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BS: Secondary Education – Mathematics (125 S.H. required to complete the degree)

Name:_____ Adviser:_____

WESTERN CONNECTICUT STATE UNIVERSITY

General Education Requirements (42 S.H.)

COMMUNICATION SKILLS (3 S.H.)* Choose one of the following: COM 160 Public Speaking*, COM 161 Decision Making in Groups*, COM 162 Interpersonal Communication* **or** COM 163 Introduction to Communication Skills*		
COM:	3	
WRITING INTENSIVE (W) * All students must complete at least one writing intensive course. W courses can be found in several disciplines. The credits will be counted in the discipline associated with the course. *NOTE: WRT101 does not satisfy the writing intensive requirement.*		
Writing Intensive*	Y/N	
FOREIGN LANGUAGE All majors must complete a foreign language requirement. This may be done by completing a language at an elementary II level or above. Students who have completed three years of language in high school with at least a C average have satisfied this requirement. (For more info, click the link above.)		
Foreign Language Requirement Met?	Y/N	
HUMANITIES (15 S.H.) Including 3 of 7 categories: Fine and Applied Arts (*NOTE: only one studio course accepted toward minimum)*, Communication, Literature, Humanistic Studies, Philosophy, History, and Foreign Language. **NOTE:** *You must complete the foreign language requirement (Elementary II or higher) before counting Elementary I foreign language courses as Humanities credit.*		
Fine/Applied Arts:	3	
HIS 148 American History to 1877 **or** HIS 149 American History from 1877	3	
Elective:	3	
Elective:	3	
Elective:	3	
SOCIAL AND BEHAVIORAL SCIENCES (12 S.H.) Courses that satisfy this requirement can be found in Social Sciences (Anthropology, Economics, Political Science, Social Sciences, and Sociology), Non-Western Cultures and Psychology. You must complete 2 of the 3 areas.		
PSY 100 Introduction to Psychology *	3	
Elective:	3	
Elective:	3	
Elective:	3	
NATURAL SCIENCES, MATHEMATICS AND COMPUTER SCIENCE (10 S.H.) Students must complete a lab science and two other courses in this category.		
Lab Science *	4	
MAT 222 Introductory Statistics*	3	
CS 140 Introduction to Programming	3	
HEALTH PROMOTION AND EXERCISE SCIENCES (2 S.H.)		
HPX 177 Fitness for Life — Lecture	1	
HPX 177 Fitness for Life — Activity	1	

*C or better is required for courses. **B or better is required for courses.

Note: MAT 171 is a substitute for MAT 181 only if MAT 170 is also completed.

Education students must maintain an overall GPA of 3.0 or better.

Major Requirements (74 S.H.)

MATHEMATICS MAJOR REQUIREMENTS (39 S.H.) MINIMUM 3.0 G.P.A.		
MAT 150 Math Seminar I	.5	
MAT 151 Math Seminar II	.5	
MAT 141 Foundational Discrete Mathematics*	3	
MAT 181 Calculus I *	4	
MAT 182 Calculus II *	4	
MAT 207 Proofs *	3	
MAT 242 Foundations of Geometry *	3	
MAT 272 Introduction to Linear Algebra *	3	
MAT 342 Topics in Geometry *	3	
MAT 375 Algebraic Structures *	3	
CHOOSE ONE: MAT 250 Mathematical Modeling, MAT 251 Posing and Solving Problems in Mathematics, MAT 332 Introduction to Applied Mathematic		
MAT:	3	
CHOOSE TWO: MAT 281 Calculus III, MAT 212 Math in Middle Grades, MAT 363 History of Mathematics, MAT 383 Introduction to Analysis		
MAT:	3	
MAT:	3	
MAT Elective (from approved list):	3	
SECONDARY EDUCATION CERTIFICATION REQUIREMENTS (35 S.H.)		
EPY 204 Adolescent Development in School Setting **	3	
ED 206 Introduction to Education **	3	
HPX 215 Health Issues in the Schools **	3	
PROFESSIONAL SEMESTER — COMPLETED AS 13 S.H. BLOCK		
EPY 405 Introduction to Special Education **	3	
ED 385 Methods of Teaching in the Secondary Schools **	3	
ED 386 Secondary Education Professional Development School Experience**	1	
ED 440 Integrating Language**	3	
ED 449 Teaching Math in Secondary Schools	3	
STUDENT TEACHING — COMPLETED AS 13 S.H. BLOCK		
ED 340 Assessment of Teaching Strategies	1	
ED 342 Student Teaching	12	
FREE ELECTIVE (9 S.H.)		
Elective:		
Elective:		
Elective:		
EXAMS FOR STATE CERTIFICATION		
Praxis I (or waiver) Required for admittance to program		
Praxis II		
LICENSE		
TK 20		

Free electives offer an opportunity to complete a minor, study a second language, study abroad, or participate in an internship. Make a plan.

