Degree Requirements - Bachelor of Science
Mathematics – Statistics 2018-2020 *Catalog*

Name _____

Freshman English/Writing (6 hours)
_____ENG 1463 Freshman English A
      ENG 1473 Freshman English B OR
_____ENG 1803 Freshman English *Honors*

Communication (3 hours)
_____COM 2013 Oral Communication

Physical Well-Being (1 hour)
Choose one:
_____HPR 1011 Life Fitness Concepts
_____HPR 1xxx PE activity
_____MSC1011 Introduction to ROTC
_____MSC1021 Introduction to Leadership
_____One or more years of active duty Military service
_____THA 2002 Ballet I
_____THA 2012 Theatre Dance I
_____THA 2772 Jazz Dance I
_____THA 4552 Modern Dance

Fine Arts and Humanities (6 hours)
Choose one:
_____ENG 2013 World Literature I
_____ENG 2023 World Literature II
_____ENG 2053 Studies in Literature
_____ENG 2793 Masters in Western Literature *Honors*
Choose one:
_____ART 2033 Humanities Art
_____ART2603 Humanities Studio Art
_____COM/MMC/THA 3423 Movie Appreciation & Enjoyment
_____HUM2093 Fine Arts *Honors*
_____MUS 2033 Humanities Music
_____MUS 4363/4373 Music History
_____THA 2033 Humanities Theatre Arts

Social Science (9 hours)
Choose one:
_____HIS 1013 Civilization to 1660
_____HIS 1023 Civilization since 1660
_____HIS 1043 Civilization since 1660 *Honors*
Choose one:
_____HIS 2053 United States to 1877
_____HIS 2063 United States since 1877
_____PSC 1013 American National Government
_____PSC 1263 American National Government *Honors*
Choose one:
_____ANT 2013 Introduction to Cultural Anthropology

_____CRJ 2013 Introduction to the Criminal Justice System
_____CRJ 2033 Introduction to Criminology
_____ECO 2013 Macroeconomics
_____ECO 2023 Microeconomics
_____GEO 1023 Introduction to Geography
_____GEO 2163 World Geography
_____PSC 1023 State and Local Government
_____PSY 1013 General Psychology
_____PSY 1073 General Psychology *Honors*
_____SOC 1013 Introduction to Sociology

Natural Sciences (16 hours)
Required:
_____BIO 1013/1021 Intro to Biology and Lab
_____CHM 1014 University Chemistry I
_____PHY2234 University Physics I
Choose one:
_____BIO 2104 General Botany
_____BIO 2114 General Zoology
_____CHM 1024 University Chemistry II
_____PHY2244 University Physics II

Nonwestern Culture (3 hours)
_____ANT 3043 North American Indians
_____ANT 3053 World Cultures
_____ART 3103 Art of the Nonwestern World
_____BIO 4044 Neotropical Ecology
_____EDU 4543 Teaching People of Other Cultures
_____ENG 3043 Nonwestern Literature
_____GEN 4083 Study Abroad Non-Western (requires travel)
_____GEO 3173 Geography of the Pacific
_____HIS 4673 Asian Civilizations
_____HIS 4683 The Modern Middle East
_____HIS 4693 African History
_____HPR 3973 History & Philosophy of Nonwestern Leisure, Culture Wellness & Sport
_____MUS 3473 Survey of Nonwestern Music
_____NSG 3643 Trans-cultural Health Care
_____PHI 3023 Religions of the World
_____PHI 4203 Asian Philosophy
_____PHY 4293 Nonwestern Cosmology
_____PSC 4233 Comparative Politics in the Middle East
_____PSC 4243 Comparative Politics in Africa
_____PSC 4253 South Asian Politics
_____PSY 3043 Cross-Cultural Psychology
_____PSY 3053 Multicultural Mental Health
_____SOC 3063 World Cultures
_____GEN 3083 Study Abroad Nonwestern World

Core Elective (3 hours)
Choose one:

_____FCS 2103 Nutrition
_____FRE 1013 French I (or higher)
_____GER 1013 German I (or higher)
_____HUM 2153 Intro/Women's and Gender Studies
_____MTH xxx3-6 (*not used in major*)
_____STA xxx3-6 (*not used in major*)
_____PHI 2013 Intro to Philosophy
_____PHI 2083 Introduction to Philosophy *Honors*
_____PHI 3113 Ethics **(recommended)**
_____PHI 4043 Ancient Philosophy
_____PHI 4053 Modern Philosophy
_____SPA 1013 Spanish I (or higher)
Or any other course listed in the Liberal Arts Core that has not been used to fulfill any other category

Writing across the Curriculum (3 hours)
_____ENG 3613 Technical Writing

Writing Intensive (WI) Requirement Must pass with a grade of "C" or better

Henderson Seminar (1 hour)
_____GEN 1031 Henderson Seminar (freshmen only)

Computer Science (4 hours)
_____CSC 1104 Foundations of Computer Science I AND
_____CSC 1104L Foundations of Computer Science I lab

Mathematics core (25 hours)
_____MTH 1294 Calculus I (fall, spring)
_____MTH 2044 Calculus II (fall, spring)
_____MTH 2283 Discrete Mathematics (fall, spring)
_____MTH 3104 Calculus III (fall)
      MTH 3113 Linear Algebra (even spring) OR
_____MTH 3663 Applied Linear Algebra (odd spring)
_____MTH 3163 Probability and Statistics I (fall)
_____MTH 3573 Transition to Advanced Mathematics (spring)
_____MTH 4901 (WI) Senior Project – Math (fall, spring)

Statistics Electives (18 hours)
Choose six (at least three 3000- or 4000-level STA):
_____STA 2054 Applied Biostatistics
_____STA 2323 Statistical Methods
_____STA 3443 Statistical Computing
_____STA 4013 Applied Regression Analysis
_____STA 4023 Applied Analysis of Variance
_____STA 4033 Nonparametric Statistical Methods
_____STA 4463 Probability and Statistics II
_____STA 4043 Statistical Analysis of Time Series
_____STA 4621–6 Statistics Internship

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Minor Courses (*Varies by department*)

Electives (as needed to meet 120-hour minimum)

Minimum total credit hours 120

Minimum Jr./Sr. hours 42

Electives

Computer science courses are recommended. A passing grade in Statistical Methods or the catalog prerequisites is required for GBU 3133, NSG 3603, PSY 4343, PSY 4433, and SOC 4213. At most one course outside the Mathematics, Computer Science, and Statistics Department may be counted as an elective.

At most three total credit hours of MTH, CSC, or STA internship will count toward the statistics degree.

_____CSC 1114 Foundations of Computer Science II and laboratory CSC 1114L

_____CSC 2203 Data Structures

_____CSC 3133 Introduction to Database Theory

_____CSC 3223 Algorithm Analysis

_____CSC 4213 Simulation Theory

_____CSC 4621–6 Computer Science Internship

_____ MIS 3153 Data Management

_____ MIS 3163 Data Visualization

_____ MIS 4043 Systems Analysis and Design

_____ MIS 4173 Data Mining

_____MTH 3124 Differential Equations (spring)

_____MTH 4233 Advanced Calculus I

_____MTH 4303 Advanced Calculus II

_____MTH 4373 Numerical Analysis

_____MTH 4621–6 Mathematics Internship

_____NSG 3603 Healthcare Research for Evidence Based Practice

_____PHI 2133 Logic I

_____PHI 4143 Logic II

_____PSY 4343 Advanced Statistics

_____PSY 4433 Psychological Tests and Measurements

_____SOC 4213 (WI) Research Methods