Proposal for Quantitative Oriented Courses to Satisfy the Mathematics Competency Requirement

***Name of Department Submitting the Proposal***:

***Faculty Contact Information (Name, Phone, and Email)***:

***Name of Course***:

***Course Description:***

***Course Prerequisite:***

***Course Status:***

Has this course been approved by CUP & the Academic Senate? Yes / No / In-progress

Has this course been approved by GEC for General Education credit? Yes / No / In-progress

***Number of Students per course***:

***Demonstrate how the course and assignments exhibit the quantitatively oriented course characteristics by including:***

* Completed form below
* Syllabus including coursework and potential texts
* List of mathematical skills used during the course (could be on syllabus)
* Rough course outline (topics) covered by week (could be on syllabus)
* Sample final exam or project

***Materials presented to the committee must demonstrate how the course meets the following expectations:***

* A significant portion of the course is dedicated to quantitative reasoning and analysis (breadth).
* The course must involve the concepts of intermediate or advanced algebra, statistics, or calculus (depth).
* The course must involve the practice in the ability to apply the mathematical skills in specific contexts or acquisition of technical skills in mathematics.
* Summative exam or project that includes assessment of mathematical skills used or gained during the course.

***Submission Process***

Please email this form and supporting materials to JD Phillips, jophilli@nmu.edu.

***Please discuss how your course, assignments, or assessments will address the following:***

|  |  |  |
| --- | --- | --- |
| **Characteristics** | **Concepts** | **How will your course address these areas?** |
| **Interpretation** | **Ability to explain information presented in mathematical forms** |  |
| **Representation** | **Ability to convert relevant information into various mathematical forms (e.g. equations, graphs, tables, words)** |  |
| **Calculation** | **Ability to perform mathematical computations at the appropriate depth** |  |
| **Application/ Analysis** | **Ability to make judgements and draw appropriate conclusions based on quantitative analysis of data** |  |
| **Assumptions** | **Ability to make and evaluate important assumptions in estimation, modeling, and data analysis** |  |
| **Communication** | **Expressing quantitative evidence in support of the argument** |  |