Competency Based Courses

EDCB 514 - Management and Curriculum Development for Diverse Learners
Hours: 3
(Same As EDCI 514) This course contains introductory content for the professional body of knowledge necessary for effective teaching in a K-12 classroom. Competency in instructional design as well as organizing and managing a classroom in diverse environments will be developed. The content of this course will include classroom procedures and management, knowledge of research-based teaching strategies, curriculum analysis/ development and lesson design, teaching models, formative and summative assessment, and certification issues. Students will exhibit an understanding of the domains and competences Texas teachers are expected to demonstrate on the Pedagogy and Professional Development TExES certification examination.

EDCB 515 - Evidence-Based Teaching for Diverse Populations
Hours: 3
(Same As EDCI 515) This capstone course requires students to apply and expand their knowledge through a number of project-based and research initiatives. Students will synthesize or integrate the knowledge they have developed throughout the prerequisite courses in a clinical/internship experience. The course focuses on understanding diagnostic teaching practices and aligning the needs of a diverse population of students. Course requirements will include designing and implementing responsive instruction and assessment, creating a community of learners, and exhibiting an understanding of the legal and professional responsibilities outlined on the Pedagogy and Professional Responsibility TExES test. Enrollment is limited to teacher candidates fully admitted into the Alternative Certification Program & completing an internship or student teaching with Advisor approval. Prerequisites: EDCB 514 & EDCB 566.

EDCB 517 - Reading and Learning in K-12 Content Areas
Hours: 3
(Same As EDCI 517) This course is designed for graduate students in the alternative certification program seeking initial teacher certification. The focus is on reading comprehension, conceptual development, and strategies for interacting with expository text and media. The role of the teacher, the structure of text, text analysis methods, and content area reading strategies are examined in relation to the student and the learning process. Research-based reading strategies are discussed as appropriate for all elementary and secondary grade levels.

EDCB 519 - Response to Intervention
Hours: 3
(Same As EDCI 519) This course will build capacity among students to implement the Response to Intervention framework in local and state education agencies. Participants will examine the RTI components of screening of students, monitoring student progress, providing evidence-based interventions and identifying students with special learning needs.

EDCB 520 - Generative AI Innovation in Curriculum Design
Hours: 3
This course explores cutting-edge practices in educational technology, focusing on generative AI and virtual reality applications in curriculum design. Students will learn to use AI tools to create interactive materials and resources and develop skills in AI prompting for effective curriculum development. The course provides a comprehensive overview of innovative practices in education technology.

EDCB 530 - Designing an AI Ecosystem in Education
Hours: 3
This course prepares educators to implement AI systems in educational settings. Topics include building professional development programs for teachers on innovative tools, developing communities of practice around educational technology, and creating strategies to gain support from parents and the community for AI integration in K-16 education.

EDCB 540 - Assessment Integrity and Analysis with Generative AI
Hours: 3
Focusing on the intersection of AI and educational assessment, this course covers student privacy protection, AI-assisted assessment development aligned with student learning outcomes, and AI applications in grading. Students will evaluate AI detectors and explore the reliability and validity of AI in high-stakes testing, using case studies.

EDCB 566 - Learning Environments and Instructional Design for the K-12 Classroom
Hours: 3
(Same as ECE 566) This course provides knowledge and practice in designing developmentally appropriate learning environments and instructional design with the use of technological and other tools/materials to advance learning in K-12 classrooms. Students will investigate the relationship between the classroom environment and instructional planning.

EDCB 585 - Research Methods with Innovative AI Tools
Hours: 3
This course examines the integration of Artificial Intelligence (AI) tools in the research process. Students will explore AI platforms for research applications, while addressing academic integrity concerns related to AI use. The course emphasizes ethical and effective utilization of AI in academic research methodologies.