

Name: _____

ID: _____

NORTH DAKOTA STATE UNIVERSITY

College of Science & Mathematics

Mathematics

Fall 2012

GENERAL EDUCATION REQUIREMENTS - 40 Credits Required

MAJOR REQUIREMENTS - 42 Credits Required

Course	Number	Course Title	Credits	Grade	Course	Number	Course Title	Credits	Grade
First Year Experience (F) 1 credit					MATH	165	Calculus I	4	
UNIV	189 ¹	Skills for Academic Success	1		MATH	166	Calculus II	4	
Communication (C) 12 credits					MATH	265	Calculus III	4	
ENGL	110	College Composition I	3		MATH	266	Intro to Differential Equations	3	
ENGL	120	College Composition II	3		MATH	270	Intro/Abstract Mathematics	3	
COMM	110	Fundamentals of Public Speaking	3		MATH	420	Abstract Algebra I	3	
ENGL		(Upper-Division Writing)	3		MATH	429	Linear Algebra	3	
Quantitative Reasoning (R) 3 credits					MATH	450	Real Analysis I	3	
MATH	165	Calculus I	4		MATH	*421 OR 451	Abstract Algebra II OR Real Analysis II	3	
Science & Technology (S) (One course w/co-requisite lab) 10 credits					<i>* In the electives below, the one you didn't choose can only be a choice for a pair.</i>				
					MATH	491	Capstone Seminar	2	
Humanities & Fine Arts (A) (Max of 3 cr in fine arts perform) 6 credits					Electives - 10 credits Must choose one from List A & one from List B and should include one of the pairs of courses listed here: 430/436, 445/446, 480/483, 452/481, 488/489, and (420/421 or 450/451: whichever you didn't choose above)				
			3		LIST A				
			3		MATH	374	Special Problems in Math	1	
Social & Behavioral Sciences (B) 6 credits					MATH	430	Graph Theory	3	
			3		MATH	436	Combinatorics	3	
Wellness (W) 2 credits					MATH	440	Axiomatic Geometry	3	
			2		MATH	445	Differential Geometry	3	
Cultural Diversity (D)					MATH	446	Intro to Topology	3	
					MATH	452	Complex Analysis	3	
Global Perspectives (G)					MATH	472	Number Theory	3	
					LIST B				
COLLEGE REQUIREMENTS for a BS or BA Degree					MATH	473	Cryptology	3	
					MATH	480	Applied Differential Equations	3	
The College of Science & Mathematics requires an additional 6 credits in Humanities or Social Sciences for the BS degree and an additional 12 credits for the BA degree and two years proficiency of a modern foreign language.					MATH	481	Fourier Analysis	3	
					MATH	483	Partial Differential Equations	3	
BA Degree Requirements:					MATH	488	Numerical Analysis I	3	
2nd Yr Lang Proficiency					MATH	489	Numerical Analysis II	3	
HUM or Soc Sci			3		STAT	467	Probability & Mathematical Statistics	3	
HUM or Soc Sci			3		CSCI	453	Linear Programming & Network Flows	3	
HUM or Soc Sci			3		Course Pair (from the list above)				
BS Degree Requirements:									
HUM or Soc Sci			3						
HUM or Soc Sci			3						
A grade of "C" or better is required in all MATH prefix courses.					UNIVERSITY GRADUATION REQUIREMENTS AND ADDITIONAL NOTES/COMMENTS LISTED ON THE BACKSIDE OF THIS CURRICULUM GUIDE.				

UNIVERSITY GRADUATION REQUIREMENTS

Related Required Courses - (Not counted as part of major credits)

Residency at NDSU (15 cr. @ NDSU):	36 Credits
Credits at 4-year University:	60 Credits
Courses numbered 300+ (Min. 15 cr @ NDSU):	37 Credits
Total Credits Required:	122 Credits

CSCI 160 required plus one lab sequence chosen from below.

CSCI	160	Computer Science I	4	
Lab Science Sequence				
BIOL	150/L 151/L	General Biology I/Lab General Biology II/Lab	OR	3/1 3/1
BIOL	*220/L 221/L	Human Anat & Phys I/Lab Human Anat & Phys II/Lab	OR	3/1 3/1
CHEM	*121/IL *122/L	General Chemistry I/Lab General Chemistry II/Lab	OR	3/1 3/1
CHEM	*150/160 *151/161	Principles of Chemistry I/Lab Principles of Chemistry II/Lab	OR	3/1 3/1
MICR	350/L 352/L	General Microbiology I/Lab General Microbiology II/Lab	OR	3/1 3/1
PHYS	*251/L *252/L	University Physics I/Lab University Physics II/Lab	OR	4/1 4/1
CSCI	161	Computer Science II and choose 2 of the following	4	
CSCI	345	Topics on Personal Computers	3	
CSCI	372	Comparative Programming Lang.	3	
CSCI	373	Assembly Programming	3	
CSCI	458	Microcomputer Graphics	3	

NOTES/COMMENTS

¹Students transferring in 24 or more credits do not need to take UNIV 189.

ALL COURSES ON THIS CURRICULUM ARE REQUIRED FOR THE MAJOR

All courses taken to fulfill gen ed, college or major requirements may NOT be taken P/F.

** Fulfills Gen Ed Requirement*