an online lab component; only ccsf offers physics 1 with calculus online with an online lab component. It would be a game changer if Cccd offered physics 2 with calculus and an online lab component.

| 2 | I need to work on my time management. | 4/19/2019 9:52 AM |
| :---: | :---: | :---: |
| 3 | Multiple assignments are due each week, requiring the student a few hundred math problems every $5-6$ days. It's unrealistic to perform an average of 20 equations per chapter section when you are expected to complete 5 or more chapter sections a week in addition to review assignments. If the amount of mathematical problems per assignment were reduced by half then I would have more time to learn the material. I would be more confident in my math skills and get better grades on the exams. I suggest reducing the number of problems per assignment, eliminating all (or the majority of) assignments that are not chapter/section assignments (such as review assignments and practice your skills assignments) and implementing 1-2 discussion assignments weekly. The discussion assignment I suggest would ask students to post one problem or type of math equation they struggled with most in their recent homework assignment/s alongside an explanation of why they struggled with it. Then, each student would be required to respond to one or two other students posts, with an explanation of how to perform the math equation. If a student can't find a post about a mathematical equation they confidently know how to perform, then the student would have to respond to two posts regarding math equations they also struggle with, with an explanation of why they too struggle with this equation. When the professor grades the discussion activity he/she will respond to the posts that are unresolved or, if the professor finds that a large number of students found the same math equations to be difficult, create a new discussion board on how to properly perform those specific math equations (this would create a space for students to interact more with the professor if they still don't quite understand the topic). | 4/14/2019 3:33 PM |


|  | exams are not relevant to the course materials that I am studying. Also, intructor does not serve non |
| :--- | :--- | :--- |
| traditional older students by helping them suceed. |  |


| 5 | In the beginning I saw no regard in terms of scheduling for working adults. Relaxing the proctor rules seems helpful but might i suggest: - More availability for exams on weekends... It is expensive and risky to take a day off for an exam. Not every employer supports education for its employees. Following Pearson's scheduling beginning/ending the school week on Sunday nights. -Stick to ONE online system. ( don't mix canvas and pearson it's ridiculous) - A less cynical attitude toward doing homework on the weekend. Sometimes it's all the time we have without risking our jobs, our healthcare, and our homes. | 4/8/2019 2:23 PM |
| :---: | :---: | :---: |
| 6 | Quality of instruction-some Prof will help answer questions and some will not. Some treat adults like children and make disparaging remarks about the level of difficulty in the course work-This is Jr High math etc-If I tested in to that course I obviously need it. I think we should expect similar reliance on Canvas from each course. Definitely little consideration for working adults etc. Being treated like children or in a defensive manner is not not productive for any student. | 4/7/2019 3:01 PM |


| 7 | I'm in an online trig class. Quality of instruction because of previous complaints about terrible textbooks and just having to google things when the (overpriced) book should explain better if it cost so much money to produce. Staff support because the only thing the teacher does is give us pointless discussion assignments and make us pretend we are interested in talking in a forum. I'm hear to learn trig not to socialize and try to think of pointless questions to ask. The forum is important if I actually have a question, but kind of ridiculous to make it an assignment and part of our grade to have to participate even if we don't have any questions. | 4/3/2019 5:58 PM |
| :---: | :---: | :---: |
| 8 | I am only dissatisfied because my professor takes a few days to answer emails. I had a question about our upcoming midterm, emailed him 4 days prior and he didn't respond until the day of the midterm. | 4/2/2019 9:54 AM |
| 9 | Too many homework, make students frustrate. I think some homework can be optional, that way students just need to study for exam. | 4/1/2019 10:29 AM |
| 10 | I will not be completing this survey. I am sick and not feeling well enough. | 3/31/2019 11:13 PM |
| 11 | My mathematics professor, his unwillingness to be of help in his students' journeys toward success, his dismissiveness, his inability to do his job, and his lack of actually teaching all have negatively impacted my experience. I would not recommend Professor Can to anybody. | 3/30/2019 9:08 PM |
| 12 | My class has not yet started | 3/30/2019 9:04 PM |
| 13 | Lack of options for classes at the Le-Jao center this semester was disappointing. Lack of proper lectures and over reliance on self study is an issue for students who are used to a traditional teaching model. | 3/30/2019 1:31 AM |
| 14 | The online tutoring depatment should be expanded to truly support an online classroom enviroment. For non traditional students these services are essential. There should also be an online system where tutors are available for chat to answer a single question at a time. | 3/29/2019 8:54 AM |
| 15 | Bing Cheng is not an adequate teacher. The class does not understand the material, so most students ended up failing first semester. | 3/28/2019 9:04 PM |
| 16 | My Team Mike Everett did an amazing job | 3/28/2019 7:24 PM |
| 17 | See previous comments | 3/28/2019 5:49 PM |
| 18 | The teacher does not do any instruction during the online course. Posting video lectures would be very helpful | 3/28/2019 3:47 PM |
| 19 | I've always struggled with math, and I wish I had been able to take an actual class at night instead only having an online option. | 3/28/2019 3:07 PM |
| 20 | I am very dissatisfied with Micheal Everett. He doesn't know his material. All other instructors are excellent. | 3/28/2019 3:01 PM |
| 21 | In my experiences, the math classes I have taken range from difficult to very difficult. A former instructor bullied students for being "lazy" when they did not understand, and his teaching style was for us to teach ourselves (which never works in Mathematics). | 3/28/2019 2:47 PM |
| 22 | I have taken 2 math classes; I was not particularly impressed with professor involvement in either...although i had no difficulties walbebra 2. Statistics by triola (pearson) makes me want to gouge my eyes out! | 3/28/2019 2:32 PM |

23 I feel that the selection of classes that I need to take are very limited. English is also my primary \begin{tabular}{l}
language and I find it difficult to understand and communicate with a large number of staff and a lot <br>
of students because of the language barrier. Because of this I often have to work independently on <br>
assignments.

