

EDUCATION DIVISION
CONCENTRATION LEARNING OUTCOMES (CLOs)

Graduates of the Bachelor of Education (B.Ed.) degree with concentration in Elementary Education (grades K-6), will be able to

ELEMENTARY EDUCATION [CAEP]

CLO1 – CAEP 1.a Candidates use their understanding of how children grow, develop and learn to plan and implement developmentally appropriate and challenging learning experiences within environments that take into account the individual strengths and needs of children. InTASC 1

CLO2 – CAEP 2.a Candidates demonstrate and apply understandings of the elements of literacy critical for purposeful oral, print, and digital communication. InTASC 4 & 5

CLO3 – CAEP 2.c Candidates demonstrate and apply understandings and integration of the three dimensions of science and engineering practices, cross-cutting concepts, and major disciplinary core ideas, within the major content areas of science. InTASC 4 & 5

CLO4 – CAEP 2.b Candidates demonstrate and apply understandings of major mathematics concepts, algorithms, procedures, applications and mathematical practices in varied contexts, and connections within and among mathematical domains. InTASC 4 & 5

CLO5 – CAEP 2.d Candidates demonstrate understandings, capabilities, and practices associated with the central concepts and tools in Civics, Economics, Geography, and History, within a framework of informed inquiry. InTASC 4 & 5

CLO6 – CAEP 2 Candidates know how particular curricular content topics and expectations are connected to each other across the core disciplines (literacy, math, science, social studies), including the knowledge base and practices of other content areas of fine and performing arts. InTASC 4 & 5

CLO7 – CAEP 2 Candidates connect their content-related understandings to curricular opportunities both within particular areas of content (e.g., science) and across other curricular expectations within health education. InTASC 4 & 5

CLO8 – CAEP 2 Candidates connect their content-related understandings to curricular opportunities both within particular areas of content (e.g., science) and across other curricular expectations within physical education. InTASC 4 & 5

CLO9 – CAEP 3.a-b Candidates administer formative and summative assessments regularly to determine students' competencies and learning needs; Candidates use assessment results to improve instruction and monitor learning. InTASC 7

CLO10 – CAEP 3.d Candidates differentiate instructional plans to meet the needs of diverse students in the classroom. InTASC 2

CLO 11 – CAEP 3.c Candidates plan instruction including goals, materials, learning activities and assessments. InTASC 8

CLO 12 – CAEP 3.f Candidates construct and maintain a productive learning environment by adapting classroom procedures to each learner's cognitive and motivational needs. InTASC 3

CLO 13 – CAEP 3.e Candidates manage the classroom by establishing and maintaining social norms and behavioral expectations. InTASC 3

CLO 14 – CAEP 4 Candidates make informed decisions about instruction guided by knowledge of children and assessment of children’s learning that result in the use of a variety of effective instructional practices that employ print and digital appropriate resources. InTASC 6

CLO 15 – CAEP 5-b Candidates design and implement professional learning activities based on ongoing analysis of student learning; self-reflection; professional standards, research and contemporary practices; and standards of ethical professional practice; and participate in peer and professional learning communities to enhance student learning. InTASC 9

CLO 16 – CAEP 5-a Candidates work collaboratively with colleagues, mentors, and other school personnel to work toward common goals that directly influence every learner’s development. InTASC 10

Graduates of the Bachelor of Education (B.Ed.) degree with concentration(s) in Middle-level and/or Secondary English, Mathematics, Science, and Social Studies Education (grades 6-8 and 6-12) will be able to

MIDDLE-LEVEL/SECONDARY EDUCATION (grades 6-8 & 6-12 licensure)

ENGLISH [NCTE]

CLO1 - demonstrate knowledge of English language arts subject matter content that specifically includes literature and multimedia texts as well as knowledge of the nature of adolescents as readers.

CLO2 - demonstrate knowledge of English language arts subject matter content that specifically includes language and writing as well as knowledge of adolescents as language users.

CO3 - plan instruction and design assessments for reading and the study of literature to promote learning for all students.

CLO4 - plan instruction and design assessments for composing texts (i.e., oral, written, and visual) to promote learning for all students.

CLO5 - plan, implement, assess, and reflect on research-based instruction that increases motivation and active student engagement, builds sustained learning of English language arts, and responds to diverse students’ context-based needs.

