| 1201 I | Larimer  | Street, | Suite | 4000 |
|--------|----------|---------|-------|------|
| Office | - 303-31 | 15-1700 | )     |      |

| Ν | Name: | ID: | Date: | Advisor: |
|---|-------|-----|-------|----------|
|   |       |     |       |          |

## **Applied Mathematics Option – Bachelor of Science in Mathematics**

| COURSE                                                                                    | TAKEN? | NOTES |
|-------------------------------------------------------------------------------------------|--------|-------|
| MATH 1401 – Calculus I                                                                    |        |       |
| MATH 2411 – Calculus II                                                                   |        |       |
| MATH 2421 – Calculus III                                                                  |        |       |
| MATH 3000 – Introduction to Abstract Math                                                 |        |       |
| MATH 3191 – Applied Linear Algebra                                                        |        |       |
| MATH 3200 – Elementary Differential                                                       |        |       |
| Equations                                                                                 |        |       |
| MATH 4650 – Numerical Analysis I                                                          |        |       |
| MATH 3800 or 4820 <u>or 3382</u> –                                                        |        |       |
| Probability and Statistics for Engineers                                                  |        |       |
| MATH 4310 – Introduction to Real Analysis I                                               |        |       |
| One course chosen from: MATH 4140, 4110,                                                  |        |       |
| 4201, 4220, 4320, 4408 – Modern Algebra;                                                  |        |       |
| Theory of Numbers; Topology; Higher                                                       |        |       |
| Geometry II; Intro to Real Analysis II or Graph                                           |        |       |
| Theory.                                                                                   |        |       |
| MATH 4779 – Math Clinic                                                                   |        |       |
| Two courses chosen from MATH 3301, 3302,                                                  |        |       |
| 4387, 4733, 4791, 4792, 4793 and 4794 –                                                   |        |       |
| Introduction to OR I; Intro to OR II;                                                     |        |       |
| Regression Analysis; Modeling and Time                                                    |        |       |
| Series, Partial Differential Equations;                                                   |        |       |
| Continuous Modeling; Probabilistic Modeling;                                              |        |       |
| Discrete Math Modeling or Optimization                                                    |        |       |
| Modeling.                                                                                 |        |       |
| Two Math classes (and at least 6 credits) above                                           |        |       |
| 3000 excluding 3040, 3511, 4012, 4013, 4014,                                              |        |       |
| 4015. (Note: Students looking to use Math 3195 to satisfy this requirement should consult |        |       |
| their advisor).                                                                           |        |       |
| LIICH auvisor).                                                                           |        |       |

If a cancellation, non-offering, or scheduling conflict prevents the timely completion of the Mathematics major, contact an advisor. No class may be used for more than one category. You must also meet the following requirements.

- 1. In order for this option to appear on your transcript, you must complete a form with your CLAS advisor before the last semester of your senior year.
  - 2. An advisor must approve the classes in your major. This should be done before completing MATH 3000.

- 3. A C- or better is needed in each class counted towards your major and your grade point average must be at least 2.25 in these MATH classes. You must take at least 15 upper division (3000 or above) MATH credits (5 classes) at CU Denver.
- 4. The semester you graduate, you must:
  - ➤ Complete the MFAT Exam and participate in an exit interview. These requirements will be scheduled through the department Administrative Assistant (303-315-1702).
  - Complete a senior survey.
- 5. You must satisfy the requirements of the College of Liberal Arts and Sciences (CLAS). Contact CLAS advising office (303-556-2555) for details.
- 6. To graduate as a Mathematics major, must have a minimum of 30 hours of resident credit (letter grades received at CU Denver). Furthermore, 21 out of the last 30 hours must be taken in CU Denver CLAS courses. Finally, at least 15 upper-division mathematics credits must be taken at CU Denver. For the most current CLAS residency requirements, please visit: <a href="http://www.ucdenver.edu/academics/colleges/CLAS/clas-advising">http://www.ucdenver.edu/academics/colleges/CLAS/clas-advising</a>

Students with at least a 3.5 major grade point average, at least 3.2 overall grade point average, and who have done an honors project are eligible to graduate with honors. See an advisor (or the honors advising sheet) for details.

## **CHECK LIST:**

In addition to meeting the requirements listed on the course requirement sheet, each student must satisfy the following:

**Math Credit Hours:** 48 hours of mathematics on transcript? Yes / No **Grade:** C- or

| better in all math classes counted toward the degree?                                                                                                                         | Yes / No <b>GPA:</b> Current          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| grade-point average for all math classes:  Math GPA as of                                                                                                                     | <u>.</u>                              |
| Note: A C- or better is needed in each class counted towards the must be at least 2.25 in these MATH classes.                                                                 | ne MATH major and grade point average |
| Residency requirement: 15 upper-division math credits ta                                                                                                                      | aken at CU Denver? Yes / No           |
| <b>Honors:</b> Does the student want to be considered for gradual <i>Minimum requirements</i> : 3.5 GPA in upper-division math, 3 Denver, and an approved honors project. See |                                       |

## Semester student plans to graduate:

See a CLAS Advisor during the first two weeks of the semester to express intent to graduate.
 Apply for graduation online through the UCDAccess portal. At time of meeting with CLAS Advisor, declare desired math option for transcript.

- o Participate in an exit interview with MATH Faculty. \*
- o Complete the MFAT Exam \*
- o Submit two written projects completed for MATH classes.\*
- o Complete and submit a senior survey.\*

Recommended: Register at CU Denver Career Center, <a href="http://www.ucdenver.edu/life/services/careercenter">http://www.ucdenver.edu/life/services/careercenter</a> Tivoli Student Union, Suite 267 303-556-2250

<sup>\*</sup>All items marked with an asterisk will be coordinated via email communication from the Department of Mathematical and Statistical Sciences.