

TEACHING, WITH TEACHER CERTIFICATION IN PHYSICAL SCIENCE (PRESCHOOL- GRADE 12) AND TEACHER OF STUDENTS WITH DISABILITIES (M.A.T.)

Program Requirements

Code	Title	Credits
Additional Requirements for State Certification		
<i>Speech</i>		
CMST 101	Fundamentals of Speech: Communication Requirement	3
<i>Physiology and Hygiene</i>		
Pass the MSU Health Knowledge Test available through the Center of Pedagogy or have the Undergraduate equivalent course approved by advisor		
<i>Additional Requirement</i>		
Select one of the following:		3
FSHD 515	Child Development II: Adolescence	
PSYC 560	Advanced Educational Psychology	
Program Requirements		
SASE 509	Sociocultural Perspectives on Curriculum and Assessment	3
SASE 680	Special Topics in Curriculum and Teaching	1-3
SPED 566	Creating Curricular Access for Adolescents with Disabilities	3
SPED 568	Teaching Methods for Inclusive Education	3
SPED 579	Special Education for Students with Disabilities	3
SPED 586	Educational Planning for Adolescents with Disabilities	3
SPED 588	Positive Behavior Supports for Diverse Learners	3
<i>Graduate Professional Sequence I</i>		
SASE 526	Seminar in Inclusive Pedagogies	3
SASE 527	Clinical Practice I	3
SPED 584	Assessment in Special Education and Classroom Practice	3
<i>Teaching Methods</i>		
Select from the list below according to subject area:		3-6
<i>Graduate Professional Sequence II</i>		
SASE 543	Advanced Seminar in Inclusive Pedagogies	3
SASE 529	Clinical Practice II	6
<i>Comprehensive Exam</i>		
In the term that you will sit for exam, register for the section which matched your major & advisor. Successfully pass exam.		
GRAD CMP	Comprehensive Examination	
Total Credits		46-51

Teaching Methods

Code	Title	Credits
Select course(s) according to subject area:		
<i>Art</i>		6
ARED 511	Foundations of Methods and Curriculum in Art Education I: P-12	
ARED 512	Foundations of Methods and Curriculum in Art Education II: P-12	
<i>Biological Science, Earth Science, Physics or Physical Science</i>		4
SASE 502	Teaching Science in Secondary Schools	
<i>Chemistry</i>		3
CHEM 501	Teaching Chemistry in the Secondary School	
<i>English</i>		4
ENGL 571	Teaching Methods (Secondary English)	
<i>Teaching English as a Second Language</i>		3
APLN 525	Methodology of Teaching ESL	
<i>French</i>		6
FREN 502	Theories and Approaches to Teaching French as a Second Language	
FREN 519	Teaching French in P-12: Practice	
<i>Mathematics</i>		4
MATH 519	Teaching Mathematics	
<i>Music</i>		6
MUED 556	Teaching Methods for the Elementary Music Class	
MUED 557	Teaching Methods for Music in the Secondary Schools	
<i>Social Studies</i>		3
SASE 501	Graduate Methods of Teaching Social Studies	
<i>Spanish</i>		3
SPAN 518	Teaching Spanish in K-12	

Subject Matter Preparation

Code	Title	Credits
<i>Calculus-based Introductory Physics I and II</i>		
PHYS 191	University Physics I	4
PHYS 192	University Physics II	4
<i>Intermediate Mechanics</i>		
PHYS 210	Intermediate Mechanics	3
<i>Oscillations, Waves, and Optics</i>		
PHYS 220	Oscillations, Waves, and Optics	3
<i>Intermediate and Advanced Physics Laboratories</i>		
PHYS 230	Intermediate Physics Laboratory	4
PHYS 330	Advanced Physics Laboratory	4
<i>Statistical and Thermal Physics</i>		
PHYS 320	Statistical and Thermal Physics	3
<i>Electricity and Magnetism</i>		
PHYS 340	Electricity and Magnetism	3
<i>Modern Physics or Quantum Mechanics</i>		
PHYS 360	Modern Physics	3
or PHYS 464	Quantum Mechanics	
<i>Mathematics</i>		
MATH 122	Calculus I	4
or AMAT 120	Applied Calculus A	

MATH 221	Calculus II	4
or AMAT 220	Applied Calculus B	
MATH 222	Calculus III	4
<i>Introductory Chemistry</i>		8
CHEM 120	General Chemistry I	4
CHEM 121	General Chemistry II	4
<i>Organic Chemistry</i>		
CHEM 230	Organic Chemistry I	3
CHEM 232	Experimental Organic Chemistry I	2
<i>Additional Chemistry or Biochemistry Course</i>		
Complete one 2-3 credit Chemistry or Biochemistry course.		2-3
Total Credits		74-75