College of Natural Sciences

BACHELOR OF SCIENCE IN STATISTICS AND DATA SCIENCE Suggested Arrangement of Courses

FIRST-YEAR FALL <u> 16</u> FIRST-YEAR SPRING <u> 16</u> SDS 313 Introduction to Data Science SDS 315 Statistical Thinking 3 3 M 408C Differential & Integral Calculus 1 C, F M 408D Seq, Series, & Multivar Calculus 1 4 4 3 RHE 306 Rhetoric & Writing C 3 C S 303E Elements of Computers and Prog ^c UGS 302/303 First-year Signature c, * 3 HIS Core Requirement C, * 3 3 Science & Tech I Core Requirement c 3 Elective **SECOND-YEAR FALL SECOND-YEAR SPRING** 15 16 SDS 431 Probability & Statistical Inference 4 SDS 334 Intermediate Statistical Models 3 M 340L Matrices & Matrix Calculations 3 Major Breadth Requirement (LD) 3 3 or 341 Linear Algebra and Matrix Theory HIS Core Requirement C, * 3 3 Major Breadth Requirement (LD) Science & Tech I Core Requirement C GOV 310L American Government c, * 3 3 Elective E 316L/M/N/P Literature C, * 3 **THIRD-YEAR FALL** 15 THIRD-YEAR SPRING 15 SDS 336 Practical Machine Learning 3 SDS 354 Advanced Statistical Methods 3 C S 327E Elements of Databases ² 3 Major Breadth Requirement (UD) 3 3 Major Breadth Requirement (UD) 3 Visual & Performing Arts Core Requirement ^c 3 GOV 312L Issues & Policies in Amer Gov C, * 3 Elective 3 Elective 3 Elective **FOURTH-YEAR FALL** 15 **FOURTH-YEAR SPRING** 12 SDS 357 Case Studies in Data Science^F 3 Approved SDS Elective 3 3 Social & Behavioral Sciences C 3 Flective Elective Approved SDS Elective 3 3 Elective 3 Elective 3 3 Elective

SKILLS & EXPERIENCE FLAGS

Cultural Diversity in the U.S.
Ethics
Global Cultures
Independent Inquiry (SDS 357)
Quantitative Reasoning (M 408C/K/N/L/S)
Writing – 2 courses (SDS 357)

LEGEND

- ^c Core curriculum requirement
- F Course carries skills and experience flag
- * Course may carry skills and experience flag
- LD Lower-division
- UD Upper-division

Catalog: 2022-2024

¹ M408C and M 408D may be replaced by one of the following three-semester calculus sequences: (1) M 408K, 408L, and 408M; or (2) M 408N, 408S, and 408M. In these sequences, the third calculus course may count as elective hours or breadth requirement if Mathematics is selected as breadth field of study.

² C S 313E Elements of Software Design must be taken prior to C S 327E Elements of Databases and may count as elective hours or breadth requirement if Computer Science is selected as breadth field of study.