Elon Core Curriculum (56-60 sh)

**First-Year Foundations:**

- COR 110 – Global Experience (4 s.h.)
- ENG 110 – Writing: Argument & Inquiry (4 s.h.)
- 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.

**World 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 world 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. Consideration for Phi Beta Kappa membership requires completion of one intermediate world language course, placement beyond that level or equivalent proficiency.

**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.)
- **Civilization** (8 s.h.)
- **Society** (8 s.h.)
- **Science/Analysis** (8 s.h.)

**Advanced Studies** (Must be outside major.)

**Major Requirements**

A minimum of 52-56 s.h. in the following courses is required.

- Statistics foundations: (16 sh)
  - *MTH 220/STS 212 (4) – Statistics in Application
  - STS 232 (4) – Statistical Modeling
  - STS 325 (4) – Design and Analysis of Experiments
  - MTH 329/STS 341 (4) – Probability Theory and Statistics

- Mathematical foundations: (16 sh)
  - *MTH 151 (4) – Calculus I
  - MTH 251 (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
- STS 481 (2-4) Internship in Statistics
- STS 499 (2-4) Independent Research in Statistics

**Complete one of the following concentrations:**

**Mathematical Statistics** (20 sh)

- MTH 239 (4) – Linear Algebra
- MTH 252 (4) – Multivariable Calculus and Analytic Geometry
- MTH 330 (4) – Mathematical Reasoning
- STS 342 (4) – Statistical Theory

Choose one course from the following:

- MTH 241 (4) – Discrete Structures
- MTH 243 (4) – Mathematical Modeling
- MTH 430 (4) – Abstract Algebra
- MTH 455 (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...)

*Required in major; may count in Elon Core Curriculum.
Biostatistics (16 s.h.)

_____ *BIO 111/113 (4) – Cell Biology and lab
_____ *BIO 212/214 (4) – Population Biology and lab

Select one course from the following:
  BIO 131 (4) – Biodiversity
  BIO 245/246 (4) – Genetics and lab

Choose *one course from the following:
  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
  PHS 301 (4) – Introduction to Epidemiology
  (Prerequisite, PHS 201, waived for declared Statistics majors with the permission of PHS coordinator)

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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 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.)