CLO6 - demonstrate knowledge of how theories and research about social justice, diversity, equity, student identities, and schools as institutions can enhance students’ opportunities to learn in English Language Arts.

CLO7 - are prepared to interact knowledgeably with students, families, and colleagues based on social needs and institutional roles, engage in leadership and/or collaborative roles in English Language Arts professional learning communities, and actively develop as professional educators.

MATHEMATICS [NCTM]

CLO1 - demonstrate and apply knowledge of major mathematics concepts, algorithms, procedures, connections, and applications within and among mathematical content domains.

CLO2 - solve problems, represent mathematical ideas, reason, prove, use mathematical models, attend to precision, identify elements of structure, generalize, engage in mathematical communication, and make connections as essential mathematical practices.

CLO3 - apply knowledge of curriculum standards for mathematics and their relationship to student learning within and across mathematical domains.

CLO4 - exhibit knowledge of pre-adolescent and adolescent learning, development, and behavior

CLO5 - provide evidence demonstrating that as a result of their instruction, middle-level and secondary students' conceptual understanding, procedural fluency, strategic competence, adaptive reasoning, and application of major mathematics concepts in varied contexts have increased.

CLO6 - to be lifelong learners and recognize that learning is often collaborative.

CLO7 - engage in a planned sequence of field experiences and clinical practice under the supervision of experienced and highly qualified mathematics teachers.

SCIENCE [NSTA]

CLO1 - understand and articulate the knowledge and practices of contemporary science and engineering.

CLO2 - plan learning units of study and equitable, culturally-responsive opportunities for all students based upon their understandings of how students learn and develop science knowledge, skills, and habits of mind.

CLO3 - plan for engaging all students in science learning by identifying appropriate learning goals that are consistent with knowledge of how students learn science and are aligned with standards.

CLO4 - demonstrate biological, chemical, and physical safety protocols in their classrooms and workspace.

CLO5 - provide evidence that students have learned and can apply disciplinary core ideas, crosscutting concepts, and science and engineering practices as a result of instruction.

CLO6 - strive to continuously improve their knowledge of both science content and pedagogy, including approaches for addressing inequities and inclusion for all students in science.

SOCIAL STUDIES [NCSS]

CLO1 - demonstrate knowledge of social studies disciplines. Candidates are knowledgeable of disciplinary concepts, facts, and tools; structures of inquiry; and forms of representation.

CLO2 - plan learning sequences that leverage social studies knowledge and literacies, technology, and theory and research to support the civic competence of learners.

CLO3 - design and implement instruction and authentic assessments, informed by data literacy and learner self-assessment, that promote civic competence.

CLO4 - use knowledge of learners to plan and implement relevant and responsive pedagogy, create collaborative and interdisciplinary learning environments, and prepare learners to be informed advocates for an inclusive and equitable society.

CLO5 - reflect and expand upon their social studies knowledge, inquiry skills, and civic dispositions to advance social justice and promote human rights through informed action in schools and/or communities.

MIDDLE LEVEL EDUCATION [AMLE]

CLO1 - understand, use, and reflect on the major concepts, principles, theories, and research related to young adolescent development and use that knowledge in their practice.

CLO2 - use the central concepts, standards, research, and structures of content to plan and implement curriculum that develops all young adolescents' competence in subject matter.

CLO3 - understand the major concepts, principles, theories, and research underlying the philosophical foundations of developmentally responsive middle level programs and schools, and they work successfully within middle level organizational components.

CLO4 - understand, use, and reflect on the major concepts, principles, theories, and research related to data-informed instruction and assessment.

CLO5 - understand their complex roles as teachers of young adolescents. They engage in practices and behaviors that develop their competence as middle level professionals.

SPECIAL EDUCATION (Licensure Pathway: K-6, 6-8, 6-12) [CEC]

CLO1 - understand how exceptionalities may interact with development and learning and use this knowledge to provide meaningful and challenging learning experiences for individuals with exceptionalities.

CLO2 - create safe, inclusive, culturally responsive learning environments so that individuals with exceptionalities become active and effective learners and develop emotional well being, positive social interactions, and self-determination.

CLO3 - use knowledge of general and specialized curricula to individualize learning for individuals with exceptionalities.

