

Mathematics Majors - 2009-2010 Catalogue

Name: _____

36-credit Major: Liberal Arts Emphasis Code 180-201	36-credit Major: Applied Emphasis Code 180-204	36-credit Major: Statistics Emphasis Code 180-205	60-cr Comprehens. Major: Actuarial Science 180-001
<p>Core (22 credits):</p> <p>__ (4) 114 - Calc I __ (4) 215 - Calc II __ (4) 216 - Calc III __ (3) 316 - Intro Real An __ (3) 324 - Lin Alg/Matrx __ (3) 425 - Abstr. Alg I __ (1) 493 - Capstone Sem</p>	<p>Core (22 credits):</p> <p>__ (4) 114 - Calc I __ (4) 215 - Calc II __ (4) 216 - Calc III __ (3) 316 - Intro Real An. __ (3) 324 - Lin Alg/Matrx __ (3) 425 - Abstr. Alg I __ (1) 493 - Capstone Sem</p>	<p>Core (22 credits):</p> <p>__ (4) 114 - Calc I __ (4) 215 - Calc II __ (4) 216 - Calc III __ (3) 316 - Intro Real An. __ (3) 324 - Lin Alg/Matrx __ (3) 425 - Abstr. Alg I __ (1) 493 - Capstone Sem</p>	<p>Core (22 credits):</p> <p>__ (4) 114 - Calc I __ (4) 215 - Calc II __ (4) 216 - Calc III __ (3) 316 - Intro Real An. __ (3) 324 - Lin Alg/Matrx __ (3) 425 - Abstr. Alg I __ (1) 493 - Capstone Sem</p>
<p>__ (3) one of these: __ 317 Real An II __ 335 PointSetTop __ 426 Abstr. Alg II</p> <p>__ minimum of 9 additional credits from courses numbered above 310: __ () _____ __ () _____ __ () _____ __ () _____ __ () _____</p>	<p>__ (12) minimum of 12 credits from:</p> <p>__ (4) 312 DifQ LinA __ (3) 313 Digit Sig __ (3) 314 Discr (GE) __ (3) 318 ComplexV __ (4) 345 Prob/St __ (3) 346 Prob __ (3) 351 Num An I __ (3) 352 Num An II __ (4) 354 Modeling __ (3) 355 Lin Progr __ (3) 358 Optimiz __ (2-3) 456 Ops Res __ (1-3) 491 or 2nd seminar, approval required</p>	<p>__ (7) Prob/Stat focus: __ (3) 346 Prob __ (4) 347 Statistics</p> <p>__ (3-6) at least 2 of: __ (3) 441 Lin Regr __ (3) 443 Exp Desgn __ (2) 445 Survey __ (2) 447 Nonpara __ (1) 491, approval required</p> <p>__ 1-4 additional credits from courses numbered above 310: __ () _____ __ () _____</p>	<p>Math focus (14 cr.):</p> <p>__ (3) 346 - Probability __ (4) 347 - Statistics __ (4) 350 - Fin. Math __ (3) 450 - Actuarial Sci</p> <p>Econ focus (9 cr.):</p> <p>__ (3) 103 or 303 - Micro __ (3) 104 or 304 - Macro __ (3) 316 - Econometrics</p> <p>Accounting focus (6 cr.):</p> <p>__ (3) 201- Acct I __ (3) 202 - Acct II</p> <p>Systems focus (3 cr.):</p> <p>__ (3) IS 240 - Info Syst</p> <p>Finance focus (6 cr.):</p> <p>__ (3) 320 - Finance __ (3) 327 - LongTerm Fin</p>
<p>__ At least 3 credits of Computer Science (CS) selected from: __ (3) 145 - Java __ (3) 163 - C++ __ (3) 170 - Sci/Math __ (4) 255 - Algor/Disc</p>	<p>__ At least 3 credits of Computer Science (CS) selected from: __ (3) 145 - Java __ (3) 163 - C++ __ (3) 170 - Modeling __ (4) 255 - Algor/Disc</p>	<p>__ At least 3 credits of Computer Science (CS) selected from: __ (3) 145 - Java __ (3) 163 - C++ __ (3) 170 - Modeling __ (4) 255 - Algor/Disc</p>	<p>If credits are needed to reach at least 60, consider the following courses: __ (3) Acct 450 __ (2) Bcom 206 or 207 __ (3) Bsad 306 __ (3) Econ 318, 321 (GE), 322 (GE) __ (3) Fin 322, 325, 326, 371</p>

- Suggested courses for mathematics majors who are planning to pursue graduate study in mathematics include Math 312, 317, 318, 335, and 426.
- If another 300-level GE is needed, one may want to consider Math 314 Discrete.
- Additional coursework is required to fulfill the University Graduation Requirements – see other side.

