

Department of Mathematics, CSCI



ASSESSMENT PLAN: M.S. in Math

Updated Date: Winter, 2015, By Kathy Hann

PROGRAM MISSION

[CSUEB Missions, Commitments, and ILOs, 2012](#)

CSUEB Mathematics Program Mission Statement

The mission of the Department of Mathematics is to provide excellent instruction in the area of mathematics and to foster scholarship and service on the part of the

The Mission of the University is to provide an academically rich, multicultural learning experience that prepares all its students to realize their goals, pursue meaningful lifework, and to be socially responsible contributors to their communities, locally and globally.

for those who need it to reach their goals, (2) business-specific skills taught in classes tailored for particular majors, and (3) rich offerings in a variety of areas of mathematics. The Department fosters academic growth for both its faculty and its students to maintain as high a level of learning experience as is possible.

PROGRAM STUDENT LEARNING OUTCOMES (SLOs)

Students graduating with a M.S. in Mathematics will be able to:

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| SLO 1 ILO 1, 2,6 | Apply the fundamental definitions and theorems of pure mathematics |
| SLO 2 ILO 1, 2,6 | Apply the fundamental definitions and theorems of applied mathematics |
| SLO 3 ILO 1, 4, 6 | Apply advanced techniques of mathematical analysis |
| SLO 4 ILO 1, 4, 6 | Apply techniques of advanced algebra |

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| SLO 5 ILO 1, 4, 6 | Apply advanced techniques of geometry and topology |
| SLO 6 ILO 1, 6 | Use mathematical algorithms |

Students taking Option B or C for the Masters in Mathematics receive focused emphasis on particular PLOs as follows:

The Applied Mathematics Option emphasizes PLOs #2, 3 & 6 above.

The Mathematics Teaching Option emphasizes #1, 2, 4 & 5 above.

Year 1: 2013-2014

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| 1. Which SLO(s) to assess | SLO 1, 2, 6 |
| 2. Assessment indicators | Multiple Choice Assessments independent of exams |
| 3. Sample (courses/# of students) | All courses |
| 4. Time (which quarter(s)) | Winter/Spring 2014 |
| 5. Responsible person(s) | Kathy Hann and Kevin Callahan |
| 6. Ways of reporting (how, to who) | The report will be delivered to the Chair and then distributed to the faculty for discussion at a faculty meeting. |
| 7. Ways of closing the loop | See year end report. |

Year 2: 2014-2015

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| 1. Which SLO(s) to assess | SLO 1-3 and 5-6 | | | | |
| 2. Assessment indicators | | | | | |
| 3. Sample (courses/# of students) | <table border="1"> <tr><td></td></tr> <tr><td></td></tr> <tr><td></td></tr> <tr><td></td></tr> </table> | | | | |
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| 4. Time (which quarter(s)) | Assessments given Fall and Winter, Re-grading and analyzing results Spring | | | | |
| 5. Responsible person(s) | Kathy Hann, Don Wolitzer and Julia Olkin | | | | |
| 6. Ways of reporting (how, to who) | The report will be delivered to the Chair and then distributed to the faculty for discussion at a faculty meeting. | | | | |
| 7. Ways of closing the loop | Faculty will brainstorm and implement improved instructional practices covering concepts in which student performance does not meet expectations and/or will reconsider and rewrite assessments to better reflect outcomes. | | | | |

Year 3: 2015-2016

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| <i>4. Time (which quarter(s))</i> | Assessments given Fall and Winter, Re-grading and analyzing results Spring |
| <i>5. Responsible person(s)</i> | Kathy Hann, Don Wolitzer and Julia Olkin |

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|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3. <i>Sample (courses/# of students)</i> | |
| 4. <i>Time (which quarter(s))</i> | Assessments given Fall and Winter, Re-grading and analyzing results Spring |
| 5. <i>Responsible person(s)</i> | Kathy Hann, Don Wolitzer and Julia Olkin |
| 6. <i>Ways of reporting (how, to who)</i> | The report will be delivered to the Chair and then distributed to the faculty for discussion at a faculty meeting. |
| 7. <i>Ways of closing the loop</i> | Faculty will brainstorm and implement improved instructional practices covering concepts in which student performance does not meet expectations and/or will reconsider and rewrite assessments to better reflect outcomes. |