CLO4 - use multiple methods of assessment and data sources in making educational decisions.

CLO5 - select, adapt, and use a repertoire of evidence-based instructional strategies to advance learning of individuals with exceptionalities.

CLO6 - use foundational knowledge of the field and their professional ethical principles and practice standards to inform special education practice, to engage in lifelong learning, and to advance the profession.

CLO7 - collaborate with families, other educators, related service providers, individuals with exceptionalities, and personnel from community agencies in culturally responsive ways to address the needs of individuals with exceptionalities across a range of learning experiences.



InTASC (DLO) / SPA (CLO) Professional Standards Alignment

K-12 Required Coursework

- Educational Foundations
- Technology
- Special Education

Standard Associations

Acronym	Description
InTASC	Interstate New Teacher Assessment & Support Consortium ¹
CAEP	Council for the Accreditation of Educator Preparation ²
NCTE	National Council of Teachers of English
NCTM	National Council of Teachers of Mathematics
NSTA	National Science Teachers Association
NCSS	National Council for the Social Studies
AMLE	Association for Middle-level Education
ISTE	International Society for Technology in Education
CEC	Council for Exceptional Children

Learner & Learning Learning Environment

	InTASC 1	InTASC 2	InTASC 3
CAEP	1	10	12-13
NCTE	6	5	
NCTM	4		
NSTA		2	
NCSS			
AMLE	1a	1b	1c-1d
ISTE		2b	7a
CEC	1	1	2

¹ Division Learning Outcomes (DLOs)

² Concentration Learning Outcomes (CLOs): Elementary; Middle-Level & Secondary English, Mathematics, Science, Social Studies, Middle-level Education



Knowledge and Application of Content

	InTASC 4	InTASC 5
CAEP	2-8	2-8
NCTE	1-2	1-2
NCTM	1	2
NSTA	1	4
NCSS	1	4
AMLE	2a	4a
ISTE		
CEC	3	3

Instructional Practice

	InTASC 6	InTASC 7	InTASC 8
CAEP	14	9	11
NCTE			3-4
NCTM	5	3	7
NSTA	5	3	
NCSS	3	2	
AMLE	4c	4	4
ISTE	6a		
CEC	4	5	5

Professional Responsibilities

	InTASC 9	InTASC 10
CAEP	15	16
NCTE		7
NCTM	6	6
NSTA	6	
NCSS		5
AMLE	5	5
ISTE	1a	
CEC	6	7

Pre-Professional & Professional Teacher Education Required Coursework, K-12

Learner & Learning Learning Environment



Course	InTASC 1	InTASC 2	InTASC 3
EDEF 201	<ul style="list-style-type: none"> • Introduced ACEI • Introduced NCTM • Introduced AMLE 	<ul style="list-style-type: none"> • Introduced ACEI 	<ul style="list-style-type: none"> • Introduced ACEI • Introduced AMLE
EDEF 200	<ul style="list-style-type: none"> • Introduced CAEP • Introduced NCTM 	<ul style="list-style-type: none"> • Introduced CAEP 	<ul style="list-style-type: none"> • Introduced CAEP
ETEC 279		<ul style="list-style-type: none"> • Introduced ISTE 	<ul style="list-style-type: none"> • Introduced ACEI • Introduced ISTE
SPED 304	<ul style="list-style-type: none"> • Introduced CAEP • Introduced CEC 	<ul style="list-style-type: none"> • Introduced CAEP • Introduced NSTA • Introduced CEC 	<ul style="list-style-type: none"> • Introduced CAEP • Introduced NCTE • Introduced CEC
EDEF 310	<ul style="list-style-type: none"> • Extended/Reinforced CAEP 	<ul style="list-style-type: none"> • Extended/Reinforced CAEP 	<ul style="list-style-type: none"> • Extended/Reinforced CAEP
EDEF 404	<ul style="list-style-type: none"> • Introduced CAEP • Extended/Reinforced NCTE 		<ul style="list-style-type: none"> • Extended/Reinforced CAEP
SPED 405	<ul style="list-style-type: none"> • Extended/Reinforced CAEP • Introduced NCTM • Extended/Reinforced CEC 	<ul style="list-style-type: none"> • Extended/Reinforced CAEP • Introduced NSTA • Extended/Reinforced CEC 	<ul style="list-style-type: none"> • Extended/Reinforced CAEP • Extended/Reinforced NCTE • Extended/Reinforced CEC

