

Degree program: __Bachelor of Science with a Major in Mathematics_____

| Program Student Learning Outcomes |
|---|
| 1. Students will be able to communicate effectively in written and oral forms, work successfully in teams, and understand ethical responsibilities. |
| 2. Students will be able to think critically and be prepared for life-long learning. |
| 3. Students will be able to continue graduate studies in Mathematics or related field. |
| 4. Students will have a working understanding of the major disciplines in Mathematics, including Algebra, Analysis, Geometry/Topology, and Probability/Statistics. Students will also have the ability to read and write proofs and a working knowledge of mathematics software tools. |
| 5. Students will be able to complete a written project, under the supervision of a faculty member, in an area of Mathematics chosen from Algebra, Analysis, Geometry/Topology, or Probability/Statistics. |

**Worksheet #2 – Program Checklist – List required courses and indicate level/s of delivery
By putting (I, E, R or A) into Each Box**

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I = Students are INTRODUCED to material
E = The material is EMPHASIZED and taught in depth
R = The material is REINFORCED with additional exposure to the information
A = The Competencies/Skills are being APPLIED

| List of courses required for the degree | Program-level outcomes addressed | | | | |
|---|---|--|--|--|---|
| | #1 Students will be able to communicate effectively in written and oral forms, work successfully in teams, and understand ethical responsibilities. | #2 Students will be able to think critically and be prepared for life-long learning. | #3 Students will be able to continue graduate studies in Mathematics or related field. | #4 Students will have a working understanding of the major disciplines in Mathematics, including Algebra, Analysis, Geometry/Topology, and Probability/Statistics. Students will also have the ability to read and write proofs and a working knowledge of mathematics software tools. | able to complete a written project, under the supervision of a faculty member, in an area of Mathematics chosen from Algebra, Analysis, Geometry/Topology, or Probability/Statistics. |
| MATH 2413 | | I | I | I | |
| MATH 2414 | | E | E | E | |
| MATH 2415 | | E | E | E | |
| COSC 1336 | I | I | | | |
| COSC 1136 | I | I | | | |
| MATH 3310 | | I | I | I | |
| MATH 3330 | | E | E | E | |
| MATH 3360 | I | I | I | I | |

| | | | | | |
|-----------|----------|----------|----------|----------|----------|
| MATH 3365 | | I | I | I | |
| MATH 4310 | | E | E | E | |
| MATH 4335 | | E | E | E | |
| MATH 4345 | I | E | E | E | I |

**Worksheet #3 - Order Courses by Outcome and Level of Delivery (Courses may be listed more than once)
Indicate level of delivery by checking the appropriate box) Add cells as necessary**

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| Program-level outcome addressed (write out each program level outcome) | Level of Material Delivery (List classes in order of material delivery) | | | | Courses List courses (or groups of courses) in order of material delivery for each outcome (I, E, R and then A). Courses may provide more than one level of material delivery. | Curriculum Component/s (Class Activities) that Address Outcome | Means of Assessment |
|---|---|---|---|-----------|--|--|---------------------|
| | I | E | R | A | | | |
| #1 Students will be able to communicate effectively in written and oral forms, work successfully in teams, and understand ethical responsibilities. | X | | | | COSC 1336 | | |
| | X | | | | COSC 1136 | | |
| | X | | | | MATH 3360 | | |
| | X | | | | MATH 4345 | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| #2 Students will be able to think critically and be prepared for life-long learning. | X | | | | MATH 2413 | | |
| | X | | | | COSC 1336 | | |
| | X | | | | COSC 1136 | | |
| | X | | | | MATH 3310 | | |
| | X | | | | MATH 3360 | | |
| | X | | | | MATH 3365 | | |
| | | X | | | MATH 2414 | | |
| | | X | | | MATH 2415 | | |
| | | X | | | MATH 3330 | | |
| | | X | | | MATH 4310 | | |
| | | X | | | MATH 4335 | | |
| | X | | | MATH 4345 | | | |
| #3 Students will be able to continue | X | | | | MATH 2413 | | |
| | X | | | | MATH 3310 | | |
| | X | | | | MATH 3360 | | |

Worksheet #4 - Needed Modifications, if any, for Curriculum Alignment

Goal: Degree programs are coherent in that they demonstrate 1) sequencing, 2. progression or increasing complexity, and 3) linkages between and among program core courses.

| Curriculum Modifications Needed | Why Needed? |
|---|--------------------|
| We do not think that we need to modify this program at this time, but we will reconsider this question during Fall 2008. | |
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