

Name: _____

NORTH DAKOTA STATE UNIVERSITY

College of Science & Mathematics

Mathematics & Physics

Fall 2012

ID: _____

GENERAL EDUCATION REQUIREMENTS - 40 Credits Required					MATH MAJOR REQUIREMENTS - 32 Credits Required (including MATH 165 from Gen Ed and four credits of math electives)				
Course	Number	Course Title	Credits	Grade	Course	Number	Course Title	Credits	Grade
First Year Experience (F) 1 credit									
UNIV	189 ¹	Skills for Academic Success	1		MATH	166	Calculus II	4	
Communication (C) 12 credits									
ENGL	110	College Composition I	3		MATH	265	Calculus III	4	
ENGL	120	College Composition II	3		MATH	266	Intro to Differential Equations	3	
COMM	110	Fundamentals of Public Speaking	3		MATH	270	Intro/Abstract Mathematics	3	
ENGL		(Upper-Division Writing)	3		MATH	420	Abstract Algebra I	3	
Quantitative Reasoning (R) 3 credits									
MATH	165	Calculus I (Grade of C Required)	4		MATH	429	Linear Algebra	3	
Science & Technology (S) (Grade of C Required for both) 10 credits									
PHYS	251/251L	University Physics I & Lab	4/1		MATH	450	Real Analysis I	3	
PHYS	252/252L	University Physics II & Lab	4/1		MATH	421 or 451	Abstract Algebra II or Real Analysis II	3	
Humanities & Fine Arts (A) (Max of 3 cr in fine arts perform) 6 credits					MATH ELECTIVES - 4 credits: Choices must be from STAT 467 & 468 and any MATH course 400-level or higher. MATH 488 & 489 are recommended				
			3						
			3		PHYSICS MAJOR REQUIREMENTS - 38 Credits Required (includes Physics Electives)				
Social & Behavioral Science (B) 6 credits					PHYS	251R	Univ. Physics I Recitation	1	
			3		PHYS	252R	Univ. Physics II Recitation	1	
			3		PHYS	350	Modern Physics	3	
Wellness (W) 2 credits					PHYS	330 (MSUM) or 455	Intermediate Mechanics OR Classical Mechanics	4 or 3	
			2		PHYS	361 or 370 (MSUM)	Electromagnetic Theory OR Electromagnetic Theory	3 or 4	
Cultural Diversity (D)					PHYS	360	Modern Physics II	3	
					PHYS	370	Intro to Computational Physics	3	
Global Perspectives (G)					PHYS	462	Heat & Thermodynamics	3	
					PHYS	485	Quantum Mechanics I	3	
COLLEGE REQUIREMENTS for a BS or BA Degree					PHYS	486	Quantum Mechanics II	3	
The College of Science & Mathematics requires an additional 6 credits in Humanities or Social Sciences for the BS degree and an additional 12 cr for the BA degree and two years proficiency of a modern foreign language.					PHYS	489	Senior Project/Capstone	3	
					BA Degree Requirements:				
2nd Yr Lang Proficiency									
HUM or Soc Sci									
HUM or Soc Sci									
HUM or Soc Sci									
HUM or Soc Sci									
BS Degree Requirements:					RELATED REQUIRED COURSE - 4 Credits Required				
HUM or Soc Sci					CSCI	160	Computer Science I	4	
HUM or Soc Sci					CHEMISTRY ELECTIVES - 8 Credits Required (CHEM 150 Sequence Recommended)				
NOTES/COMMENTS					CHEM	150/160 or 121/121 Lab	Principles of Chemistry I and Lab or General Chemistry I and Lab	3/1	
					CHEM	151/161 or 122/122 Lab	Principles of Chemistry II and Lab or General Chemistry II and Lab	3/1	
¹ Students transferring in 24 or more credits do not need to take UNIV 189.					UNIVERSITY GRADUATION REQUIREMENTS AND ADDITIONAL NOTES/COMMENTS LISTED ON PAGE 2 OF THIS CURRICULUM GUIDE.				
					ALL COURSES ON THIS CURRICULUM ARE REQUIRED FOR THE MAJOR				

UNIVERSITY GRADUATION REQUIREMENTS		NOTES/COMMENTS
Residency at NDSU (15 cr. @ NDSU):	36 Credits	<p>All courses taken to fulfill gen ed, college or major requirements may NOT be taken P/F.</p> <p>A grade of 'C' or better is required for ALL major courses.</p>
Credits at 4-year University:	60 Credits	
Courses numbered 300+ (Min. 15 cr @ NDSU):	37 Credits	
Total Credits Required:	122 Credits	