Knowledge and Application of Content

Course	InTASC 4	InTASC 5
EDEF 201	<ul style="list-style-type: none"> • Introduced AMLE 	<ul style="list-style-type: none"> • Introduced AMLE • Introduced NCSS
EDEF 200		<ul style="list-style-type: none"> • Introduced NCSS
ETEC 279		
SPED 304	<ul style="list-style-type: none"> • Introduced CAEP • Introduced CEC 	<ul style="list-style-type: none"> • Introduced NCSS • Introduced CEC
EDEF 310		
EDEF 404		<ul style="list-style-type: none"> • Introduced CAEP
SPED 405	<ul style="list-style-type: none"> • Extended/Reinforced CAEP • Introduced CEC 	<ul style="list-style-type: none"> • Extended/Reinforced CAEP • Extended/Reinforced NCSS • Introduced CEC



Instructional Practice

Course	InTASC 6	InTASC 7	InTASC 8
EDEF 201	<ul style="list-style-type: none"> • Introduced CAEP • Introduced NCSS 	<ul style="list-style-type: none"> • Introduced CAEP • Introduced AMLE 	<ul style="list-style-type: none"> • Introduced CAEP • Introduced AMLE
EDEF 200	<ul style="list-style-type: none"> • Introduced CAEP • Introduced NCSS 	<ul style="list-style-type: none"> • Introduced CAEP 	<ul style="list-style-type: none"> • Introduced CAEP
ETEC 279	<ul style="list-style-type: none"> • Introduced ISTE 		
SPED 304	<ul style="list-style-type: none"> • Introduced CAEP • Introduced CEC 	<ul style="list-style-type: none"> • Introduced CAEP • Introduced CEC 	<ul style="list-style-type: none"> • Introduced CEC
EDEF 310		<ul style="list-style-type: none"> • Extended/Reinforced ACEI 	<ul style="list-style-type: none"> • Extended/Reinforced ACEI
EDEF 404	<ul style="list-style-type: none"> • Introduced CAEP 		<ul style="list-style-type: none"> • Introduced CAEP • Introduced NCTE • Extended/Reinforced NCTE
SPED 405	<ul style="list-style-type: none"> • Extended/Reinforced ACEI • Extended/Reinforced CEC 	<ul style="list-style-type: none"> • Extended/Reinforced ACEI • Extended/Reinforced CEC 	<ul style="list-style-type: none"> • Introduced NCTE • Extended/Reinforced CEC

Professional Responsibilities

Course	InTASC 9	InTASC 10
EDEF 201	<ul style="list-style-type: none"> • Introduced ACEI • Introduced NCTM • Introduced AMLE 	<ul style="list-style-type: none"> • Introduced NCTM
EDEF 200	<ul style="list-style-type: none"> • Introduced CAEP • Introduced NCTM 	<ul style="list-style-type: none"> • Introduced NCTM
ETEC 279	<ul style="list-style-type: none"> • Introduced ACEI • Introduced ISTE 	
SPED 304	<ul style="list-style-type: none"> • Introduced CAEP • Introduced NCTM • Extended/Reinforced NSTA • Introduced CEC 	<ul style="list-style-type: none"> • Introduced CAEP • Introduced NCTE • Introduced NCSS • Introduced CEC



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Course	InTASC 9	InTASC 10
EDEF 310	<ul style="list-style-type: none"> • Extended/Reinforced AECI • Extended/Reinforced NCTM 	<ul style="list-style-type: none"> • Extended/Reinforced AECI • Extended/Reinforced NCTM
EDEF 404		<ul style="list-style-type: none"> • Extended/Reinforced NCTE
SPED 405	<ul style="list-style-type: none"> • Extended/Reinforced AECI • Extended/Reinforced NCTM • Extended/Reinforced NSTA • Extended/Reinforced CEC 	<ul style="list-style-type: none"> • Extended/Reinforced AECI • Extended/Reinforced NCTE • Extended/Reinforced NCTM • Extended/Reinforced NCSS • Extended/Reinforced CEC