$\quad$

Requiring more than two lengthy posts per week (and on different days) to participate in engaging <br>
conversation with other classmates is difficult when I work full time, commute and have a family. I <br>
crefer 1-2 posts per week in addition to homework. Checking in more than that is too challenging and <br>
prom <br>
I've dropped classes because of it.
\end{tabular}

# Q8 Are you taking one or more classes in this program in a distance learning, online or hybrid format? 

Answered: 100
Skipped: 31

| ANSWER CHOICES | RESPONSES |  |
| :--- | :--- | :--- |
| Yes | $76.00 \%$ | 76 |
| No | $24.00 \%$ | 24 |
| TOTAL |  | 100 |

> Q9 If you are taking a class in this program in a distance learning format, please indicate the extent of your satisfaction with each of the following elements. (Skip any items that are not applicable to you.)

Very Satisfied

|  | VERY SATISFIED | SATISFIED | DISSATISFIED | VERY <br> DISSATISFIED | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Quality of instruction in my distance learning course | 53.85\% | 30.77\% | 7.69\% | 7.69\% |  |
|  | 42 | 24 | 6 | 6 | 78 |
| Amount of interaction with other students in the class | 41.56\% | 46.75\% | 9.09\% | 2.60\% |  |
|  | 32 | 36 | 7 | 2 | 77 |



$$
7 \begin{aligned}
& \text { Instructor makes us have more interaction with eachother through forums than actually } \\
& \text { "instructing" anything. Wish he actually guided through the lessons in the textbook or something } \\
& \text { because just the textbook is terrible at explaining things. Reliability of technology because sometimes } \\
& \text { my assignments will not load and I have to open in separate browsers until one of them works. I have } \\
& \text { updated everything and even contacted Pearson and no one knows what's wrong. (also apparently } \\
& \text { asking other students for help on this in forums doesn't count towards my discussion points as I was } \\
& \text { marked as not participating when I was asking things that were very relevant to the course ie loading } \\
& \text { the assignments and asking if anyone else had same problem as me) }
\end{aligned}
$$

| 8 | Too many mandatory homework. | 4/1/2019 10:30 AM |
| :---: | :---: | :---: |
| 9 | I think that participation in discussion boards negate the benefits of online instruction personally. I think it is really hard to replicate the classroom environment online- especially when it is forced for points. In all honesty I take online math classes to be able to get to the heart of the subject and its contents. A general introduction student posting and a space where students who want to study in some virtual way would be great.But it is so distracting to learn math when you have to keep posting to the discussion board. | 3/30/2019 9:43 PM |
| 10 | The class has not yet started | 3/30/2019 9:04 PM |
| 11 | I just feel that there should be more resources to get your question answers when I have a questions, most of the times you post a question up on a forum and you have to wait for an answer. Also, online platform that is used to do your homework and take quizzes should be updated to be more mobile friendly, seems like there using outdated technology that works with Flash and does not work well with mobile devices. | 3/29/2019 7:52 AM |
| 12 | The primary avenue for any support has been via Canvas. Sometimes I struggle with concepts, or recall, but reaching out without a clear knowledge of exactly what I'm not getting seems to be pointless, and I don't want to waste mine or anyone else's time, so I get frustrated...leading to dropping the class...feeling stupid for having waste the time and money | 3/28/2019 5:57 PM |
| 13 | No actual instruction | 3/28/2019 3:48 PM |
| 14 | Very Dissatisfied with Michael Everett. He doesn't know his material. Other math instructors are excellent. | 3/28/2019 3:02 PM |
| 15 | Quizzes are not online. Online textbook is very difficult to access and loads really slowly | 3/28/2019 3:01 PM |

16 Suggest class be made available prior to start day to allow for programs, online resources, plugins, etc. 3/28/2019 2:39 PM Also, compatibility of programs spring 2019 for online proctoring not terribly user friendly. Not impressed with professor involvement with math...professor directives often inconsistent with syllabus or schedule for study.

| 17 | My math instructor was pretty non-existent. He didn't even post our midterm grades or give any <br> feedback on what we missed. I had to email him to ask for my results, and was then only provided with <br> my score. | 3/28/2019 2:17 PM |
| :--- | :--- | :--- |
| 18 | MyMathLab doesn't always recognize correct answers. As such, points can be lost despite mastering <br> content. This is of no fault of Coastline Community College. This is something Pearson will need to <br> continually improve | 3/28/2019 2:16 PM |

## Q10 Did you use the tutoring available from the textbook publisher, CourseCompass, and/or MyMathLab?

| ANSWER CHOICES | RESPONSES |  |
| :--- | :--- | :--- |
| Yes | $47.87 \%$ | 45 |
| No: Didn't need it | $23.40 \%$ | 22 |
| No: Didn't know about the service | $28.72 \%$ | 27 |
| TOTAL |  | 94 |

