

Teaching and Learning (SPED, T&L)

B.S.ED. Double Major in Elementary and Middle Level Education (https://catalog.und.edu/undergraduateacademicinformation/departmentalcoursesprograms/teachingandlearning/tl-bsed-dbl2/)

B.S.ED. Double Major in Elementary Education and Early Childhood (https://catalog.und.edu/undergraduateacademicinformation/departmentalcoursesprograms/teachingandlearning/tl-bsed-dbl/)

B.S.ED. in Secondary Education (https://catalog.und.edu/undergraduateacademicinformation/departmentalcoursesprograms/teachingandlearning/tl-bsed-se/)

B.S.ED. with Composite Major in Social Studies (https://catalog.und.edu/undergraduateacademicinformation/departmentalcoursesprograms/teachingandlearning/tl-bsed-ss/)

B.S.ED. with Major in Early Childhood Education (https://catalog.und.edu/undergraduateacademicinformation/departmentalcoursesprograms/teachingandlearning/tl-bsed-ece/)

B.S.ED. with Major in Elementary Education (https://catalog.und.edu/undergraduateacademicinformation/departmentalcoursesprograms/teachingandlearning/tl-bsed-ee/)

B.S.ED. with Major in Middle Level Education (https://catalog.und.edu/undergraduateacademicinformation/departmentalcoursesprograms/teachingandlearning/tl-bsed-mle/)

B.S.ED. with Major in Science (https://catalog.und.edu/undergraduateacademicinformation/departmentalcoursesprograms/teachingandlearning/tl-bsed-sci/)

Kindergarten Endorsement (https://catalog.und.edu/undergraduateacademicinformation/departmentalcoursesprograms/teachingandlearning/tl-kin-end/)

Minor in Early Childhood Education (https://catalog.und.edu/undergraduateacademicinformation/departmentalcoursesprograms/teachingandlearning/tl-minor-ece/)

Minor in English Language Learner (ELL) Education (https://catalog.und.edu/undergraduateacademicinformation/departmentalcoursesprograms/teachingandlearning/tl-minor-ell/)

Minor in Literacy Education (https://catalog.und.edu/undergraduateacademicinformation/departmentalcoursesprograms/teachingandlearning/tl-minor-le/)

Minor in Middle Level Education (https://catalog.und.edu/undergraduateacademicinformation/departmentalcoursesprograms/teachingandlearning/tl-minor-mle/)

Minor in Special Education (https://catalog.und.edu/undergraduateacademicinformation/departmentalcoursesprograms/teachingandlearning/tl-minor-se/)

Certificate in Autism Spectrum Disorder (https://catalog.und.edu/undergraduateacademicinformation/departmentalcoursesprograms/teachingandlearning/tl-cert-asd/)

Certificate in Science of Reading

Certificate in Special Education (https://catalog.und.edu/undergraduateacademicinformation/departmentalcoursesprograms/teachingandlearning/tl-cert-se/)

SPED 400. Introduction to Visual Impairment. 3 Credits.

A course which provides an overview of the field of visual impairment to include the following emphases: History/philosophy; Service-delivery models; medical, psychological and educational implications of partial vision or total blindness, expanded core curriculum and curricula methods; orientation and mobility, current issues/trends. F.

SPED 404. Communication Media/Methods Visual Impairment. 3 Credits.

This course provides an overview of the communication devices and adaptive technology used by individuals with low vision and blindness. Students learn to read and write the braille codes for mathematics and music, do basic calculations on the abacus, brailler and talking calculator and gain familiarity with computers and software currently used in the field. Prerequisite: SPED 402 and consent of instructor. S.

SPED 425. Legal/Ethical Aspects in Special Education. 3 Credits.

This course covers the theory and study of special education law for children and youth with disabilities. S.

SPED 428. Assistive Technology. 3 Credits.

An overview of the various forms of technology (e.g., communication boards, switches, software) that may be used to assist students with disabilities. S.

