Program of Study: Statistics – Bachelor of Science (B.S.)

Actuarial Science Concentration College of Arts and Sciences Department of Statistics Catalog Year: 2018-2019

Program of Study

Degree Requirements (120 hours)

- 1. Carolina Core (34-46 hours)
 - a. **CMW** (6 hours): any approved CC-CMW course —must be passed with a grade of C or higher
 - b. **ARP** (8 hours) –must be passed with a grade of C or higher
 - i. MATH 141
 - ii. MATH 142
 - c. SCI (8 hours): Two 4-credit hour CC-SCI laboratory science course
 - d. GFL (0-6 hours): Demonstration of proficiency in one foreign language equivalent to the minimal passing grade on the exit examination in the 122 course is required for all baccalaureate degrees. Students can demonstrate this proficiency by successfully completing Phase II of the Proficiency Test or by successfully completing the 122 course, including the exit exam administered as part of that course.

It is strongly recommended that students continuing the study of a foreign language begin college-level study of that language in their first semester and continue in that language until their particular foreign language requirement is completed.

- e. GHS (3 hours): any approved CC-GHS course
- f. **GSS** (3 hours): any approved CC-GSS course
- g. AIU (3 hours): any approved CC-AIU course

Carolina Core Stand Alone or Overlay Eligible Requirements:

Up to two of these requirements may be met in overlay courses. At least one of these requirements must be satisfied by a course not applied elsewhere in general education. (3-9 Hours)

- h. CMS (3 hours): any approved overlay or stand-alone CC-CMS course
- i. **INF** (0-3 hours): any approved overlay or stand-alone CC-INF course
- j. VSR (0-3 hours): any approved overlay or stand-alone CC-VSR course

2. College Requirements (15-19 hours)

- a. Foreign language course (0-3 hours) —only if needed to meet 122-level proficiency
- b. **Analytical Reasoning** (6-7 hours)
 - i. MATH 344 or MATH 544
 - ii. CSCE 145 or CSCE 206
- c. **History** (3 hours): The College of Arts and Sciences requires one U.S. History and one non-U.S. History course, both of which must be chosen from the approved Carolina Core GHS courses. Whichever is not fulfilled through the Carolina Core GHS requirement must be fulfilled through this college requirement.
- d. **Social Science** (3 hours)
 - i. ECON 221 (prerequisite for Actuarial Science minor)
- e. **Fine Arts or Humanities** (3 hours)
 - i. ENGL 462 or ENGL 463

3. Program Requirements (28-44 hours)

- a. Minor (18 hours): The Minor in Risk Management and Insurance is required for the Actuarial Science Concentration.
 - i. ACCT 225
 - ii. ECON 222
 - iii. FINA 363
 - iv. FINA 469
 - v. FINA 471
 - vi. FINA 475

- b. **Supporting Courses** (3 hours) *–must be passed with a grade of C or higher*
 - i. MATH 241
- c. Electives (7-23 hours): No courses of a remedial, developmental, skill-acquiring, or vocational nature may apply as credit toward degrees in the College of Arts and Sciences. The College of Arts and Sciences allows the use of the Pass-Fail option on elective courses. Further clarification on inapplicable courses can be obtained from the College of Arts and Sciences.
- 4. Major Requirements (27 hours) —a minimum grade of C is required in all major courses
 - a. **Major Courses** (24 hours)
 - i. Theory and Models (9 hours)
 - 1. STAT 511
 - 2. STAT 512
 - 3. STAT 513
 - ii. Methods and Computation (9 hours)
 - 1. STAT 509 or STAT 515
 - 2. STAT 516
 - 3. STAT 540
 - iii. Advanced Applications (6 hours)
 - 1. STAT 520
 - 2. STAT 521
 - b. **Major Electives** (3 hours)
 - i. Select one course from STAT 500 or above

Notes: A student double majoring in Mathematics and Statistics may use STAT 511 [=MATH 511] to satisfy a major requirement in both programs.

A student double majoring in Economics (in the College of Arts and Sciences) and Statistics may use the combination of both ECON 436 and STAT 506 in place of the combination of both STAT 516 and one of the STAT 500 or above advanced application courses for the Statistics major. In this case ECON 436 may satisfy a major requirement in both programs. ECON 436 and STAT 516 may not both be used to satisfy major requirements in Statistics.

Major credit will be given for only one of STAT 509 or STAT 515. Neither STAT 509 nor STAT 515 may be taken concurrently with, or after, STAT 513. A student who has started the Statistics major after taking STAT 512 may replace the STAT 509/515 requirement with an additional 3 hour advanced application course chosen from STAT 500 or above.