InTASC (DLO) / SPA (CLO) Professional Standards Alignment

Elementary Education K-6 Courses

Standard Associations

Acronym	Description
InTASC	Interstate New Teacher Assessment & Support Consortium ¹
CAEP	Council for the Accreditation of Educator Preparation ²

Learner & Learning Environment

Courses	InTASC 1 CAEP 1	InTASC 2 AMEI 10	InTASC 3 AMEI 12-13
EDEF 201	Introduced	Introduced	Introduced
EDEF 200	Introduced	Introduced	Introduced
EDEF 279			Introduced
SPED 304	Introduced	Introduced	Introduced
EDEF 310	Extended/Reinforced	Extended/Reinforced	Extended/Reinforced
EDEF 324	Introduced		Introduced
EDEF 325	Introduced		Introduced
EDEF 402		Extended/Reinforced	Extended/Reinforced Introduced
EDEF 404	Introduced		
SPED 405	Extended/Reinforced	Extended/Reinforced	Extended/Reinforced
EDEF 406	Extended/Reinforced	Extended/Reinforced	Extended/Reinforced
EDEF 422	Introduced	Introduced	Introduced
EDEF 424	Extended/Reinforced	Extended/Reinforced	
EDEF 426	Extended/Reinforced	Extended/Reinforced	Extended/Reinforced
EDEF 462	Extended/Reinforced	Extended/Reinforced	Extended/Reinforced
EDEF 464		Extended/Reinforced	
EDEF 466	Extended/Reinforced		Extended/Reinforced
EDEF 490	Refined	Refined	Refined
EDEF 492			Refined

¹ Division Learning Outcomes (DLOs)

² Concentration Learning Outcomes (CLOs)



Knowledge and Application of Content

Courses	InTASC 4 CAEP 2-8	InTASC 5 CAEP 2-8
EDEF 201		
EDEF 200		
ETEC 279		
SPED 304	Introduced	
EDEF 310		
EDEE 324	Introduced	Introduced
EDEE 325	Introduced	Introduced
EDEE 402	Introduced	Introduced
EDEF 404		Extended/Reinforced
SPED 405	Extended/Reinforced	Extended/Reinforced
EDEE 406	Extended/Reinforced	Extended/Reinforced
EDEE 422	Introduced	Introduced
EDEE 424	Introduced	Introduced
EDEE 426	Extended/Reinforced	Extended/Reinforced
EDEE 462	Introduced	Introduced
EDEE 464	Introduced	Introduced
EDEE 466	Extended/Reinforced	Extended/Reinforced
EDEE 490	Refined	Refined
EDEE 492	Refined	

Instructional Practice

Courses	InTASC 6 CAEP 14	InTASC 7 CAEP 9	InTASC 8 CAEP 11
EDEF 201	Introduced	Introduced	Introduced
EDEF 200	Introduced	Introduced	Introduced
ETEC 279			
SPED 304	Introduced	Introduced	
EDEF 310		Extended/Reinforced	Extended/Reinforced
EDEE 324			Introduced
EDEE 325			Introduced
EDEE 402	Introduced		Extended/Reinforced
EDEF 404			
SPED 405	Extended/Reinforced	Extended/Reinforced	
EDEE 406	Extended/Reinforced	Extended/Reinforced	Extended/Reinforced
EDEE 422	Introduced	Introduced	Introduced



Courses	InTASC 6 CAEP 14	InTASC 7 ACEI 9	InTASC 8 ACEI 11
EDEE 424	Extended/Reinforced		Extended/Reinforced
EDEE 426	Extended/Reinforced	Extended/Reinforced	Extended/Reinforced
EDEE 462	Extended/Reinforced	Extended/Reinforced	Extended/Reinforced
EDEE 464		Extended/Reinforced	Extended/Reinforced
EDEE 466		Extended/Reinforced	Extended/Reinforced
EDEE 490	Refined	Refined	Refined
EDEE 492		Refined	