SPED 430. Braille Code 1. 2 Credits.

Students will complete four final self-paced learning units (chapters) consisting of lessons that will lead them to being a proficient Braille reader and writer. F.

SPED 431. Braille Code 2. 2 Credits.

Students will complete four final self-paced learning units (chapters) consisting of lessons that will lead them to being a proficient Braille reader and writer. Prerequisite: SPED 430. S.

SPED 432. Visual Impairment / Early Intervention. 3 Credits.

This course covers the purpose and principles of early intervention. It addresses the developmental needs of young children with visual impairments and effective strategies to meet those needs. It also covers the role of teachers of students with visual impairment in the early intervention program as well as key aspects of consultation, interdisciplinary collaboration, service coordination, and culturally sensitive family-centered services. SS.

SPED 460. Introduction to Autism Spectrum Disorder. 3 Credits.

This is the introductory course in a sequence of interdisciplinary courses focusing on autism spectrum disorder. Its central purpose is to encourage parents and caregivers of individuals with autism spectrum disorder to engage in reflective thinking about and critical analysis of the many and varied issues, e.g., identification, educational placement, effective treatments, vocational training, related to the provision of quality lifelong supports for these individuals. Prerequisite: Completed degree from a related field of study, or seniors who have completed TL 315, and are completing an undergrad degree from a related field of study. F,S.

SPED 461. Methods for Autism Spectrum Disorder. 3 Credits.

This is a required course in a sequence of interdisciplinary courses focusing on autism spectrum disorder (ASD). Its central purpose is to address commonly implemented intervention strategies, particularly those considered to be evidence based or research supported in the field of ASD. This course examines the current literature base supporting various interventions and strategies with a focus on matching the needs and strengths of individuals with ASD to the most appropriate intervention method based on data driven practice and research support for a particular intervention. F,S.

SPED 462. Autism Spectrum Disorder: Supports Across the Lifespan. 3 Credits.

This course is in a sequence of interdisciplinary courses focusing on autistic spectrum disorder (ASD). Issues related to parental reactions to diagnosis, stressors at home and school, strategies for empowering families, transitional situations for individuals with ASD, transitions to jobs and college, and legal issues will be explored. The central purpose of the course is threefold: a) to provide current information related to the chronic stressors experienced by caregivers for and family members of persons with ASD, b) to provide current information regarding career/vocational options related to transition from high school through adult life, e.g., young adults, middle-aged adults, older adults, and c) to provide current information regarding legal issues related to the provision of lifelong supports for persons with ASD. F.



SPED 464. ASD: Structured Teaching, Visually Supported Instruction. 3 Credits.

This is an elective course in the sequence of interdisciplinary courses focusing on autism spectrum disorder (ASD). Its central purpose is to learn and apply the visually supported teaching methods effectively. There is a focus on the design and implementation of visually supported instruction. This method can be applied to instruction for individuals both with and without ASD. F.

SPED 466. Autism Spectrum Disorder: Intensive Early Intervention. 3 Credits.

This is an elective course in the sequence of interdisciplinary courses focusing on children with autistic spectrum disorder (ASD) birth to age six. Topics addressed will include basic characteristics of children with ASD birth to age six, the developmental implications for these children and their families, and research supported early interventions utilizing a family centered approach with an emphasis on natural learning opportunities. F.

SPED 467. ASD Assessment. 3 Credits.

This course is a required course in a sequence of interdisciplinary courses focusing on autistic spectrum disorders (ASD). This course will address the entire process of program planning for students with ASD including screening, evaluative assessment, ongoing assessment, using assessment to guide intervention planning, and monitoring progress. Students will explore a variety of methods and tools commonly used with individuals with ASD; specifically standardized assessments, checklists, rating scales, structured observation tools, and curricular based assessments. Its central focus is on assessing the ongoing needs and strengths of individuals with ASD in order to plan successful interventions in further differentiating instruction. F,S.

