Program Change Request

Date Submitted: 11/08/18 2:09 pm

Viewing: MINOR-MATH : Mathematics - Minor

Last approved: 03/06/17 3:18 pm
Last edit: 11/13/18 11:30 am
Changes proposed by: donnah

Catalog Pages Using this Program
Mathematics - Minor

Contact(s)

<table>
<thead>
<tr>
<th>Name</th>
<th>E-mail</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Donna Hoffman</td>
<td><a href="mailto:donnah@tamu.edu">donnah@tamu.edu</a></td>
<td>979-862-4306</td>
</tr>
</tbody>
</table>

Academic level: Undergraduate
Effective Term: 2019-2020
Department: Mathematics
College: Science
Program type: Minor
With a minor in: Mathematics (MATH)
Associated Program: Not Applicable

Catalog Program Title
Mathematics - Minor

Rationale for Proposal
1. Since Changing MATH 220 is being renumbered to 221/251/253 from a 300-level required course number, it no longer needs to be listed separately to an elective course will give students more flexibility in completing the Undergraduate Catalog and Rule C. Minor in Howdy Degree Evaluation.
2. MATH 396 is only a 1 credit hour course and MATH 419 is only a 2 credit hour course and therefore not eligible for the minor.
3. This added statement will bring Howdy Degree Evaluation into agreement with the Undergraduate Catalog.

Program hours: 16
Is this program eligible for financial aid?: No
Will program hours change (increase/decrease) due to the proposed curriculum changes?: No

Catalog Program Requirements
Non-math majors can obtain a minor in mathematics by meeting the following requirements:

**Course List**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Semester Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 148</td>
<td>Calculus II for Biological Sciences</td>
<td>4</td>
</tr>
<tr>
<td>MATH 152</td>
<td>Engineering Mathematics II</td>
<td></td>
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<tr>
<td>MATH 172</td>
<td>Calculus</td>
<td></td>
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</tbody>
</table>

Select one from:

- MATH 220: Foundations of Mathematics
- MATH 221: Several Variable Calculus 1
- MATH 251: Engineering Mathematics III
- MATH 253: Engineering Mathematics III

300-400 level Mathematics course 2, 3

Select from the following:

- MATH 304, MATH 309, MATH 311, or MATH 323 can be taken to satisfy the minor, due to the course content.
- MATH 396, MATH 403, MATH 419, and MATH 485 may not be used to satisfy the requirements.
- MATH 485 will receive approval only under exceptional circumstances.

**Additional Information**

1. To remove MATH 220 from the Course List in the Undergraduate Catalog and in Rule C. in Howdy Degree Evaluation (due to the renumbering of MATH 220 to Math 300).
2. Description of change: To add MATH 396 Removing Calculus III (MATH 221/251/253) as a required course and MATH 419 to changing the list 6 hours of excluded courses in the Note Section of the Undergraduate Catalog and change Rule B. upper level electives to 9 hours. and Rule C. to exclude MATH 396 and MATH 419 in Howdy Degree Evaluation.
3. To add the statement, "Only one of MATH 221, MATH 251, or MATH 253 can be taken to satisfy the minor, due to course content" to the Description section in Howdy Degree Evaluation.

**Required Proposal Forms**

- math_minor_16c.pdf
- PresidentApprovalFacultySenateItems121216.pdf
- math_minor.pdf

**Reviewer Comments**

- Angel Mario Carrizales (carri1214) (11/01/17 5:37 pm): Rollback: What is being changed? The content of this proposal is the same from the 2017-2018 Catalog approval cycle.
- Angel Mario Carrizales (carri1214) (11/02/17 4:58 pm): Rollback: Previous comment has not been addressed.
- Angel Mario Carrizales (carri1214) (11/13/18 11:33 am): Initial concerns addressed.
unofficial evaluation

**Area: Mathematics Minor (16-0.00 credits) - Not Met**

**Description:** Minimum of 6 hours at 300-499 level. No grade less than a “C” is acceptable. All 300-499 level MATH courses must be taken at TAMU. Transfer work not accepted. MATH 152, 171, or 172 is a required prerequisite.

**Met:**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Rule</th>
<th>Subject</th>
<th>Attribute</th>
<th>Low</th>
<th>High</th>
<th>Required</th>
<th>Required</th>
<th>Term Subject</th>
<th>Course Title</th>
<th>Attribute</th>
<th>Credits</th>
<th>Grade</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>AND</td>
<td>A.</td>
<td>MATH 437 4hrs</td>
<td>Grade of “C” or better. Select from MATH 148, 152, 172.</td>
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<td>No</td>
<td>AND</td>
<td>B.</td>
<td>400-Level MATH 3hrs</td>
<td>Grade of “C” or better. Select from MATH 400-499 (except MATH 403, 419, 485)</td>
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<td>No</td>
<td>AND</td>
<td>C.</td>
<td>MATH Elect 9hrs</td>
<td>Grade of “C” or better. Select from MATH 221, 251, 253, 300-499 (except MATH 355-368, 396, 403, 419, 485)</td>
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Total Credits and GPA 0.000 .00

unofficial evaluation

**Area: University Writing Requirement - Not Met**

**Met:**

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<th>Condition</th>
<th>Rule</th>
<th>Subject</th>
<th>Attribute</th>
<th>Low</th>
<th>High</th>
<th>Required</th>
<th>Required</th>
<th>Term Subject</th>
<th>Course Title</th>
<th>Attribute</th>
<th>Credits</th>
<th>Grade</th>
<th>Source</th>
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</thead>
<tbody>
<tr>
<td>No</td>
<td></td>
<td>A.</td>
<td>Writing Requirement</td>
<td>Two courses required. Only sections of ANTH 100-499, UGSS 491 with the Writing attribute [(UWRT)] may be used to satisfy this requirement.</td>
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Total Credits and GPA 0.000 .00

unofficial evaluation

**Area: Int’l & Cult Diversity - Not Met**

**Met:**

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<tr>
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<th>Attribute</th>
<th>Low</th>
<th>High</th>
<th>Required</th>
<th>Required</th>
<th>Term Subject</th>
<th>Course Title</th>
<th>Attribute</th>
<th>Credits</th>
<th>Grade</th>
<th>Source</th>
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<tbody>
<tr>
<td>No</td>
<td></td>
<td>A.</td>
<td>Int’l &amp; Cultural Diversity 6hrs</td>
<td>Select from courses with the International and Cultural Diversity attribute [ICD] (except sections of 3510 259 with the UWRT attribute).</td>
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Total Credits and GPA 0.000 .00

unofficial evaluation

**Area: Residence Requirement - Not Met**

**Description:** A minimum of 16 hours of 300-499 level coursework must be completed at Texas A&M University. 12 hours must be in the major field.

**Met:**

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<th>Term Subject</th>
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<th>Attribute</th>
<th>Credits</th>
<th>Grade</th>
<th>Source</th>
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<tbody>
<tr>
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<td>AND</td>
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<td>Residence-Major 12hrs</td>
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<tr>
<td>No</td>
<td>AND</td>
<td>B.</td>
<td>Residence - 300-499 24hrs</td>
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Total Credits and GPA 0.000 .00

unofficial evaluation

**Area: GPR-Major - Not Met**

**Description:** A GPR of 2.00 must be maintained in all major field courses.

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<th>Required</th>
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<th>Source</th>
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Total Credits and GPA 0.000 .00

11/7/2018, 4:37 PM