

Name: _____

NORTH DAKOTA STATE UNIVERSITY

College of Science & Mathematics

Mathematics & Computer Science

Fall 2012

ID: _____

GENERAL EDUCATION REQUIREMENTS - 40 Credits Required

MATH MAJOR REQUIREMENTS - 32 credits

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 to Abstract Mathematics	3	
COMM	110	Fundamentals of Public Speaking	3		MATH	429	Linear Algebra	3	
ENGL		(Upper-Division Writing)	3		MATH	430	Graph Theory	3	
Quantitative Reasoning (R)			3 credits		MATH	420 & 421 or 450 & 451	Abstract Algebra I & II OR Real Analysis I & II	6	
MATH	165	Calculus I	4		MATH	491	Capstone Seminar	2	
Science & Technology (S) (One course w/co-req lab)			10 credits						
					COMPUTER SCIENCE MAJOR REQUIREMENTS - 35 credits				
					CSCI	160	Computer Science I	4	
					CSCI	161	Computer Science II	4	
Humanities & Fine Arts (A) (Max of 3 cr in fine arts perform)			6 credits		CSCI	213	Modern Software Development	3	
			3		CSCI	313	Software Development for Games	3	
			3		CSCI	336	Theoretical Computer Science II	3	
Social & Behavioral Science (B)			6 credits		CSCI	366	Files for Database Systems	3	
			3		CSCI	372	Comparative Programming Languages	3	
			3		CSCI	374	Computer Organization & Architecture	3	
Wellness (W)			2 credits		CSCI	445	Software Projects Capstone	3	
			2		CSCI	467	Algorithm Analysis	3	
Cultural Diversity (D)					CSCI	489	Social Implications of Computers	3	
					Related Required Courses - 6 credits (Not counted as part of major credits)				
Global Perspectives (G)					STAT	367	Probability	3	
					STAT	368	Statistics	3	
COLLEGE REQUIREMENTS for a BS or BA Degree					Select ONE course from list - 3 credits (Not counted as part of major credits)				
<p>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.</p>					CSCI	418	Simulation Models	3	
					CSCI	453	Linear Programming and Network Flows	3	
					MATH	436	Combinatorics	3	
					MATH	488	Numerical Analysis I	3	
BA Degree Requirements:					Lab Science Sequence from page two - 8 or 10 credits				
2nd Yr Lang Proficiency									
HUM or Soc Sci			3		<p>PROGRAM NOTES</p> <p>¹Students transferring in 24 or more credits do not need to take UNIV 189.</p> <p>ALL COURSES IN THIS CURRICULUM ARE REQUIRED FOR THE MAJOR</p> <p>A grade of 'C' or better is required in MATH & CSCI courses used toward the major.</p> <p>Curriculum is continued on the back</p>				
HUM or Soc Sci			3						
HUM or Soc Sci			3						
HUM or Soc Sci			3						
BS Degree Requirements:									
HUM or Soc Sci			3						
HUM or Soc Sci			3						

UNIVERSITY GRADUATION REQUIREMENTS		Lab Science Sequence chosen from:					
Residency at NDSU:	36 credits with at least 15 credits in major	This pair can also be used for Science and Technology General Education					
Credits at a 4-yr University	60 credits	Course	Number	Course Title	Credits	Grade	
Courses numbers 300 or higher	37 credits (Min. 15 credits at NDSU)	BIOL	126/L 220/L	Human Biology/Lab Human Anatomy & Physiology I/Lab	3/1 3/1		
Total credits required:	Minimum 122 credits	CHEM	121/L 122/L	General Chemistry I/Lab General Chemistry II/Lab	3/1 3/1		
ADDITIONAL NOTES/COMMENTS All courses taken to fulfill gen ed, college or major requirements may NOT be taken P/F.		CHEM	150/160 151/161	Principles of Chemistry I/Lab Principles of Chemistry II/Lab	3/1 3/1		
		MICR	350/L 352/L	General Microbiology/Lab General Microbiology II/Lab	3/1 3/1		
		PHYS	211/L 212/L	College Physics I/Lab College Physics II/Lab	3/1 3/1		
		PHYS	251/L 252/L	University Physics I/Lab University Physics II/Lab	4/1 4/1		