## Q11 How satisfied were you with the tutoring available from the publisher, CourseCompass, and MyMathLab?

| ANSWER CHOICES |  |
| :---: | :---: |
| Very Satisfied |  |
| Satisfied |  |
| Dissatisfied |  |
| Very Dissatisfied |  |
| TOTAL |  |
| \# | IF YOU INDICATED THAT YOU WERE DISSATISFIED OR VERY DISSATISFIED, PLEASE DESCRIBE YOUR CONCERNS. |
| 1 | Hard to communicate with them. The system kept disconnecting and I had to start all over with a new tutor. Very frustrating. |
| 2 | I try couple times and no one came. I took to my online professor and she provided in class (I was Online at the time). It was a bit sad to not receive help or email. I sent a request a couple days before I enter for a tutor. |
| 3 | $n / a$ |
| 4 | Horrible service. Can't learn a thing using their set up. Not user-friendly. Difficult to navigate. |
| 5 | Trying to gain understanding without direction seems pointless to me. Help with one or two problems will get me through the homework, but I needed more understanding |
| 6 | I'm better with human beings. |


| Q12 How does the tutoring available from the publisher, Coursecompass, |  |  |
| :---: | :---: | :---: |
| and/or MyMathLab compare with the SMMRTTHINKING tutoring? |  |  |
| ANSWER CHOICES | RESPON |  |
| Publisher/CourseCompass/MyMathLab tutoring is better. | 27.27\% | 12 |
| SMARTTHINKING tutoring is better. | 9.09\% | 4 |
| I haven't used both, so I can't compare them. | 63.64\% | 28 |
| TOTAL |  | 44 |

## Q13 Which best describes your knowledge of or experience with Coastline's Student Success Center?

| ANSWER CHOICES | RESPONSES |  |
| :--- | :---: | :---: |
| I have used the Student Success Center. | $20.21 \%$ |  |
| I have attended Webinar online tutoring | $1.06 \%$ | 19 |
| I wanted to use the Student Success Center, but the hours and days did not meet my needs. | $11.70 \%$ |  |
| I did not need help from the Student Success Center. | $31.91 \%$ |  |
| I did not know about the Student Success Center. | $35.11 \%$ | 30 |
| TOTAL | 30 |  |


| Q14 What were your reasons for using Coastline's Student Success Center?Mark all that apply. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | OICES | RESPONS |  |  |
|  |  | 88.89\% |  | 16 |
|  | omputers | 5.56\% |  | 1 |
|  | nds for study sessions | 16.67\% |  | 3 |
|  | e specify) | 16.67\% |  | 3 |
| Total Respondents: 18 |  |  |  |  |
| \# | OTHER (PLEASE SPECIFY) |  | DATE |  |
| 1 | n/a |  | 4/1/2019 10:31 AM |  |
| 2 | I wanted to do quiet study session alone, but I am not sure if that's allowed. |  | 3/30/2019 5:32 PM |  |
| 3 | For a midterm/final |  | 3/28/2019 4:45 PM |  |

## Q15 How satisfied were you with the Student Success Center?



# Q16 Do you have any suggestions for improving Coastline's Student Success Center? 

Answered: 6 Skipped: 125

| \# | RESPONSES | DATE |
| :---: | :---: | :---: |
| 1 | More tutor in core courses | 5/13/2019 8:57 PM |
| 2 | Good service | 4/1/2019 10:31 AM |
| 3 | None | 3/30/2019 9:46 PM |
| 4 | should all tutoring be working with a higher devotion for a better result | 3/30/2019 2:02 AM |
| 5 | Expand the online tutoring format. Make a system where there's a few tutors online that are available through skype to answer questions 1 at a time so that online students can always get help during business hours. | 3/29/2019 8:59 AM |
| 6 | N/A | 3/28/2019 4:45 PM |

Answered: 18 Skipped: 113

Q17 Age
Answered: 93 Skipped: 38


| Under 18 | $3.23 \%$ | 3 |
| :--- | :---: | :---: | :---: |
| $18-30$ | $35.48 \%$ | 33 |
| $31-45$ | $33.33 \%$ | 31 |
| $46-60$ | $21.51 \%$ | 20 |
| 61 or older | $6.45 \%$ | 6 |
| TOTAL |  | 93 |

## Q18 Gender

| ANSWER CHOICES | RESPONSES |  |  |
| :--- | :---: | :---: | :---: |
| Male | $34.78 \%$ | 32 |  |
| Female | $59.78 \%$ | 55 |  |
| Prefer not to answer | $5.43 \%$ | 5 | 92 |
| TOTAL |  | 92 |  |

## Q19 Ethnicity

| ANSWER CHOICES | RESPONSES |
| :--- | :--- |
| African-American/Black | $7.61 \%$ |
| American Indian/Native Alaskan | $2.17 \%$ |
| Asian/Pacific Islander | $10.87 \%$ |
| Hispanic/Latino | $17.39 \%$ |
| Multi-Ethnic | $7.61 \%$ |
| White (non-Hispanic) | $41.30 \%$ |
| Decline to state | $9.78 \%$ |
| Comprehensive Program Review Math |  |


| Other (please specify) | $3.26 \%$ |  |
| :--- | :--- | :--- |
| TOTAL |  |  |
| $\#$ | OTHER (PLEASE SPECIFY) | DATE |
| 1 | 1 | $5 / 6 / 2019$ |
| 2 | Jewish | $4 / 07 \mathrm{AM}$ |
| 3 | vietnamese | $4 / 24 / 2019$ |
| $2: 03 \mathrm{PM}$ |  |  |

## Q20 Primary Language

| ANSWER CHOICES | RESPONSES |  |
| :---: | :---: | :---: |
| English | 91.21\% | 83 |
| Spanish | 1.10\% | 1 |
| Vietnamese | 6.59\% | 6 |
| Other (please specify) | 1.10\% | 1 |
| TOTAL |  | 91 |
| OTHER (PLEASE SPECIFY) |  | DATE |
| Russian |  | 4/24/2019 2:03 PM |