SPED 485. Internship: Visual Impairment. 1-6 Credits.

This is a culminating experience for students who are seeking licensure or an endorsement in the area of visual impairment. This course is designed for students to synthesize previously learned information from coursework as they apply and implement their knowledge and skills through written products and classroom performance. Prerequisite: SPED 400, SPED 504, SPED 502, and SPED 505. F,S,SS.

SPED 490. Teaching Students with Multiple Disabilities & Visual Impairment. 3 Credits.

This course provides an overview of educating students who have multiple disabilities including visual impairments, cortical visual impairment, and deafblindness. This includes characteristics, assessment, strategies for essential areas of instruction and transitions. S, even years.

T&L 220. Lakota Linguistics for Teachers 1. 3 Credits.

This is an introductory course on Lakota linguistics designed for Lakota language teachers. It focuses on three main components of Lakota grammar: (i) Lakota pronunciation and alphabet, (ii) Lakota inflectional morphology, and (iii) Lakota sentence structure (syntax). The first component is a thorough introduction to Lakota phonemic inventory, historic and current writing systems and methodology on how to teach pronunciation, listening comprehension and how to develop phonemic awareness in second language acquisition of Lakota. The second component offers a comprehensive coverage of Lakota conjugation of all verb classes and types. The third component introduces Lakota sentence structure up to intermediate level. On demand.

T&L 250. Introduction to Education. 3 Credits.

This course is designed for students exploring the profession of teaching in early childhood, elementary, middle, or secondary schools. You will study what it means to be a teacher, the role of schools in a diverse society, and the foundations of education. You will participate in field experiences in schools, role-playing, simulations, and peer-teaching to explore teaching in today's schools. F,S.

T&L 251. Understanding Individuals with Different Abilities. 3 Credits.

This course is designed to introduce students to foundational knowledge of individuals with different abilities addressing the identification, supports, range of services, assessment components, and evidence-based teaching practices. Historical, legal, cultural, and societal influences that impacts educational success will be explored. F,S,SS, even years.

T&L 252. Child Development. 3 Credits.

Study of the growth and developmental process through adolescence. A basis for understanding basic needs of the normal child and means of meeting them in the child's home and community environment. F,S.

T&L 286. Field Experience. 1 Credit.

Supervised tutorial or apprentice teaching experience in an early childhood, K-12 classroom, university or community setting approved by the program area. S/U grading. Prerequisite: Consent of instructor. Repeatable to 3.00 credits. S/U grading. F,S.

T&L 310. Introduction to Early Childhood Education. 3 Credits.

An overview of the early childhood education field, including an introduction to its historical roots; current theories, program models and issues; curriculum development; and typical and atypical development of young children. There will be a minimum of six hours of observation and/or activities in the field. F,S.

T&L 311. Observing and Assessing Children. 3 Credits.

This course acquaints the student with a variety of ways of observing, recording, and analyzing the behavior and development of children. Assessment of children will be analyzed by looking at a variety of assessment activities that can be done with children. There will be a minimum of six hours of field experience. Prerequisite: Admission to Teacher Education Program and T&L 310. S.

T&L 313. Language Development and Emerging Literacy. 3 Credits.

This course examines both typical and atypical development of language and thought in children ages birth-8. Children's emergent literacy is studied within the context of language development. There will be a minimum of eight hours of field experience. Prerequisite: Admission to the Teacher Education program. F.

T&L 316. Behavioral Assessment and Tiered Supports in Education. 3 Credits.

The study of behavior management within a multi-tiered system of support (MTSS) for the educational advancement of children and youths in schools. Behavior concepts, assessments, and interventions are applied within the MTSS framework as defined by contemporary special education laws and regulations. Prerequisite or Corequisite: T&L 251. F.

T&L 319. Integrating Diverse Needs in Educational Settings. 3 Credits.

