CHECKLIST FOR GRADUATION REQUIREMENTS IN STATISTICS - BACHELOR OF SCIENCE

Minimum of 132 s.h. required for graduation (36 s.h. must be 300/400-level courses)
(Additional hours to total 132 s.h. -- includes second major, minor, and elective hours.)

Name________________________ I.D. #__________________

General Studies Requirements (58-62 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 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 service studies, 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 s.h)

___MTH/STS 212 (4) – Statistics in Application
___STS 232 (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:

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

Complete one of the following concentrations:

MATHMETICAL 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…)
(… concentration options continued from page 1.)

**BIO-STATISTICS** (16 sh)

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

  BIO 131 (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.)