



MIDDLE SCHOOL EDUCATION SCIENCE, GRADES 5-9

EDUCATOR PREPARATION PROGRAM NAME WASHINGTON UNIVERSITY	EDUCATOR PREPARATION PROGRAM CODE 300342
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INSTRUCTIONS

Please complete Educator Preparation Program (EPP) Name & EPP Code above.

Certification Requirements:

- **Course Number** – List the course number(s) for the course(s) or groups of competencies that align with the specific section of the requirements. It is possible to have more than one course or group listed.
- **Course Title** – List the course title(s) for the course(s) or groups of competencies that align with the specific section of the requirements. It is possible to have more than one course or group listed.
- **Semester Hours** – List the number of semester hours for each specific section. It is possible to use decimals (to the nearest tenth) to indicate partial use of a course to meet a requirement. The total number of semester hours must meet or exceed the minimum required number of semester hours.

Email the completed cover sheet, curriculum matrix, and advising/program information to DESE.MoSPETransition@dese.mo.gov on or before the date established in the Transition Plan.

QUESTIONS: Contact Educator Preparation, 573-751-1668 or DESE.MoSPETransition@dese.mo.gov

A. Professional Requirements (Minimum of 45 semester hours)

1. Content Planning and Delivery

	Course Number	Course Title	Semester Hours
a. Curriculum and Instructional Planning	ED 415 ED 4952	- Curriculum and Instruction in Science - Middle School Curriculum and Instruction	3 (.3) 3 (.3)
b. Instructional Strategies and Techniques in Content Area Specialty	ED 415 ED 4952	- Curriculum and Instruction in Science - Middle School Curriculum and Instruction	(.2) (.2)
c. Assessment, Student Data, and Data-Based Decision-Making	ED 415 ED 4952 ED 408 ED 4821	- Curriculum and Instruction in Science - Middle School Curriculum and Instruction - Education & Psych. of Exceptional Children - Teaching-Learning Process in Secondary School	(.1) (.1) (.1) (.1)
d. Strategies for Content Literacy	ED 415 ED 4952 ED 5681	- Curriculum and Instruction in Science - Middle School Curriculum and Instruction - Reading in the Content Areas	(.1) (.1) (.5)
e. Critical Thinking and Problem Solving	ED 415 ED 4952 ED 4821	- Curriculum and Instruction in Science - Middle School Curriculum and Instruction - Teaching-Learning Process in Secondary School	(.1) (.1) (.2)
f. English Language Learning	ED 5253 ED 415 ED 4952 ED 4821 ED 408 ED 4843	- Instructional Interventions in Reading for Adolescents & English Language Learners - Curriculum and Instruction in Science - Middle School Curriculum and Instruction - Teaching-Learning Process in Secondary School - Education & Psych. of Exceptional Children - Field Experience Seminar	(.5) (.1) (.1) (.1) (.1) (.1)

2. Individual Student Needs

	Course Number	Course Title	Semester Hours
a. Psychological Development of the Child and Adolescent	(These two courses) ED 4052 AND ED 313B OR (These 3 courses) ED 4052 PSYCH 321 PSYCH 325	- Educational Psychology: Focus on Teaching and Learning in Schools - Education, Childhood, Adolescence and Society - (same as above) - Developmental Psychology - Psychology of Adolescence	(.2) 3 (.8) 3 3
b. Psychology/Education of the Exceptional Child	ED 408	- Education & Psych. of Exceptional Children	3 (.5)

