

**Advanced Mathematics Content Mastery**

**Double Degree and Master of Science**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name:** |  | **Date:** |  |

The purpose of this form is to demonstrate competence in the field of Advanced Mathematics. Students are required to complete **at least 49 credits** of content mastery courses. To complete the form, list courses taken; include the planned terms for courses not taken. A University Honors course can be substituted for the corresponding course. If you have questions how the courses fit within your major, please contact your program advisor. Submit the completed form with your application.

The suggested courses help students prepare for the NES *Mathematics* exam required for a teaching endorsement in Mathematics. <http://www.orela.nesinc.com/Content/Docs/NES_Framework_304.pdf>

A cumulative 3.0 GPA is preferred on all required courses. Grades below C- are not accepted. All content mastery courses must be taken on an A-F basis; no P/N or S/U grades can be accepted.   
If you have questions about this form, please contact Carol McKiel at [carol.mckiel@oregonstate.edu](mailto:carol.mckiel@oregonstate.edu)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Content** | **Examples of OSU Courses** | **Course Designator & Number** | **Credits** | **Year/Term** | **Grade** |
| **Calculus**  **12 credits** | MTH 251\*, 252, 254 |  |  |  |  |
| **Discrete Mathematics**  **3 credits** | MTH 355 |  |  |  |  |
| **Statistics**  **4 to 8 credits** | ST 201 **and** ST 202  **OR**  ST 351 |  |  |  |  |
| Probability  **3 credits** | MTH 361 |  |  |  |  |
| Geometry  **3 credits** | MTH 338 (WIC) |  |  |  |  |
| **Linear Algebra**  **3 credits** | MTH 341 |  |  |  |  |
| **Abstract Algebra**  **3 credits** | MTH 343 |  |  |  |  |
| **Algebraic and Geometric Transformations\*\***  **9 credits** | MTH 491, 492, 493\*\* |  |  |  |  |
| **Math Electives**  **6 credits** | **Select a minimum of 6 credits:**  MTH253, 255, 256, 306, or Any ST (Statistics) courses |  |  |  |  |
| **Math Education**  **3 credits** | SED 414  (or for MS students, take SED516 during the program) |  |  |  |  |

\*\*The standard 8 sequence is unique to OSU and may be taken during the program to satisfy the 9 credits of graduate content course requirement for MS licensure program.