Professional Responsibilities

Courses	InTASC 9 ACEI 15	InTASC 10 ACEI 16
EDEF 201	Introduced	
EDEF 200	Introduced	
ETEC 279	Introduced	
SPED 304	Introduced	Introduced
EDEF 310	Extended/Reinforced	Introduced
EDEE 324	Introduced	
EDEE 325		
EDEE 402	Introduced	Introduced
EDEF 404		
SPED 405	Extended/Reinforced	Extended/Reinforced
EDEE 406	Extended/Reinforced	Extended/Reinforced
EDEE 422		Introduced
EDEE 424		
EDEE 426	Extended/Reinforced	Extended/Reinforced
EDEE 462	Extended/Reinforced	Extended/Reinforced
EDEE 464	Extended/Reinforced	Extended/Reinforced
EDEE 466		
EDEE 490	Refined	Refined
EDEE 492	Refined	



InTASC (DLO) / SPA (CLO) Professional Standards Alignment

Middle-Level/Secondary English 6-12

Standard Associations

Acronym	Description
InTASC	Interstate New Teacher Assessment & Support Consortium ¹
NCTE	National Council of Teachers of English ²
AMLE	Association for Middle-level Education ³

Learner & Learning Environment

Courses	InTASC 1 NCTE 6 AMLE 1a	InTASC 2 AMLE 1b	InTASC 3 NCTE 5 AMLE 1c-1d
EDEF 345	Introduced AMLE		Introduced AMLE
EDUC 410	Extended AMLE		Extended AMLE
EDML/SE 428	Extended NCTE		Extended NCTE
EDML/SE 430	Extended AMLE	Extended AMLE	Extended AMLE
EDML/SE 440	Extended AMLE	Extended AMLE	Extended AMLE
EDML/SE 490	Refined NCTE	Refined InTASC	Refined NCTE
EDML/SE 492	Refined NCTE	Refined InTASC	Refined NCTE

Knowledge and Application of Content

Courses	InTASC 4 NCTE 1-2 AMLE 2a	InTASC 5 NCTE 1-2 AMLE 4a
EDEF 345	Introduced AMLE	Introduced AMLE
EDUC 410	Introduced AMLE	Introduced AMLE
EDML/SE 428	Extended NCTE	Extended NCTE
EDML/SE 430	Introduced AMLE	Introduced AMLE
EDML/SE 440	Extended AMLE	Extended AMLE
EDML/SE 490	Refined NCTE	Refined NCTE
EDML/SE 492	Refined NCTE	Refined NCTE

¹ Division Learning Outcomes (DLOs)

² Concentration (ML/SE English Education) Learning Outcomes (CLOs)

³ Concentration (Middle-level Education) Learning Outcomes (AMLE)



Instructional Practice

Courses	InTASC 6 AMLE 4c	InTASC 7 AMLE 4	InTASC 8 NCTE 3-4 AMLE 4
EDEF 345	Introduced AMLE	Introduced AMLE	Introduced AMLE
EDUC 410			Introduced AMLE
EDML/SE 428			Extended NCTE
EDML/SE 430	Extended AMLE	Extended AMLE	Introduced AMLE Extended AMLE
EDML/SE 440	Extended AMLE	Extended AMLE	Extended AMLE
EDML/SE 490	Refined InTASC	Refined InTASC	Refined NCTE
EDML/SE 492	Refined InTASC	Refined InTASC	Refined NCTE

Professional Responsibilities

Courses	InTASC 9 AMLE 5	InTASC 10 NCTE 7 AMLE 5
EDEF 345		Introduced AMLE
EDUC 410		Extended AMLE
EDML/SE 428		Extended NCTE
EDML/SE 430	Extended AMLE	Introduced AMLE
EDML/SE 440	Extended AMLE	Extended AMLE
EDML/SE 490	Refined InTASC	Refined InTASC
EDML/SE 492	Refined InTASC	Refined InTASC



InTASC (DLO) / SPA (CLO) Professional Standards Alignment

Middle-Level/Secondary Math 6-12

Standard Associations

Acronym	Description
InTASC	Interstate New Teacher Assessment & Support Consortium ¹
NCTM	National Council of Teachers of Mathematics ²
AMLE	Association for Middle-level Education ³

Learner & Learning Environment

Courses	InTASC 1 NCTM 4 AMLE 1a	InTASC 2 AMLE 1b	InTASC 3 AMLE 1c-1d
EDEF 345	Introduced AMLE		Introduced AMLE
EDUC 410	Extended AMLE		Extended AMLE
EDML/SE 438	Extended NCTM		
EDML/SE 430	Extended AMLE	Extended AMLE	Extended AMLE
EDML/SE 440	Extended AMLE	Extended AMLE	Extended AMLE
EDML/SE 490	Refined NCTM	Refined InTASC	Refined InTASC
EDML/SE 492	Refined NCTM	Refined InTASC	Refined InTASC