This course introduces students to the shared, collaborative responsibility of professionals in education. It emphasizes understanding of different emotional and learning abilities and underscores the requirement that teachers create and modify learning environments and adapt evidence-based teaching strategies and methods. Integrated into this course are concepts of accountability, building collaborative partnerships and facilitating educational programming for inclusive success. F,S,SS, odd years.

T&L 320. Infant and Toddler. 3 Credits.

This course is a study of the child's growth and development from birth to 36 months. It will give the student a basis for understanding normal developmental needs of children and means of meeting them in the children's home and community environments. Prerequisite: T&L 252 or PSYC 250 or permission of instructor. F.

T&L 322. Administration and Leadership in Early Childhood Education. 3 Credits.

An investigation of patterns of administration, curriculum organization, spatial resources, and staffing in early childhood settings, serving children 0-8 years old. Topics include federal and state laws and emerging trends in preschool and primary education in the state, region, and nation. Ten (10) hours of field experience. Prerequisite: Admission to the Teacher Education program. F.

T&L 324. Integrating the Arts in the Elementary Classroom. 3 Credits.

Learn why integrating the arts in the elementary classroom is critical for student learning and engagement. Design lessons that engage children in learning elementary content through the arts as well as foster children's creative expression. F,S.

T&L 328. Survey of Children's Literature. 3 Credits.

Students survey the broad range of literature written for children. Emphasis is placed on gaining familiarity with the multicultural aspects of literature, understanding the distinguishing characteristics of genre, developing visual literacy with respect to illustration, and acquiring the ability to evaluate literature, as well as its use, with an understanding of children's developmental needs. F.S.

T&L 329. Young Adult Literature. 3 Credits.

Discussion and critical evaluation of contemporary literature, both adolescent and adult, which is of interest to young adults, with an emphasis on fiction, drama, poetry, essays, and biographies. On demand.



T&L 330. Lakota Linguistics for Teachers 2. 3 Credits.

This is course builds on LLT1 and offers a comprehensive coverage of Lakota inflectional and derivational morphology, allowing the students to identify, use and teach all types of Lakota verbs in all their forms. Secondly, the course provides a thorough introduction to Lakota sentence structure (syntax). Prerequisite: T&L 220. On demand.

T&L 333. Methods and Materials: Pre-Kindergarten. 3 Credits.

Exploration of curriculum, methods and materials for use in pre-kindergarten educational settings. Includes selection of materials, creative environments, and planning for the individual needs of children within a group setting. Prerequisite: T&L 310 and admission to the Teacher Education program. Corequisite: T&L 486. F,SS.

T&L 335. Foundations of Reading. 3 Credits.

This course presents scientifically based reading research foundations needed to understand reading development. Students explore the instructional implications related to phonological awareness, phonics, fluent reading, vocabulary acquisition, and comprehension. Students examine literacy assessment and analysis to inform individual instruction. Prerequisite: Admission to the Teacher Education program. F,S.

T&L 336. Social and Emotional Development and Guidance of Children. 3 Credits.

This course examines both typical and atypical social and emotional development in children ages 0-8 as a basis for understanding and working with children in educational settings. The course will also focus on child guidance and behavior issues affecting classroom climate. There will be a minimum of 6 hours field experience. F.

T&L 338. Home, School and Community Relations. 3 Credits.

The course is an exploration of home school relations. The content will include history, parental involvement in schools, parent-teacher conferences, home visits, parent programs, and resources for parents. S.

T&L 339. Educational Technology. 3 Credits.

Students will demonstrate a sound understanding of technology concepts and operations that not only support classroom curriculum but provide an avenue for continuing professional development. Students will learn to apply technology to facilitate a variety of effective assessment and evaluation strategies. The class will help students understand the social, ethical, legal and human issues that surround the use of technology in PK-12 schools. F,S,SS.