c. Differentiated Learning	ED 4052 ED 415 ED 4952 ED 4821 ED 408 ED 4843	- Educational Psychology: Focus on Teaching and Learning in Schools - Curriculum and Instruction in Science - Middle School Curriculum and Instruction - Teaching-Learning Process in Secondary School - Education & Psych. of Exceptional Children - Field Experience Seminar	(.1) (.1) (.1) (.1) (.1) (.2)
d. Classroom Management	ED 4052 ED 408 ED 4821 ED 4843	- Educational Psychology: Focus on Teaching and Learning in Schools - Education & Psych. of Exceptional Children - Teaching-Learning Process in Secondary School - Field Experience Seminar	(.1) (.1) (.2) (.2)
e. Cultural Diversity	ED 313B ED 4052 ED 4821 ED 4843 (one course) ED 301C ED 453B ED 459F ED 481	- Education, Childhood, Adolescence and Society - Educational Psychology: Focus on Teaching and Learning in Schools - Teaching-Learning Process in Secondary School - Field Experience Seminar (one of the following courses) - American School - Sociology of Education - Philosophies of Education - History of Education	(.2) (.1) (.1) (.1) 3
f. Educational Psychology	ED 4052	- Educational Psychology: Focus on Teaching and Learning in Schools	3 (.5)
3. Schools and the Teaching Profession			
	Course Number	Course Title	Semester Hours
a. Consultation and Collaboration	ED 4843 ED 4821	- Field Experience Seminar - Teaching-Learning Process in Secondary School	2 (.2) (.1)
b. Legal/Ethical Aspects of Teaching	ED 4843 ED 4821 ED 408	- Field Experience Seminar - Teaching-Learning Process in Secondary School - Education & Psych. of Exceptional Children	(.2) (.1) (.1)
c. Middle School Philosophy and Organization	ED 4951	- Middle School Philosophy and Organization	2
4. Middle School Literacy (Minimum of six semester hours)			
	Course Number	Course Title	Semester Hours
a. Reading and Writing in the Content Area	ED 5681	- Reading in the Content Areas	3 (.5)
b. Instructional Interventions for Students with Reading Deficits	ED 5253	- Instructional Interventions in Reading for Adolescents & English Language Learners	3 (.5)
5. Content Knowledge for Teaching (Minimum of 24 semester hours with appropriate distribution in one of the following certificate subject areas)			
	Course Number	Course Title	Semester Hours
a. Agricultural Education			
b. Business Education			
c. Technology and Engineering			
d. Language Arts			
e. Mathematics			
f. Science (Semester hours of 24 must include at least one course from each of the subject areas: Biology, Chemistry, Physics, and Earth and Planetary Science)	(At least one course from each content area: BIOL, CHEM, EPSC, & PHYS. Total of 24 hours.) BIOL 2950 BIOL 2960 BIOL 2970 BIOL 328 BIOL 349 BIOL 334 BIOL 3151 BIOL 3411 BIOL 3041 BIOL 3422	(At least one course from each content area: BIOL, CHEM, EPSC, & PHYS. Total of 24 hours.) - Introduction to Environmental Biology - Principles of Biology I - Principles of Biology II - Principles of Human Physiology - Microbiology - Cell Biology - Endocrinology - Principles of Nervous System - Plant Biology and Genetic Engineering - Genes, Brains, and Behavior	3 4 4 4 3 3 3 3 4 3

	BIOL 3501	- Evolution	4
	BIOL 381	- Introduction to Ecology	3
	CHEM 111A	- General Chemistry I	3
	CHEM 151	- General Chemistry I Lab	2
	CHEM 112A	- General Chemistry II	3
	CHEM 152	- General Chemistry II Lab	2
	EPSC 108A	- Oceans and the Atmosphere	3
	EPSC 171A	- The Solar System	3
	EPSC 201	- Earth and the Environment	4
	EPSC 104	- Freshman Seminar: Geology in the Field	3
	EPSC 105	- Freshman Seminar: Habitable Planets	3
	EPSC 111	- Introduction to Global Climate Change in the 21 st Century	3
	EPSC 112	- Freshman Seminar: Engineering the Climate	3
	PHYS 117 or 198	- General Physics I	4
	PHYS 118 or 198	- General Physics II	4
	PHYS 171	- Physics and Society	3
	PHYS 210	- Epic of Evolution: Life, Earth, and Cosmos	3
	PHYS 125A	- Solar System Astronomy	3
	PHYS 126A	- Stars, Galaxies, and Cosmology	3
	PHYS 171A	- Physics and Society	3
g.	Social Science		
h.	Speech/Theatre		
Professional Requirements - Total Semester Hours			55
B. Field and Clinical Experiences (Minimum of ten semester hours)			
	Course Number	Course Title	Semester Hours
1.	Early Field Experiences (Minimum of one semester hour with a minimum of 30 clock hours)	ED 4052 - Educational Psychology: Focus on Teaching and Learning in Schools	1
2.	Mid-Level Field Experiences (Minimum of one semester hour with a minimum of 45 clock hours)	ED 4843 - Field Experience Seminar	1
3.	Culminating Clinical Experiences (Minimum of eight semester hours with a minimum of 12 weeks in one placement)	ED 4922 - Student Teaching in Middle School	8
Field and Clinical Experiences - Total Semester Hours			10

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