General Studies Requirements (58-62 sh)

FIRST-YEAR CORE:

GST 110 - Global Experience (4 s.h.)
ENG 110 - College Writing (4 s.h.)
MTH 112 or 121 or 212 (4 s.h.)*
HED 111 – Contemporary Wellness (2 s.h.)

Experiential Learning Requirement (ELR): (One Unit)

May be met by any one of the following: internship, practicum, co-op, study abroad, student teaching, approved field-based course or documented service, leadership, or individualized learning experience.

Foreign Language Requirement:

Students must meet one of the following: (a) complete a language course numbered 122 or higher at Elon, or receive transfer or study abroad credit for the same; (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 services - HSS 111 only, political science, psychology, & sociology/anthropology.]

Science * ___________________ (Lab: ___) * ___________________ (8 s.h.)

[Eight hours chosen from one or more of the following:

- mathematics, science, and computer science (CSC designation).
- At least 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 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 52-56 s.h. in the following courses is required.

Statistics foundations: (16 sh)

- MTH/STS 212 (4) – Statistics in Application
- STS 323 (4) – Statistical Modeling
- STS 325 (4) – Design and Analysis of Experiments
- MTH/STS 341 (4) – Probability Theory and Statistics

Mathematical foundations: (16 sh)

- MTH 121 (4) – Calculus I
- MTH 221 (4) – Calculus II

Choose two courses from the following:

- STS 213 (4) – Survey Sampling Methods
- STS 256 (4) – Applied Nonparametric Statistics
- STS 327 (4) – Statistical Computing
- STS 342 (4) – Statistical Theory

Choose from the following: A related experiential/capstone experience approved by the department (4 sh). Approved options are:

- STS 460 (2) - Seminar I
- STS 461 (2) – Seminar II
- STC 481 (2-4) Internship in Statistics
- STC 499 (2-4) Independent Research in Statistics

Complete one of the following concentrations:

MATHEMATICAL STATISTICS (20 sh)

- MTH 321 (4) – Multivariable Calculus and Analytic Geometry
- MTH 231 (4) – Mathematical Reasoning
- STS 342 (4) – Statistical Theory

- MTH 306 (4) – Applied Matrix Theory

- OR -

- MTH 311 (4) – Linear Algebra

Choose one course from the following:

- MTH 206 (4) – Discrete Structures
- MTH 265 (4) – Mathematical Modeling
- MTH 312 (4) – Abstract Algebra
- MTH 425 (4) - Analysis

ACTUARIAL SCIENCE (20 sh)

- ECO 111 (4) – Principles of Economics
- ACC 201 (4) – Principles of Accounting
- FIN 343 (4) – Principles of Finance
- FIN 416 (4) – Fundamentals of Insurance
- FIN 433 (4) – Derivatives

(concentration options are continued on page 2...)
BIO-STATISTICS (16 sh)

_____ *BIO 111/113 (4) – Cell Biology and lab
_____ BIO 112/114 (4) – Population Biology and lab

BIO 231 (4) – Biodiversity

-OR-

_____ BIO 245/246 (4) – Genetics and lab

Choose one course from the following:

  PHS 301 (4) – Introduction to Epidemiology
  (Prerequisite, PHS 201, waived for declared Statistics
  majors with the permission of PHS coordinator)

  BIO 318 (4) – Comparative Vertebrate Structure & Function
  BIO 325 (4) – Human Histology
  BIO 331 (4) – The Biology of Animal Behavior
  BIO 332 (4) – Zoology
  BIO 335 (4) – Field Biology
  BIO 341 (4) – Botany
  BIO 344 (4) – Evolution
  BIO 348 (4) – Biotechnology
  BIO 350 (4) – General Ecology

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____ Major Comprehensive Evaluation

All graduating statistics majors are required to complete a
senior portfolio of their work and exit interview based on the
portfolio materials. This portfolio will include a compilation of
their work across their four years of statistical 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.)