<p>Bachelor of Science (BS) Degree in the College of A&S for Mathematics Majors and Bachelor of Arts (BA) Degree in the College of A&S for Mathematics Majors</p>	<p>General Education Requirements (min. 45 credits):</p> <ul style="list-style-type: none"> - Minimum of 9 credits from courses numbered 300 or above from at least two GE categories
<p>Credits:</p> <ul style="list-style-type: none"> - Minimum 120 total credits - Minimum of 39 at 300-level or higher - Minimum of 90 credits of A&S courses - Minimum of 60 unique credits between major-minor concentration - Minimum of 23 credits senior year 	<p>I. <u>Communications</u> (minimum 6 credits)</p> <ul style="list-style-type: none"> - Language Skills (at least 3 credits): American Indian Studies 111, 112; Communication/Journalism; English (lang. and comp. – excluding 110/112); Foreign Lang (language and comp); IDIS - Analytical Skills (at least 3 credits) – Computer Science; Math (114, 215, 307, 314), Philosophy (Logic); IDIS.
<p>Competencies:</p> <p><u>English Competency:</u> (one of the following)</p> <ul style="list-style-type: none"> - Earn 5 credits in Engl 110 with C or above - Test out of Engl 110 - Earn 4 credits of Hnrs 101 with C or above - <p><u>Mathematics/Statistics Competency:</u></p> <ul style="list-style-type: none"> - Met by placing into /completing Math 114 <p>For BS: <u>Foreign Language/Foreign Culture:</u> (one of the following)</p> <ul style="list-style-type: none"> - Place into 201-level course of foreign lang. or earning at least C or S in 102-level foreign language course (or AIS 112 or CSD 103) - Earn credit in a full semester (equivalent) of study abroad or approved internship abroad - Earn a minimum of 9 credits in FC courses - Earn credit in 101- or 102- level (or equivalent) course AND at least 6 credits in FC courses <p>For BA: <u>Foreign Language:</u> (one of the following)</p> <ul style="list-style-type: none"> - Place into 201-level course of foreign lang. - Earn at least C or S in 102-level foreign language course (or AIS 112 or CSD 103) 	<p>II. <u>Natural Sciences</u></p> <p>BS – 15 credits, 2 lab courses, 2 categories BA – 9 to 12 credits, 1 lab course, 2 categories</p> <ul style="list-style-type: none"> - Categories: Biology, Chemistry, Geography (physical), Geology, Physics, IDIS (including Materials Science, WMNS 432) - Lab courses: Biol 100, 110, 111, 151, 181, 195, 214, 320, 356, 392; Chem 100, 103, 104, 115, 325; Geog 104; Geol 106, 110, 115, 131; Msci 100; Phys 100, 211, 212, 226, 229, 231, 232. <p>III. <u>Social Sciences</u> (9 to 12 credits, 1 course from at least 2 categories)</p> <ul style="list-style-type: none"> - Categories: Anthropology; Economics; Geography (cultural); Political Science; Psychology; Sociology; IDIS (including AIS 101, Criminal Justice, LAS 150, WMNS 310, 375, 433, 440)
<p>Other Requirements</p> <p><u>Cultural Diversity:</u></p> <ul style="list-style-type: none"> - 3 credits of content in a course or courses dealing with African Americans, Hispanics, American Indians, or Asian Americans <p><u>Service-Learning:</u></p> <ul style="list-style-type: none"> - 30 hours or more of service/learning <p><u>Wellness Theory and Physical Activity:</u></p> <ul style="list-style-type: none"> - 1 credit of Wellness Theory - 1 credit of Physical Activity 	<p>IV. <u>Humanities</u></p> <p>BS – 9 to 12 credits, at least 1 course from 2 cat. BA – 15 credits, at least 1 course from 4 cats.</p> <p>Categories:</p> <ul style="list-style-type: none"> - Fine Arts: Art, Art History, Dance, Music, Music Therapy (including Mutx 115 and 218), Theatre Arts. - Philosophy (excluding Logic), Religious Studies - History - English (literature), Foreign Language (literature and civilization) - IDIS: AIS 102, Humanities, Interdisciplinary Studies, International Studies, Latin American Studies, Women’s Studies <p>V. <u>University-wide GE</u> (up to 6 credits).</p>