## Q21 Are you currently enrolled in high school?

Answered: 94 Skipped: 37


| ANSWER CHOICES | RESPONSES |  |
| :--- | :--- | :--- |
| Yes | $4.26 \%$ | 4 |
| No | $95.74 \%$ | 90 |
| TOTAL |  | 94 |

## Q22 Are you active duty military?



| ANSWER CHOICES | RESPONSES |  |
| :--- | :---: | :---: |
| Yes | $0.00 \%$ |  |
| No | $100.00 \%$ | 94 |
| TOTAL | 94 |  |

## Q23 Are you a military veteran?

Answered: 94 Skipped: 37

| ANSWER CHOICES | RESPONSES |
| :--- | :--- |
| Yes | $6.38 \%$ |
| No | $93.62 \%$ |
| TOTAL | 824 |


| ANSWER CHOICES | RESPONSES |  |
| :--- | :---: | :---: |
| Not working outside the home | $26.88 \%$ |  |
| Working as a volunteer (non-paid position) | $8.60 \%$ | 8 |


| Working 20 hours or less per week | $10.75 \%$ | 10 |
| :--- | :--- | :--- |
| Working between $21-30$ hours per week | $9.68 \%$ | 9 |
| Working full-time | $44.09 \%$ | 41 |
| TOTAL |  | 93 |

## Q25 What is your highest level of education?

| ANSWER CHOICES | RESPONSES |  |
| :--- | :--- | :--- |
| Less than high school completion | $5.43 \%$ | 5 |
| High school diploma (or GED) | $54.35 \%$ | 50 |
| Associate's degree | $26.09 \%$ | 24 |
| Bachelor's degree | $8.70 \%$ | 8 |
| Master's degree | $5.43 \%$ | 5 |
| Doctorate | $0.00 \%$ | 0 |
| TOTAL |  | 92 |

## Q26 Are you currently enrolled at another college in addition to your Coastline classes? (Mark all that apply.)

| ANSWER CHOICES | RESPONSES |  |
| :---: | :---: | :---: |
| No: Enrolled only at Coastline | 49.44\% | 44 |
| Golden West College | 4.49\% | 4 |
| Irvine Valley College | 0.00\% | 0 |
| Orange Coast College | 17.98\% | 16 |
| Saddleback College | 1.12\% | 1 |
| Santa Ana College | 2.25\% | 2 |
| Santiago Canyon College | 2.25\% | 2 |
| Comprehensive Program Review Math |  |  |


| Other community college | $12.36 \%$ | 11 |
| :--- | :--- | :--- |
| A four-year college or university | $17.98 \%$ | 16 |

Total Respondents: 89
Q27 In your own words, please tell us what you most want to learn or accomplish from taking courses in this particular program at Coastline?

Answered: 49 Skipped: 82

| \# | RESPONSES | DATE |
| :---: | :---: | :---: |
| 1 | To satisfy 4-year university requirement | 11/13/2019 4:37 PM |
| 2 | Associates Degree for transfer | 6/23/2019 11:03 AM |
| 3 | Earn units to transfer to a four year university | 6/13/2019 6:22 PM |
| 4 | Be able to transfer the courses to CSULB to help with my degree in liberal studies | 5/6/2019 1:08 AM |
| 5 | I aim to increase my confidence in my math skills and move forward so I can take trig and calc. | 4/14/2019 3:45 PM |
| 6 | I want to learn some math for personal enrichment | 4/9/2019 2:16 PM |
| 7 | I need to pass the business calculus class so I can complete my last five classes towards my two bachelor's degrees. | 4/9/2019 8:51 AM |
| 8 | I want to transfer for BA | 4/7/2019 3:06 PM |
| 9 | Learn more, plus prepare for college classes in the future. | 4/6/2019 4:58 AM |
| 10 | Math and psychology | 4/3/2019 6:14 PM |
| 11 | Earn my teaching credential | 4/3/2019 12:41 PM |
| 12 | I need practice more in communicate English, so I think English club is necessary. | 4/2/2019 10:18 PM |
| 13 | The math class that I am taking right now is Math 045 with Luke Smith. He is an amazing professor. He is such a patient and encouraging man. Prof Smith teaches step by step and consistently checks with the class if we need clarification. If we do, he goes over the material in a different approach for us to understand. He is very approachable and not at all intimidating. Best math professor, by far! | 4/2/2019 3:44 PM |
| 14 | I would like to receive an Associates Degree | 4/2/2019 8:10 AM |
| 15 | All of the online courses I have taken have been very educational!!!! | 4/1/2019 10:00 PM |
| 16 | I want to earn my degree! To do my best and understand the concept of my subject and classes. | 4/1/2019 7:13 PM |
| 17 | Better skills. | 4/1/2019 10:37 AM |
| 18 | They were the last classes I need for Bachelors | 3/31/2019 1:18 PM |
| 19 | I want to be proficient in multivariable/vector calculus and have a sense of finally accomplishing the full calculus sequence. | 3/30/2019 10:00 PM |
| 20 | Would like to improve my knowledge of math to be able to take upper math courses. | 3/30/2019 9:54 PM |
| 21 | I am attempting to receive my CSU mathematics general education requirement to transfer it to the four year university I currently attend. | 3/30/2019 9:13 PM |
| 22 | Meet admissions requirements for Master's program | 3/30/2019 9:06 PM |
| 23 | An A.S. Degree. | 3/30/2019 4:04 PM |
|  | Comprehensive Program Review Math | 76 |