Knowledge and Application of Content

Courses	InTASC 4 NCTM 1 AMLE 2a	InTASC 5 NCTM 2 AMLE 4a
EDEF 345	Introduced AMLE	Introduced AMLE
EDUC 410	Introduced AMLE	Introduced AMLE
EDML/SE 438	Extended NCTM	Extended NCTM
EDML/SE 430	Introduced AMLE	Introduced AMLE
EDML/SE 440	Extended AMLE	Extended AMLE
EDML/SE 490	Refined NCTM	Refined NCTM
EDML/SE 492	Refined NCTM	Refined NCTM

¹ Division Learning Outcomes (DLOs)

² Concentration (ML/SE Mathematics Education) Learning Outcomes (CLOs)

³ Concentration (Middle-level Education) Learning Outcomes (AMLE)



Instructional Practice

Courses	InTASC 6 NCTM 5 AMLE 4c	InTASC 7 NCTM 3 AMLE 4	InTASC 8 NCTM 7 AMLE 4
EDEF 345	Introduced AMLE	Introduced AMLE	Introduced AMLE
EDUC 410			Introduced AMLE
EDML/SE 438	Extended NCTM	Extended NCTM	Extended NCTM
EDML/SE 430	Extended AMLE	Extended AMLE	Introduced AMLE Extended AMLE
EDML/SE 440	Extended AMLE	Extended AMLE	Extended AMLE
EDML/SE 490	Refined NCTM	Refined NCTM	Refined NCTM
EDML/SE 492	Refined NCTM	Refined NCTM	Refined NCTM

Professional Responsibilities

Courses	InTASC 9 NCTM 6 AMLE 5	InTASC 10 NCTM 6 AMLE 5
EDEF 345		Introduced AMLE
EDUC 410		Extended AMLE
EDML/SE 438	Extended NCTM	Extended NCTM
EDML/SE 430	Extended AMLE	Introduced AMLE
EDML/SE 440	Extended AMLE	Extended AMLE
EDML/SE 490	Refined NCTM	Refined NCTM
EDML/SE 492	Refined NCTM	Refined NCTM



InTASC (DLO) / SPA (CLO) Professional Standards Alignment Middle-Level/Secondary Science and Secondary Biology 6-12

Standard Associations

Acronym	Description
InTASC	Interstate New Teacher Assessment & Support Consortium ¹
NSTA	National Science Teachers Association ²
AMLE	Association for Middle-level Education ³

Learner & Learning Environment

Courses	InTASC 1 AMLE 1a	InTASC 2 NSTA 2 AMLE 1b	InTASC 3 AMLE 1c-1d
EDEF 345	Introduced AMLE		Introduced AMLE
EDUC 410	Extended AMLE		Extended AMLE
EDML/SE 457			
EDML/SE 458			
EDML/SE 430	Extended AMLE	Extended AMLE	Extended AMLE
EDML/SE 440	Extended AMLE	Extended AMLE	Extended AMLE
EDML/SE 490	Refined InTASC	Refined NSTA	Refined InTASC
EDML/SE 492	Refined InTASC	Refined NSTA	Refined InTASC

Knowledge and Application of Content

Courses	InTASC 4 NSTA 1 AMLE 2a	InTASC 5 NSTA 4 AMLE 4a
EDEF 345	Introduced AMLE	Introduced AMLE
EDUC 410	Introduced AMLE	Introduced AMLE
EDML/SE 457	Extended NSTA	Extended NSTA
EDML/SE 458	Extended NSTA	Extended NSTA
EDML/SE 430	Introduced AMLE	Introduced AMLE
EDML/SE 440	Extended AMLE	Extended AMLE
EDML/SE 490	Refined NSTA	Refined NSTA

¹ Division Learning Outcomes (DLOs)

² Concentration (ML/SE Mathematics Education) Learning Outcomes

³ Concentration (Middle-level Education) Learning Outcomes (AMLE)



Courses	InTASC 4 NSTA 1 AMLE 2a	InTASC 5 NSTA 4 AMLE 4a
EDML/SE 492	Refined NSTA	Refined NSTA