T&L 341. Foundations of Middle Level Education. 2 Credits.

This course promotes understanding the needs of early adolescent students and of the interdisciplinary, collaborative teaching approaches associated with the middle school philosophy. The course addresses the components of organization. Prerequisite: Admission to the Teacher Education program. F.

T&L 345. Curriculum, Instruction, and Assessment. 3 Credits.

A general curriculum development and instruction course designed for the undergraduate pre-service middle school and/or secondary teacher across all disciplines. It introduces and provides practice in planning, multiple instructional strategies, and methods of formal and informal assessment. It considers the impact of historical foundations, teaching philosophy, discipline standards, knowledge of diverse learners and special needs, and technology on curriculum development. Prerequisite: T&L 250. F,S.

T&L 350. Development and Education of the Adolescent. 3 Credits.

A comprehensive examination of the characteristics and behavior of the adolescent student with implications for curriculum and instruction in the junior/middle and high schools. Topics covered will be transition from childhood to adolescence, including cognitive development, self-concept, physiological changes, social needs and values, and values and attitudes of adolescents. This course will provide an understanding of the wide range of differences in developmental patterns of children and the influences of economic, sociological and psychological factors in development. An additional 10 hour field experience is required for the course. Prerequisite: Admission to Teacher Education Program and T&L 250. F.

T&L 370. Differentiated Instruction. 3 Credits.

An introduction to the principles of differentiation including responsive instructional and assessment strategies, learner preferences, and the dynamics of a differentiated learning environment. Managing and organizing a differentiated approach to teaching is also presented. S.

T&L 386. Field Experience. 1 Credit.

Supervised tutorial or apprentice teaching, experience in an early childhood, K-12 classroom, university or community setting approved by the program area. Optional. Prerequisite: Admission to Teacher Education Program and T&L 250. S/U grading. F,S.

T&L 390. Special Topics. 1-3 Credits.

May be repeated. Prerequisite: Admission to the Teacher Education Program. Repeatable.

T&L 400. Methods and Materials. 3 Credits.

Various teaching methods and strategies and the materials used in teaching in a subject area. (Some Methods and Materials courses carry an academic department prefix and number. The number of methods courses required by a department may vary. Consult with an adviser.) Some offered F only; some F,S. See adviser. Prerequisite: T&L 250 and T&L 345, and admission to the Teacher Education program. Corequisite: T&L 486. Repeatable to 18.00 credits. F,S.

T&L 401. School Safety Science. 1 Credit.

Prepares students to plan for and communicate about a wide variety of classroom and laboratory safety issues. Health and safety issues are examined for the classroom teacher and the students in all science courses, including electrical safety, biological safety, chemical use, storage and disposal, legal issues, liability reduction and cost control are also addressed in detail. Prerequisite: Admission to Teacher Education Program. Corequisite: T&L 400. F.

T&L 404. Assessment in the Elementary Classroom. 1 Credit.

Elementary teachers must know how to design and use classroom assessments across all content areas as a way to monitor student learning and achievement, and to inform their decisions about instruction and the learning environment. This course will outline procedures for designing or selecting, administering, scoring, and interpreting a variety of formative and summative assessments for use in elementary classrooms. By exploring assessments aligned to educational objectives and standards, students will evaluate student learning outcomes across the elementary grades and content areas. In addition, students will become familiar with measures to assess learners with special needs and to assess learners from linguistically and culturally diverse backgrounds.

T&L 405. Data Literacy for Teachers. 1 Credit.

Teachers in all grade levels and program areas must know how to effectively and responsibly use student assessment data to inform their practice and address individual student needs and learning goals. This course will introduce students to various sources of assessment data, how to analyze patterns and themes in the data in order to make individual and programmatic decisions, and how to discuss data trends with colleagues as part of a professional learning community. Through careful examinations of real student data and discussions with community educators and administrators, students in this course will gain an understanding of the role and purpose of data and how to meaningfully use it to guide instruction. F,S,SS.