| 24 | We don't have to take midterms anymore just focus on homework | 3/30/2019 3:24 PM |
| :---: | :---: | :---: |
| 25 | I want to learn what I have to in order to pass the class and complete my transfer requirement. | 3/30/2019 1:37 AM |
| 26 | learn math thoroughly | 3/29/2019 6:53 PM |
| 27 | The application of statistics in every day life. | 3/29/2019 6:11 PM |
| 28 | Business calculus is a valuable exercise in functions and rates that openly apply to hard sciences (my major: Biopsychology). So I appreciated learning in the format that was offered, and I am pleased to say that so far I'm doing better in (and actually enjoying) this math class then most other. So what I hope to accomplish in achieving an ' A ' and transfer that math record with me to every future institution in which I study! | 3/29/2019 11:41 AM |
| 29 | I would like to be able to fully understand the coursework so i can better complete work in a higher level math and also to pass in order to receive my degree. | 3/29/2019 11:41 AM |
| 30 | N/A | 3/29/2019 11:40 AM |
| 31 | personal growth and challenge, job opportunities, confidence | 3/29/2019 11:09 AM |
| 32 | Want to be able to transfer to a university to my degree in Computer Science or Engineering | 3/29/2019 7:57 AM |
| 33 | I would like to earn a math degree so I could teach high school math. | 3/28/2019 10:24 PM |
| 34 | I want to complete college courses so I can save money at a four year university. | 3/28/2019 9:07 PM |
| 35 | It's a prerequisite for calculus nd physics which re ness are fo my B.S in Environmental Sience | 3/28/2019 7:30 PM |
| 36 | I would like to complete Math 160: Statistics, in order to graduate with my AA in Psychology. | 3/28/2019 6:35 PM |
| 37 | To fulfill class requirements | 3/28/2019 5:04 PM |
| 38 | Using the right formulas | 3/28/2019 4:47 PM |
| 39 | I want to fulfill deficiency requirements for my masters program | 3/28/2019 3:50 PM |
| 40 | I want to understand why math is required for Communications majors. | 3/28/2019 3:13 PM |
| 41 | Calculus requirement for civil engineer degree | 3/28/2019 3:07 PM |
| 42 | Want to satisfy my requirements | 3/28/2019 3:06 PM |
| 43 | Fulfill prerequisites for my masters. | 3/28/2019 3:04 PM |
| 44 | Want to earn an associate's degree in math and hopefully progress in this field. | 3/28/2019 2:53 PM |
| 45 | Professors teaching basic mathematics courses should keep in mind that students in those levels do not understand abstract concepts, and may need explanation. | 3/28/2019 2:51 PM |
| 46 | I wanted to experience online education and instruction for applications with my employment. Looking for challenges faced in independent study and options for assistance | 3/28/2019 2:50 PM |
|  | Comprehensive Program Review Math | 77 |


| 47 | Preparing for admission into a Masters program. | 3/28/2019 2:37 PM |
| :---: | :---: | :---: |
| 48 | I am currently enrolled in the Paralegal Certification Program. In order to receive my certification, I have to have my AA, which is why I am currently enrolled in the Math 030 class. | 3/28/2019 2:33 PM |
| 49 | I want to actually learn how to solve the problems from someone teaching me based on their experience. I'm fine with YouTube videos, but teaching myself from a book was frustrating. | 3/28/2019 2:26 PM |

## Q28 Please tell us what your most positive experience has been in any of the Coastline classes you have taken in this particular program.

| \# | RESPONSES | DATE |
| :---: | :---: | :---: |
| 1 | Mostly what i have self-learnt | 11/13/2019 4:37 PM |
| 2 | Dr.lee ran a great class or statistics I was very satisfied. | 6/23/2019 11:03 AM |
| 3 | The availability of calculus 2 and 3 online | 6/13/2019 6:22 PM |
| 4 | The convenience of working on things at my own pace | 5/6/2019 1:08 AM |
| 5 | The week 6 discussion board assignment asked students to perform a specific type of math equation and show their work. It was great because if students were struggling in that area of math they essentially got a step by step study guide from all of the other students. | 4/14/2019 3:45 PM |
| 6 | Doing the homework or quizzes. | 4/9/2019 2:16 PM |
| 7 | I love Coastline! I've taken classes on the military side and the non-military side. The professors have been amazing as well as all the staff on campus! | 4/9/2019 8:51 AM |
| 8 | I love the student success center and tutoring. | 4/7/2019 3:06 PM |
| 9 | The most positive experience was not using My MathLab and not having a lab. | 4/6/2019 8:04 PM |
| 10 | Clear instructions from the professor. | 4/6/2019 4:58 AM |
| 11 | I love your online environment and meeting with a counselor and getting enrolled was super easy and felt like I was apart of the school even though I'm online. | 4/3/2019 6:14 PM |
| 12 | Discussions | 4/3/2019 12:41 PM |
| 13 | So far, this has been my only math class but I am going to be taking Statistics next semester and I hope Prof Smith will be teaching it! | 4/2/2019 3:44 PM |
| 14 | the amount of support received with online classes | 4/2/2019 8:10 AM |
| 15 | Love all the online courses I have taken. All the professors seem to want all their students to succeed and gain a lot of interesting and helpful knowledge of the subject. | 4/1/2019 10:00 PM |
| 16 | Sadly Math was a bit rough for online! I just felt I needed more help. I going to take in class to receive better help and more accessibility of tutors to understand harder concepts. | 4/1/2019 7:13 PM |
| 17 | $\mathrm{n} / \mathrm{a}$ | 4/1/2019 10:37 AM |
| 18 | The easy layout | 3/31/2019 1:18 PM |
| 19 | My instructor, Son Nguyen is very nice and humble, and wants his students to learn. | 3/30/2019 10:00 PM |
| 20 | Receiving encouragement and guidance from students and instructor. | 3/30/2019 9:54 PM |
| 21 | My professors- exclusive of Professor Can- who have been helpful and who give me the impression that they actually care about their students. Honestly, I felt as though Professor Can could care less about his students. He was so dismissive. | 3/30/2019 9:13 PM |