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Four-Year Plan This is a sample sequence of courses. Other combinations are possible.

Prerequisites are in parentheses; see catalog for details.
Class standing by credit: Freshman: 0-29 credits; Sophomore: 30-59 credits; Junior: 60-89 credits; Senior: 90+ credits

	SEMESTER 1 (16.5 S.H.)			SEMESTER 2 (16.5 S.H.)		
FIRST YEAR (33 S.H.)	Writing Intensive	3		MAT 222 Introductory Statistics	3	
	Gen. Ed: HIS 148 American History to 1877 OR HIS 149 American History from 1877	3		Gen. Ed: Fine Art	3	
	Gen. Ed: Humanities or Free Elective	3		Gen Ed: PSY 100 Introduction to Psychology	3	
	Gen. Ed: COM 160, 161,162 or 163	3		Gen Ed: Social and Behavioral Sciences	3	
	MAT 181 Calculus II (MAT 181 or appropriate placement)	4		MAT 182 Calculus II (MAT 181 or appropriate placement)	4	
	MAT 150 Math Seminar I (declared Math major or MAT 100 or placement exam)	.5		MAT 151 Math Seminar II (MAT 150)	.5	

	SEMESTER 3 (16 S.H.)			SEMESTER 4 (15 S.H.)		
SECOND YEAR (31 S.H.)	Gen Ed: Social and Behavioral Sciences	3		Gen. Ed: CS 140 Introduction to Programming	3	
	Gen. Ed: Lab Science	4		MAT 272 Introduction to Linear Algebra (MAT 182)	3	
	Gen. Ed: Humanities (foreign language if required)	3		Gen. Ed: Humanities (foreign language if required)	3	
	MAT 141 Foundational Discrete Mathematics (MAT 100 with a grade ≥ B or appropriate placement)	3		EPY 204 Adolescent Development in School Setting (completion of 30 credits of course work and cumulative GPA ≥ 2.67)	3	
	ED 206 Introduction to Education	3		HPX 215 Health Issues in the School (30 S.H. completed)	3	

	SEMESTER 5 (17 S.H.)			SEMESTER 6 (15 S.H.)		
THIRD YEAR (32 S.H.)	Free Elective	3		MAT 342 Topics in Geometry (MAT 242)	3	
	MAT 242 Foundations of Geometry (junior standing in an Education major)	3		MAT 375 Algebraic Structures (MAT 272 with grade ≥ C)	3	
	Choice: MAT 281 (MAT 182 with a grade ≥ C or MAT 181 with a grade of B or better and concurrent registration in MAT 182), 212 (MAT 105 or 106 or declared Secondary education major), 363 (MAT 182), 383 (MAT 207and MAT 182)	3		Choice: MAT 281 (MAT 182 with a grade ≥ C or MAT 181 with a grade of B or better and concurrent registration in MAT 182), 212 (MAT 105 or 106 or declared Secondary education major), 363 (MAT 182) , 383 (MAT 207and MAT 182)	3	
	Gen Ed: Social and Behavioral Sciences:	3		MAT 207 Proofs (MAT 141 with a grade ≥ C)	3	
	Choice: MAT 250 (MAT 182), MAT 251 (MAT 182) , or MAT 332 (MAT 222 with a grade ≥ C and MAT 272)	3		Math Elective:	3	
	HPX 177 (lecture and activity)	2				
	Complete a degree audit and plan for application for graduation					

	SEMESTER 7 (13 S.H.)			SEMESTER 8 (16 S.H.)		
FOURTH YEAR (29 S.H.)	EPY 405 Introduction to Special Education (EPY 203 or 204 or PSY 210 or 211)	3		ED 340 Assessment of Teaching Strategies	1	
	ED 385 Methods of Teaching in Secondary Schools (enrollment in professional semester)	3		ED 342 Student Teaching	12	
	ED 386 Secondary Professional Development School Experience (enrollment in professional semester)	1		Free Elective	3	
	ED 440 Integrating Language (enrollment in professional semester)	3				
	ED 449** Teaching Math in Secondary Schools (enrollment in professional semester)	3				

The Education Department requirements are outlined on the department website. Please note requirements for admission to the program, exams, certifications, professional education fees and student teaching policies.

Approved Math Electives: (prerequisites vary, please see catalog for details)

- MAT 185 Introduction to Symbolic Computations
- MAT 212 Mathematics in the Middle Grades
- MAT 250 Mathematical Modeling
- MAT 251 Posing and Solving Programs in Mathematics
- MAT 282 Ordinary Differential Equations
- MAT 298 Faculty Developed Study
- MAT 299 Student Developed Study
- MAT 332 Introduction to Applied Mathematics
- MAT 351 Independent Study
- MAT 359 Introduction to the Theory of Computation
- MAT 363 History of Mathematics
- MAT 383 Introduction to Mathematics Analysis
- MAT 467 Topics in Mathematics