T&L 409. Reading in the Content Areas. 3 Credits.

This course emphasizes instructional strategies and techniques for reading and writing, as well as the use of varied texts, in the content area classroom. This course also includes scientifically- and researched-based best practices including phonemic awareness, phonics, fluency, vocabulary, and comprehension, as well as assessment of reading abilities and the identification and correction of reading difficulties to increase student achievement. Prerequisite: Admission to the Teacher Education program. F,S.

$\label{thm:continuous} \textbf{T\&L 410. Reading Methods in Elementary Schools (TEAM). 3 Credits.}$

This methods course prepares future elementary teachers with the essential methods, dispositions, and strategies for teaching and assessing literacy in the elementary school classroom. Explicit and systematic instruction of phonological awareness, phonics, fluency, vocabulary, and comprehension are studied, practiced, and implemented. Prerequisite: Admission to the Teacher Education program; see department for approval. F,S.

T&L 411. Primary Reading and Language Arts. 2 Credits.

This course explores a wide variety of developmentally-appropriate instructional practices for teaching primary level children multiple ways of communicating and experiencing language. This course emphasizes integrating reading, writing, speaking and listening as forms of creative and personal expression. Effective methods of teaching children to decode and encode print are studied. Prerequisite: Admission to the Teacher Education program. S.



T&L 412. Science of Reading: Research-Based Literacy Practices. 3 Credits.

The course provides an introduction to the science-based principles of literacy and language development. Students explore the best practices for teaching reading across the grade levels including instructional implications related to the five components of reading. S.

T&L 413. Assessing and Correcting Reading Difficulties. 3 Credits.

This course examines effective assessment techniques and tools aligned to the five components of reading: phonemic awareness, phonics, fluency, vocabulary and comprehension. Students will have opportunities to administer and interpret research-based literacy assessments to plan differentiated and independent instruction based on assessment data analysis. F,SS.

T&L 414. Corrective Reading Practicum. 2 Credits.

Applying the knowledge and skills learned in T&L 413, students in this practicum assess, plan for and teach children who are having difficulty with reading and/or writing. F,SS.

T&L 415. Language and Literacy Development of English Language Learners. 3 Credits.

This course includes study of various approaches to ELL/bilingual education, methods of instruction, assessment of English language proficiency and classroom learning, and teaching academic content to ELLs in the general education classroom. Prerequisite: Admission to the Teacher Education program or permission of instructor. S.

T&L 416. Adolescent Literacy Development. 3 Credits.

A study of adolescent literacy development with emphasis on instructional strategies and practices for reading and responding to texts, helping struggling readers, and engagement in literacy. Prerequisite: Admission to the Teacher Education program or permission of instructor. F.

T&L 417. Writing & Language Arts Methods. 2 Credits.

A study of methods for teaching writing and language arts to children in grades K-6. Emphasis is placed on process-oriented writing approaches; spelling and grammar; ways of using language for creative, personal, and content area expression. Prerequisite: Admission to Teacher Education Program. F,S.

T&L 418. Curriculum & Pedagogy in Indigenous Education. 3 Credits.

This course examines indigenous ways of thinking about and doing schooling. Students will study both the theory and practical classroom applications of indigenous knowledge systems, culturally sustaining curriculum, indigenous models of education and critical pedagogy. On demand.

T&L 420. Assessment for ELLs. 3 Credits.

This course broadly explores issues of assessment, language proficiency assessment and classroom-based assessment for English Language Learners. Students will understand and use multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and to inform instruction. Topics of study include: identification and placement of ELLs, cultural bias in testing, standardized testing and accommodations, state and federal policies regarding ELLs and assessment, program evaluation, and classroom-based assessments. F.

T&L 422. Development of the Gifted and Talented. 2 Credits.

Research and theory for understanding the development needs of the more able child in early childhood and in educational experiences. S.