| 22 | The class has not yet started | 3/30/2019 9:06 PM |
| :---: | :---: | :---: |
| 23 | Math 100 with Professor Feldon. | 3/30/2019 4:04 PM |
| 24 | I do better online | 3/30/2019 3:24 PM |
| 25 | The Professor is flexible and offers assistance for struggling students who are not math majors but are required to take this line of courses due to transfer requirements. | 3/30/2019 1:37 AM |
| 26 | efficiently learning the material | 3/29/2019 6:53 PM |
| 27 | The quality of the instructor's lecture. | 3/29/2019 6:11 PM |
| 28 | The professor was very quick to help, and very encouraging. The class also grew to be very swift in our efforts to answer other students questions posted on the discussion board. <br> Sometimes a question would result in a2 or 3 different ways of answering a problem. Awesome. | 3/29/2019 11:41 AM |
| 29 | the ability to finish assignments from anywhere | 3/29/2019 11:41 AM |
| 30 | N/A | 3/29/2019 11:40 AM |
| 31 | Great professors John Ryan, Thomas Cao - very helpful and thorough. They are encouraging and approachable despite it being an online class . | 3/29/2019 11:09 AM |
| 32 | I have noticed that at least with the instructors I have taken the course with that they prepare you well for the exams by encouraging/allowing you to rework missed answers until you get them or get locked out. This repetition they encourage actually helps you learn the material. It is also less frustrating in an online environment when there are frequent distractions in a home to make you miss problems. | 3/29/2019 9:09 AM |
| 33 | For the most part the instructors are very friendly and understanding. | 3/29/2019 7:57 AM |
| 34 | Mr. Can is a very understanding teacher. | 3/28/2019 10:24 PM |
| 35 | I have not enjoyed any college math classes I took from Coastline. | 3/28/2019 9:07 PM |
| 36 | I'm o medical restriction o I couldn't attend class physically. Your online course is keeping m on track. | 3/28/2019 7:30 PM |
| 37 | In my most recent midterm, in Math 115, I earned a score of 200 out of 200 and was most pleased with myself. | 3/28/2019 6:35 PM |
| 38 | All of my professors that have made an effort to make the students feel comfortable and make the online classes reasonable in terms of work load | 3/28/2019 5:04 PM |
| 39 | Maybe 2 or 3 . I had to take two other math classes before and also had another math class but I dropped it last semester. | 3/28/2019 4:47 PM |
| 40 | Math professor - Luke Smith | 3/28/2019 3:46 PM |
| 41 | I loved my math 45 Professor from spring 2018. She was very encouraging and made sure her students understood the material before moving on. | 3/28/2019 3:13 PM |
| 42 | I love the format. The process is streamlined efficiently for working professionals. | 3/28/2019 3:07 PM |
| 43 | Online was great | 3/28/2019 3:06 PM |
| 44 | Dr Song and Dr Villalobos | 3/28/2019 3:04 PM |
|  | Comprehensive Program Review Math | 80 |


| 45 | Professor Feldon was the most encouraging instructor I've ever had, and communicated well to insure <br> I was able to complete the course under stressful circumstances. | $3 / 28 / 2019$ 2:57 PM |
| :--- | :--- | :--- | :--- |
| 46 | The SmartThinking tutoring is helpful. | $3 / 28 / 2019$ 2:51 PM |
| 47 | I have met many wonderful people through my coursework and majority have been great | $3 / 28 / 2019$ 2:50 PM |
| 48 | Professor Everett | $3 / 28 / 2019$ 2:48 PM |
| 49 | Interaction with my professor, she is very responsive. | $3 / 28 / 2019$ 2:37 PM |
| 50 | I really enjoyed how organized my Philosophy and English classes were. The philosophy class required <br> one post and response per week after watching his YouTube video, which I was able to do on the <br> weekend when I wasn't at work and my wife could care for our kids. The English class required more <br> posting and due by Friday, but it was still doable. Both instructors were very engaged and responded <br> on the posts. | $3 / 28 / 2019$ 2:26 PM |

