General Studies Requirements (56-60 sh)

FIRST-YEAR CORE:

GST 110 - Global Experience (4 s.h.)

ENG 110 - Writing: Argument & Inquiry (4 s.h.)
   (C- or better required for graduation)

MTH 110 or 151 or 220 (4 s.h.)

Experiential Learning Requirement (ELR – 2 units required):
Included in experiential learning are study abroad, research, service-learning, leadership, internships, (including co-ops, teaching, and practicum), or other courses or experiences with ELR designation

Foreign Language Requirement:
Students must meet one of the following: (a) complete a language course numbered 122 or above upon arriving at Elon, using a department of foreign languages approved placement instrument; (b) place into a language course numbered 200 or above upon arriving at Elon, using a department of foreign languages approved placement instrument; (c) score a 4 or 5 on an AP language exam or similar exam. Each student must take the language placement test by October 1 of his or her first full year at Elon. Students are allowed two tries; the higher score is counted. That score stands and may not be repeated by later testing.

STUDIES IN THE ARTS AND SCIENCES:
[Transfer students with at least 18 s.h. of transfer credit must complete 32 hours total in Studies in the Arts & Sciences, but may have as few as 7 hours in one or more of the four Studies in the Arts & Sciences areas.]

Expression (8 s.h.)
   [Eight hours chosen from at least two of the following:
   literature (in English or foreign languages), philosophy, & fine arts
   (art, art history, dance, fine arts, music, music theatre, & theatre).
   At least one course must be literature.]

Civilization (8 s.h.)
   [Eight hours chosen from at least two of the following:
   history, foreign languages, and religious studies.]

Society (8 s.h.)
   [Eight hours chosen from at least two of the following:
   economics, geography, human service studies, political science, psychology, & sociology/anthropology.]

Science/Analysis *PHY 221 (Lab: ) *PHY 222 (8 s.h.)
   [Eight hours chosen from one or more of the following:
   mathematics/statistics, science, computer science and information science. One course must be a physical or biological laboratory science.]

ADVANCED STUDIES (Must be outside major.)

(8 s.h.)
   [Eight hours of 300-400 level coursework outside the major field and chosen from areas under Studies in the Arts and Sciences.]

GST Interdisciplinary Capstone Seminar (4 s.h.)
   [300-400 level GST course; requires junior/senior status.]

*Required in major; may count in General Studies.

Major Requirements
A minimum of 56 - 93 s.h. in the following courses is required.

   _____ MTH 151 (4) - Calculus I
   _____ MTH 251 (4) - Calculus II
   _____ MTH 252 (4) – Multivariable Calculus & Analytic Geometry

Choose one of the following:

MATHEMATICS (BS) (44 sh)

   _____ MTH 239 (4) - Linear Algebra
   _____ MTH 330 (4) - Mathematical Reasoning
   _____ MTH 430 (4) - Abstract Algebra
   _____ MTH 455 (4) - Analysis
   _____ MTH/STS 460 (2) - Seminar I
   _____ MTH/STS 461 (2) - Seminar II

Choose one course (4 s.h.) from the following:

   _____ MTH 359 (4) - Differential Equations
   _____ MTH elective (4) - 300/400-level (excluding MTH 481)
   _____ CSC 130 (4) – Computer Science I
   _____ One CSC course (4) numbered 200 or above
   _____ *PHY 221 (4) – University Physics I
   _____ *PHY 222 (4) – University Physics II

MATHEMATICS (BS) WITH TEACHING LICENSURE (81sh)

   _____ MTH 220/STS 212 (4) – Statistics in Application
   _____ MTH 239 (4) - Linear Algebra
   _____ MTH 308 (4) – Math for Middle Grades & Secondary Teachers
   _____ MTH 309 (1) – 21st Century Technology in Mathematics

(Mathematics BS options are continued on page 2 ...)
(... mathematics BS continued from page 1.)

_____MTH 330 (4) - Mathematical Reasoning
_____MTH 335 (4) - Modern Geometry
_____MTH 329 (4) - Probability Theory & Statistics
_____MTH 430 (4) - Abstract Algebra
_____MTH 455 (4) – Analysis
_____MTH 460 (2) – Seminar I
_____MTH 461 (2) – Seminar II

Select one course from the following:
  *PHY 201 (4) – General Physics I
  *CSC 130 (4) – Computer Science I

Professional Studies - Secondary & K-12

_____*SOC 243 (4) – Sociology of Education
_____CIS 220 (3) – Technology for Teaching and Learning
_____*PSY 321(4) - Educational Psychology
_____EDU 302 (1) – Explorations Seminar II
_____EDU 315 (4) – Educational Assessment
_____EDU 355 (4) – Teaching in 21st Century Classrooms
_____EDU 422 (4) – Methods of Teaching Middle Grades and Secondary Math
_____EDU 450 (4) – Teaching Diverse Learners in Secondary Schools
_____EDU 481 (10) – Student Teaching
_____EDU 303 (2) – Explorations Seminar III

_____ Major Comprehensive Evaluation

All graduating mathematics majors are required to complete a senior portfolio of their work and exit interview based on portfolio materials. This portfolio will include a compilation of their work across their four years of mathematical study at Elon; therefore, students should be mindful of this requirement as they complete work for all their courses and be sure to retain electronic copies of work that they may want to include in their portfolio in their senior year.

_____Major Total (s.h.)