T&L 423. Assessment and Individualized Planning in Special Education. 3 Credits.

A study of the principles and practices of: (1) obtaining diagnostic information on school-related problems of a student; (2) assimilating this information and prescribing appropriate alterations based on continuous measurement data. Prerequisite: T&L 316. S.

T&L 424. Methods & Materials & Phil: Art Elem Classroom. 1-4 Credits.

T&L 430. Social Studies Methods in Elementary Schools (TEAM). 3 Credits

To understand and analyze the different modes of teaching social studies, to gain the competencies necessary for organizing a unit in the social studies, to gain an understanding of the values and multiple perspectives inherent within the various teaching strategies, to develop a preferred perspective on the ideal nature of Social Studies education. Prerequisite: Admission to the Teacher Education program; see department for approval. F,S.

T&L 432. Learning Environments. 3 Credits.

The purpose of this class is to study psychological, social, and cultural factors that influence classroom behavior and to examine elements that contribute to a positive learning environment. An additional 15 hour field experience is required for the course over a three-week period. Prerequisite: Admission to the Teacher Education program. F,S.

T&L 433. Multicultural Education. 3 Credits.

This course is designed to implement a multicultural approach to teaching and learning by examining how race, ethnicity, and culture influence students' experiences in schools. This course's content provides teacher candidates with the knowledge and concepts they need to enhance their understanding of socio-cultural consciousness through culturally responsive and relevant pedagogy. Teacher candidates will understand how to develop appropriate, informed, and sensitive responses to the rich diversity (gender, sexuality, exceptionality, age, socioeconomic status, religion, ethnicity, race, language, and culture) of student learners in the classroom as a pathway to be inclusive. This course explores immigration and refugees' issues and examines cultural assumptions, implicit biases, attitudes, and values that shape our perceptions and predicate our actions. This exploration prepares teacher candidates to create spaces in their learning environments where all learners are supported through acknowledgment of multiple identities, funds of knowledge, and experiences to surface and interrupt oppression. This multicultural course highlights the effects of settler colonialism on Native Peoples. This course will help students to learn about the American Indian Reservations in North Dakota: The history, language, school settings, population, tribal governments, sovereignty laws, and early education for North Dakota's Native Peoples. Note: course requires you to complete 10 hours of field experience working with students from diverse backgrounds. Prerequisite: Admission to the Teacher Education program. F,S,SS.

T&L 440. Mathematics Methods in Elementary Schools (TEAM). 3 Credits. Students explore how to facilitate the learning of mathematics in a constructivist environment through the use of investigations, manipulatives, technology, and holistic forms of assessment. Current trends in teaching mathematics are emphasized, with particular attention to documents created by the National Council of Teachers of Mathematics. Prerequisite: Admission to the Teacher Education program; see department for approval. F,S.

T&L 443. Mathematics for Primary Grades. 2 Credits.

Math for Primary Grades focuses on curriculum and methods for teaching mathematics in kindergarten through the third grade. Students actively engage in projects and activities that help them develop a conceptual understanding of teaching mathematics in a cooperative and constructivist environment where children view themselves as as mathematicians. Emphasis is placed on the use of manipulative, problem solving activities and children's literature in the planning and organizing of developmentally appropriate classroom activities and lessons. Prerequisite: Admission to the Teacher Education program. F,S.

T&L 444. Assessing and Correcting Mathematics Difficulties. 2 Credits.

The focus of this course and the co-requisite practicum is to learn about current approaches to assessment and methods to assist students who are having difficulty with mathematics. Observations, error pattern analysis, interviews, and other evaluation procedures are used to learn about elementary students' mathematical abilities, and these assessments are used to plan for instruction. Corequisite: T&L 413 and T&L 486. F.

T&L 451. Second Language Acquisition for ELLs. 3 Credits.