## Q29 Are there other courses or degree programs that you would like Coastline to offer?

| \# | RESPONSES | DATE |
| :---: | :---: | :---: |
| 1 | Yes, paralegal and forensic psychology classes | 11/13/2019 4:37 PM |
| 2 | no | 6/23/2019 11:03 AM |
| 3 | Online Physics with calculus 1 and 2 with a online lab component | 6/13/2019 6:22 PM |
| 4 | No | 5/6/2019 1:08 AM |
| 5 | Wildlife/animal related science courses. | 4/14/2019 3:45 PM |
| 6 | Computer Science with an emphasis in multimedia | 4/9/2019 2:16 PM |
| 7 | I am satisfied with the current degree offerings. Thank you. | 4/9/2019 8:51 AM |
| 8 | I'd like to find a way to take the science/lab requirement online or hybrid. | 4/7/2019 3:06 PM |
| 9 | N/A | 4/6/2019 4:58 AM |
| 10 | Chinese! | 4/3/2019 6:14 PM |
| 11 | No | 4/3/2019 12:41 PM |
| 12 | Child Development AA Degrees | 4/2/2019 3:44 PM |
| 13 | none | 4/2/2019 8:10 AM |
| 14 | In the time being none that I can see for the time being. | 4/1/2019 7:13 PM |
| 15 | Math in Introduction to Statistic | 4/1/2019 10:37 AM |
| 16 | a more comphrehensive videogame design and development \& cyphering | 3/30/2019 10:00 PM |
| 17 | Computer sciences | 3/30/2019 9:54 PM |
| 18 | I am open to it in the future but am near the completion of my degree so will not likely be returning. | 3/30/2019 9:13 PM |
| 19 | The class has not yet started | 3/30/2019 9:06 PM |
| 20 | I have hoped that there would be more Programming courses available for A.A student. | 3/30/2019 5:34 PM |
| 21 | No | 3/30/2019 4:04 PM |
| 22 | i think everything offered at community colleges should be offered online as much as possible | 3/29/2019 6:53 PM |
| 23 | No | 3/29/2019 6:11 PM |
| 24 | I found that, so far, the variety and availability of online classes that meet www.assist.org criteria, and UC and State general, and sometimes major specific, classes. I appreciate any courses that can be a relief to my already hectic schedule with an online or hybrid format. | 3/29/2019 11:41 AM |
| 25 | mortuary science because to closest school to me with that program is cypress community college | 3/29/2019 11:41 AM |
|  | Comprehensive Program Review Math | 82 |


| 26 | N/A | 3/29/2019 11:40 AM |
| :---: | :---: | :---: |
| 27 | no | 3/29/2019 11:09 AM |
| 28 | Construction Management. It's a growing field. It's increasingly technology-based. Most of the qualified experienced workers looking to move into management from the field have a hard time not working and going back to school. It's well suited for a post military career. | 3/29/2019 9:09 AM |
| 29 | No, You guys offer what I need | 3/29/2019 7:57 AM |
| 30 | No. | 3/28/2019 9:07 PM |
| 31 | Everything else I need I can take locally or requires a lab. | 3/28/2019 7:30 PM |
| 32 | Not that I can currently think of. | 3/28/2019 6:35 PM |
| 33 | No | 3/28/2019 5:04 PM |
| 34 | More art related courses. | 3/28/2019 4:47 PM |
| 35 | Not sure. but even if I did, I don't think I would enroll unless it was required by my major. | 3/28/2019 3:07 PM |
| 36 | No | 3/28/2019 3:06 PM |
| 37 | more Computer science / programming! | 3/28/2019 3:04 PM |
| 38 | I would like to see some basic engineering courses offered online. | 3/28/2019 2:53 PM |
| 39 | Online communications course that fulfills speech requirement for AA-T None available for distance learning. Westminister is $100+$ miles away | 3/28/2019 2:50 PM |
| 40 | Discrete Mathamatics (online) | 3/28/2019 2:48 PM |

Q30 Do you have any comments or suggestions for improving the Math Program?
Answered: 43 Skipped: 88

| \# | RESPONSES | DATE |
| :---: | :---: | :---: |
| 1 | Please pay more attention to quality of online classes as well as the permanent staff members. Mr. Hao Nhien was not doing a great job of teaching at all. | 11/13/2019 4:37 PM |
| 2 | no; thank you for the program you run. It is great. | 6/23/2019 11:03 AM |
| 3 | If teachers had recorded lectures with them working through problems it would be really helpful | 6/13/2019 6:22 PM |
| 4 | No | 5/6/2019 1:08 AM |
| 5 | Yes. I wrote them all down in one of the previous pages of this survey. | 4/14/2019 3:45 PM |
| 6 | Make the exams relevant to what I am learning in the textbook, quizzes and homework. | 4/9/2019 2:16 PM |
| 7 | I believe that the math department is functioning at an outstanding pace and I have no suggestions for improvement. | 4/9/2019 8:51 AM |
| 8 | The deans really need to lay down the law with the instructors with online teaching. It's getting really sloppy. We are seen a an inconvenience to the instructors and that attitude needs to change.... 1. Demand Emotional Intelligence from the instructors: Most students who are serious enough to take a calculus class read the syllabus. If there is a question it's likely because the answer did not seem clear in the text, or perhaps there is a seemingly contradictory statement either in the syllabus or elsewhere that makes it ambiguous. This should be the first assumption, not flaming in all caps that we're lazy didn't read it. 2. Basic Communication Skills All instructors need to be tested for fluent written skills or be required to take a refresher course. 3. Digital Communication Skills: Understanding the subtle differences between written and verbal communication, being clear and unambiguous in written form, and a sensitivity to the different ways written statements can be taken. 4. Check Homework: Require all MML homework to be entered correctly into the system. It should be checked. Many precious hours are wasted in MML due to correct answers marked wrong. 5. Out of Bounds: Instructors openly complaining about their schedules a formal setting like in discussions is both unprofessional and unnecessary. In the private sector I would be fired for that kind or behavior. 6. Follow The Program: If MML has a section for video lecture, post video lectures, if MML has a section for homework, post homework there not in the study plan. Instructors are taking too many liberties trying to create their own 'hybrid' structure instead of the structure provided. Do not mix systems like canvas and MML. This creates a chaotic mess for the students and the instructor. | 4/8/2019 3:05 PM |
| 9 | Consistent guidelines for Canvas use-all instructors should use it in a similar fashion-upload syllabus, post grades, add work with enough time for working adults to complete it (don't post new work on Wednesday and have it due on Friday, working adults need at least 1 weekend day to complete assignments). | 4/7/2019 3:06 PM |
| 10 | Well...it's really boring. I love math, so I haven't quite been affected, but seriously it needs to be more interesting if you want more students to enjoy math. Supplements to Pearson, such as videos (like 3Brown1Blue) are good places to start. | 4/6/2019 4:58 AM |
| 11 | Use better textbooks. Just because people can use google these days shouldn't be an excuse to give people vague and useless class lessons, I feel like getting through a chapter takes much longer than it should just because I have to consult outside sources just to decode it. | 4/3/2019 6:14 PM |
| 12 | No | 4/3/2019 12:41 PM |
| 13 | Have Prof Smith teach all the math classes =) | 4/2/2019 3:44 PM |
|  | Comprehensive Program Review Math | 85 |


