

COLLEGE OF SCIENCE & MATHEMATICS

MAJOR: MATHEMATICS & STATISTICS

ACADEMIC YEAR: 2013-2014

DEGREE TYPE: B.A. or B.S.

REQUIRED DEGREE CREDITS TO GRADUATE: 122

GENERAL EDUCATION REQUIREMENTS – 40 CREDITS

Lower Division Requirements – 37 Credits

First Year Experience (F) - 1 Credit

UNIV	189	Skills for Academic Success	1 cr
Students transferring in 24 or more credits do not need to take UNIV 189.			

Communication (C) - 9 Credits

ENGL	110	College Composition I	3 cr
ENGL	120	College Composition II	3 cr
COMM	110	Fund of Public Speaking	3 cr

Quantitative Reasoning (R) - 3 Credits

MATH	165	Calculus I	4 cr
------	-----	------------	------

Science & Technology (S) - 10 Credits

A one-credit lab must be taken as a co-requisite with a general education science/technology course unless the course includes an embedded lab experience equivalent to a one-credit course. Select from current general education courses www.ndsu.edu/registrar/gened/

Humanities & Fine Arts (A) - 6 Credits

Select from current general education courses www.ndsu.edu/registrar/gened/

Social & Behavioral Sciences (B) - 6 Credits

Select from current general education courses www.ndsu.edu/registrar/gened/

Wellness (W) - 2 Credits

Select from current general education courses www.ndsu.edu/registrar/gened/

Cultural Diversity (D)

Select from current general education courses www.ndsu.edu/registrar/gened/

Global Perspectives (G)

Select from current general education courses www.ndsu.edu/registrar/gened/

Upper Division Requirements - Writing – 3 Credits

Select from current general education courses www.ndsu.edu/registrar/gened/

MATH MAJOR REQUIREMENTS – 32 CREDITS (includes MATH 165)

- A grade of 'C' or better is required in all MATH & STAT courses.

MATH	166	Calculus II	4 cr
MATH	265	Calculus III	4 cr
MATH	266	Intro to Differential Equations	3 cr
MATH	270	Intro to Abstract Mathematics	3 cr
MATH	420	Abstract Algebra I	3 cr
MATH	429	Linear Algebra	3 cr
MATH	450	Real Analysis I	3 cr
MATH	451	Real Analysis II	3 cr
MATH	491	Capstone Seminar	2 cr

STATISTICS MAJOR REQUIREMENTS – 28 CREDITS

- A grade of 'C' or better is required in all MATH & STAT courses.

STAT	330	Introductory Statistics	3 cr
STAT	461	Applied Regression Models	3 cr
STAT	462	Intro/Experimental Design	3 cr
STAT	467	Prob & Math Stat I	3 cr
STAT	468	Prob & Math Stat II	3 cr
STAT	476 or 491	Actuary Exam Study II Capstone Seminar	1 cr

Statistics Electives 12 Cr

Credits at the 400-level other than those listed above.

RELATED REQUIRED COURSES – 24 CREDITS

Computer Science-14 Credits

CSCI	160	Computer Science I	4 cr
CSCI	161	Computer Science II	4 cr
Choose 2 of the following - 6 Credits:			
CSCI	345	Topics on Personal Computers	3 cr
CSCI	372	Comparative Programming Languages	3 cr
CSCI	373	Assembly Programming	3 cr
CSCI	458	Microcomputer Graphics	3 cr

Lab Sequence – 10 Credits

Choose 1 sequence along with the 2 cr science elective OR the Physics sequence.

* Science & Tech Gen Ed Requirement

BIOL	111/L	Concepts of Biology/Lab*	3/1 cr
	315/L	Genetics/Lab*	OR 3/1 cr
BIOL	126/L	Human Biology/Lab*	3/1 cr
	220/L	Human Anat & Phys I/Lab*	OR 3/1 cr
CHEM	121/L	Gen. Chemistry I/Lab*	3/1 cr
	122/L	Gen. Chemistry II/Lab*	OR 3/1 cr
CHEM	150/160	Prin. of Chem I/Lab*	3/1 cr
	151/161	Prin. of Chem II/Lab*	3/1 cr
AND			
Science Elective			2 cr
OR Just the Physics courses listed below			
PHYS	251/L	Univ Physics I/Lab*	4/1 cr
	252/L	Univ Physics II/Lab*	4/1 cr

DEGREE REQUIREMENTS-UP TO 5 CREDITS TO REACH 122

Degree requirements continued on page two.

DEGREE REQUIREMENTS AND NOTES:

- Except for courses offered only as pass/fail grading, no course may be taken Pass/Fail.

Bachelor of Science (BS) Degree – An additional 6 credits in Humanities or Social Sciences*

Bachelor of Arts (BA) Degree – An additional 12 credits Humanities and Social Sciences* and proficiency at the second year level in a modern foreign language.

*Humanities and Social Sciences may be fulfilled by any course having the following prefix: ADHM, ANTH, ARCH, ART, CJ, CLAS, COMM, ECON, ENGL, FREN, GEOG, GERM, HDFS, HIST, LA, LANG, MUSC, PHIL, POLS, PSYC, RELS, SOC, SPAN, THEA, WGS, or any course from the approved list of general education courses in humanities and social sciences (general education categories A and B). These credits must come from outside the department of the student's major.