Instructional Practice

Courses	InTASC 6 NSTA 5 AMLE 4c	InTASC 7 NSTA 3 AMLE 4	InTASC 8 AMLE 4
EDEF 345	Introduced AMLE	Introduced AMLE	Introduced AMLE
EDUC 410			Introduced AMLE
EDML/SE 457	Extended NSTA		
EDML/SE 458	Extended NSTA	Extended NSTA	
EDML/SE 430	Extended AMLE	Extended AMLE	Introduced AMLE Extended AMLE
EDML/SE 440	Extended AMLE	Extended AMLE	Extended AMLE
EDML/SE 490	Refined NSTA	Refined NSTA	Refined InTASC
EDML/SE 492	Refined NSTA	Refined NSTA	Refined InTASC

Professional Responsibilities

Courses	InTASC 9 NCTM 6 AMLE 5	InTASC 10 AMLE 5
EDEF 345		Introduced AMLE
EDUC 410		Extended AMLE
EDML/SE 457	Extended NSTA	
EDML/SE 458	Extended NSTA	
EDML/SE 430	Extended AMLE	Introduced AMLE
EDML/SE 440	Extended AMLE	Extended AMLE
EDML/SE 490	Refined NSTA	Refined InTASC
EDML/SE 492	Refined NSTA	Refined InTASC



InTASC (DLO) / SPA (CLO) Professional Standards Alignment Middle-Level/Secondary Social Studies 6-12

Standard Associations

Acronym	Description
InTASC	Interstate New Teacher Assessment & Support Consortium ¹
NCSS	National Council for the Social Studies ²
AMLE	Association for Middle-level Education ³

Learner & Learning Environment

Courses	InTASC 1 AMLE 1a	InTASC 2 AMLE 1b	InTASC 3 AMLE 1c-1d
EDEF 345	Introduced AMLE		Introduced AMLE
EDUC 410			
EDML/SE 448			
EDML/SE 430	Extended AMLE	Extended AMLE	Extended AMLE
EDML/SE 440	Extended AMLE	Extended AMLE	Extended AMLE
EDML/SE 490	Refined InTASC	Refined InTASC	Refined InTASC
EDML/SE 492	Refined InTASC	Refined InTASC	Refined InTASC

Knowledge and Application of Content

Courses	InTASC 4 NCSS 1 AMLE 2a	InTASC 5 NCSS 4 AMLE 4a
EDEF 345	Introduced AMLE	Introduced AMLE
EDUC 410		
EDML/SE 448	Extended NCSS	Extended NCSS
EDML/SE 430	Introduced AMLE	Introduced AMLE
EDML/SE 440	Extended AMLE	Extended AMLE
EDML/SE 490	Refined NCSS	Refined NCSS
EDML/SE 492	Refined NCSS	Refined NCSS

¹ Division Learning Outcomes (DLOs)

² Concentration (ML/SE Mathematics Education) Learning Outcomes (CLOs)

³ Concentration (Middle-level Education) Learning Outcomes (AMLE)



Instructional Practice

Courses	InTASC 6 NCSS 3 AMLE 4c	InTASC 7 NCSS 2 AMLE 4	InTASC 8 AMLE 4
EDEF 345	Introduced AMLE	Introduced AMLE	Introduced AMLE
EDUC 410			
EDML/SE 448	Extended NCSS	Extended NCSS	
EDML/SE 430	Extended AMLE	Extended AMLE	Introduced AMLE Extended AMLE
EDML/SE 440	Extended AMLE	Extended AMLE	Extended AMLE
EDML/SE 490	Refined NCSS	Refined NCSS	Refined InTASC
EDML/SE 492	Refined NCSS	Refined NCSS	Refined InTASC

Professional Responsibilities

Courses	InTASC 9 AMLE 5	InTASC 10 NCSS 5 AMLE 5
EDEF 345		Introduced AMLE
EDUC 410		
EDML/SE 448		Extended NCSS
EDML/SE 430	Extended AMLE	Introduced AMLE
EDML/SE 440	Extended AMLE	Extended AMLE
EDML/SE 490	Refined InTASC	Refined NCSS
EDML/SE 492	Refined InTASC	Refined NCSS