| 14 | none | 4/2/2019 8:10 AM |
| :---: | :---: | :---: |
| 15 | The math classes are great. Teachers are very helpful and quick to answer your questions. They give a clear understanding of their expectations. Love how the computer will walk you through the steps showing how to solve the problem. | 4/1/2019 10:00 PM |
| 16 | Some homework can be optional, and others can be mandatory, because if have a lot mandatory homework, students worry to finish the homework, instead to studying to exams. | 4/1/2019 10:37 AM |
| 17 | Just an alternate to proctors. Like any teacher instead of certified proctor | 3/31/2019 1:18 PM |
| 18 | None | 3/30/2019 9:54 PM |
| 19 | Let go of Professor Can as he is not the type of helpful, caring professor that students need. <br> Release midterm or final practice exam answer keys at some point before the exam. Change your policy of students needing to get a $70 \%$ on the midterm and a $70 \%$ on the final in order to pass the class because that sort of rigidness isn't fair to students who have eight weeks to go in a class and paid for the class only to be told halfway through that they are automatically going to fail. | 3/30/2019 9:13 PM |
| 20 | The class has not yet started | 3/30/2019 9:06 PM |
| 21 | None | 3/30/2019 4:04 PM |
| 22 | no its great | 3/29/2019 6:53 PM |
| 23 | No | 3/29/2019 6:11 PM |
| 24 | You know, Professor Mike Cisneros is incredible. Follow his lead in orchestrating a math class online. It's more then just the software, and my professor knows how to implement that and engage the class. | 3/29/2019 11:41 AM |
| 25 | honestly no, I really enjoy how this class is. | 3/29/2019 11:41 AM |
| 26 | N/A | 3/29/2019 11:40 AM |
| 27 | The program is actually very good if you are a disciplined student, you take ownership of your learning and you do all of the assignments. It is set up for your success. My Math Lab is a great tool. The quality of the 'community' experience varies depending on the other student interactions. Professors who make the discussion board mandatory and who interact daily with the students foster a much better environment for student fellowship and helpfulness towards one another. IF the professor is not organized and interactive or takes a long time to respond to questions (and this has happened) THEN the quality of the online math program very rapidly diminishes. | 3/29/2019 11:09 AM |
| 28 | The online tutoring should be expanded. The hours of the embedded tutors should be expanded. Tutors should have more professional training and have to pass a review before being able to instruct. Knowing the material and teaching the material is different and some tutors need more training. | 3/29/2019 9:09 AM |
| 29 | Please update mymath lab or find another vendor. Make online courses more mobile friendly and have more interactive learning experiences that will catch a person attention with more real life examples. | 3/29/2019 7:57 AM |
| 30 | Search for better teachers. | 3/28/2019 9:07 PM |
| 31 | No | 3/28/2019 7:30 PM |
| 32 | No | 3/28/2019 6:35 PM |
|  | Comprehensive Program Review Math | 86 |


| 33 | None, Professor Farnham is amazing and has created great online math curriculum in pairing with MyMathLab. He is always helpful and positive and meeting him at our midterm was a pleasure | 3/28/2019 5:04 PM |
| :---: | :---: | :---: |
| 34 | N/A | 3/28/2019 4:47 PM |
| 35 | Have the instructors post video lectures explaining the concepts and teaching the material | 3/28/2019 3:50 PM |
| 36 | Make more math classes available at night. I struggled so much because I had to teach myself most of the time, but I'm already not good at math. Having pm classes for working students will be really helpful. | 3/28/2019 3:13 PM |
| 37 | None. It's doing great. | 3/28/2019 3:07 PM |
| 38 | No | 3/28/2019 3:06 PM |
| 39 | Remove Dr Everett from the department. He doesn't know his material. Everyone else is excellent. | 3/28/2019 3:04 PM |
| 40 | I would suggest researching other curriculum for independent study. As technology is a virtue, perhaps offering some type of classroom instruction online in conjunction with canvas | 3/28/2019 2:50 PM |
| 41 | There was only ONE class that was offered that wan't online, which is completely ridiculous. I 3/28/2019 2:33 PM realize that the times are moving to online classes, however math is a subject, I feel for me, requires a real person as an instructor. Because my original math class was cancelled at the |  |
|  | last minute, having to take this class has been extremely difficult on my schedule, but I HAD TO take this class. |  |
| 42 | Instructor interaction. Instructor to share helpful hints or tips with whole class without student prompting. | 3/28/2019 2:26 PM |
| 43 | More study help for online and fix problems on homework. Because the textbook doesn't help to explain every step they kind assume you know everything there is to learn. It's very frustrating when the text will give you some example problems and on the homework they give you other problems. This would have been ok only if we physically are in a classroom but for online students we tend to fall behind because what we learn is only from our understanding of the text not the homework. | 3/28/2019 2:16 PM |