In this course, students will develop an understanding of the socio- and psycholinguistic aspects of interlanguage by studying the theories and research of first and second language acquisition. Students will examine the nature of learners and their individual differences during the stages of language development. F.

T&L 453. Methods and Materials: Kindergarten. 2 Credits.

Exploration of curriculum, methods, and materials for use in kindergarten settings. Prerequisite: Admission to Teacher Education Program and T&L 310. F,S,SS.

T&L 456. Early Childhood Ed Seminar. 1 Credit.

This seminar continues the exploration of curriculum, methods, and materials issues as they are presented in the particulars of the student teaching experience. Prerequisite: T&L 333 and admission to Teacher Education Program. Corequisite: T&L 487. F,S.



T&L 465. Middle Level Curriculum and Methods. 5 Credits.

This methods course takes a hands-on approach to increasing understanding and application of the various methods and strategies for teaching early adolescent students. This course addresses techniques, strategies, materials, and a content area knowledge base necessary for promoting student learning and success in a middle school setting. Prerequisite: T&L 341. Corequisite: T&L 486. S.

T&L 467. Language Structure and Analysis for ELL Teachers. 3 Credits.

This course explores the grammatical and discourse structures of the modern English language, analysis of grammar and discourse with a focus on specific problem areas for ELLs, and pedagogical implications for ELLs' English language development. S.

T&L 470. Science Methods in Elementary Schools (TEAM). 3 Credits.

A survey of teaching strategies, materials, and resources appropriate for promoting science inquiry in elementary classrooms. Prerequisite: Admission to the Teacher Education program; see department for approval. F,S.

T&L 474. STEM Concepts in the Elementary Classroom. 3 Credits.

Elementary school teachers must know and understand the fundamental concepts and practices in all domains of science (physical, life, earth and space sciences), as well as how technology, engineering, and math are integrated into this subject matter, so that they can plan and effectively implement meaningful and engaging STEM learning experiences for their students. This course will provide a foundation in the science content necessary for elementary teachers to know through a hands-on, inquiry-based approach. Further, it will introduce students to effective teaching strategies for not only integrating the components of STEM across all science domains but for making STEM accessible for diverse learners as well. F,S,SS.

T&L 486. Field Experience. 1-4 Credits.

Supervised tutorial or apprentice teaching experience in an early childhood, K-12 classroom, university, or community setting approved by the program area. Prerequisite: Admission to the Teacher Education program. Repeatable to 16.00 credits. S/U grading. F,S.

T&L 487. Student Teaching. 1-16 Credits.

Provides students with the opportunity to assume the role of a classroom teacher in an educational setting under the supervision of a cooperating teacher and a University faculty member. Ongoing professional support will be provided throughout the progression of the student teaching experience including professional support and development opportunities such as mental health training and ethics training which were formally part of TL 488, Senior Seminar. Prerequisite: Permission of program, senior standing only. Repeatable. S/U grading. F,S.

T&L 489. Senior Capstone: Responsive Teaching. 3 Credits.

Course is taken with student teaching. Teacher candidates engage in written communication and critical thinking in the context of student teaching. Course engagements require candidates to develop and implement curriculum and assessment; analyze and reflect on assessment results to respond to learners' needs; and synthesize professional artifacts to demonstrate ability to plan, implement, assess and reflect on teaching and learning. Corequisite: Acceptance into Student Teaching. F,S.

T&L 493. Workshop. 1-4 Credits.

Special problems in Special Education; consideration of special problems of concern to the Special Education teacher and other educators. Repeatable to 8.00 credits. F,S.

T&L 495. Independent Study. 1-4 Credits.

This course is designed for the interested student's pursuit of an area of study not offered through regular courses. In addition, students can continue to pursue subject matter covered in courses in greater depth. Repeatable to 8.00 credits.

T&L 498. Special Projects. 1-8 Credits.

Course number reserved for committee approved proposals, independent study, special colloquia, or experimental courses.