EDCI - Education Curriculum & Instr

EDCI 491 Special Topics: 1-4 Credits (1-4 Lec)
PREREQUISITE: Course prerequisites as determined for each offering. Courses not required in any curriculum for which there is a particular one-time need, or given on a trial basis to determine acceptability and demand before requesting a regular course number. Repeatable up to 12 credits.

EDCI 501 Educational Statistics I: 3 Credits (3 Lec)
PREREQUISITE: STAT 216, graduate standing, or consent of instructor. The application of statistical processes to the analysis of educational data. Educational problems that require hypothesis testing, regression, estimation and the T-distribution, analysis of frequencies, and ANOVA in their solution will be included.

EDCI 504 Assessment and Evaluation in Education: 3 Credits (3 Lec)
PREREQUISITE: Graduate standing. Assessment and evaluation are ongoing processes in education. This course will engage students in a discussion regarding the construction, selection and use of formative, summative, selected response, written response, performance, personal communication, and other alternative assessment methods. In addition, students will be involved in weekly activities that allow them to analyze assessment and evaluation use at the classroom, program, and/or institutional levels.

EDCI 506 Applied Educational Research: 3 Credits (3 Lec)
PREREQUISITE: Graduate standing. Students are introduced to systematic scientific inquiry, its purpose in an educational environment, the different approaches to conducting educational research, and the major components of an educational research study. Providing a foundation for further study of research methodologies, students will identify and evaluate existing literature on a topic and conduct an educational research study. Course will address responsible conduct of research.

EDCI 510 Issues and Trends in Social Studies Instruction: 3 Credits (3 Lec)
PREREQUISITE: Graduate standing. Treats current issues & trends in social studies teaching and learning, with special focus on the social and political forces driving change in social studies education and the responses from the research and practice communities. Department of Education.

EDCI 512 Writing and Its Improvement: 3 Credits (3 Lec)
PREREQUISITE: Graduate standing. Advanced study in language arts pedagogy. Special attention is given to the writing process.

EDCI 514 Mentoring New Teachers: 3 Credits (3 Lec)
PREREQUISITE: Graduate standing. This course examines research relevant to the process of mentoring new teachers and supporting their professional development. Course content explores skills necessary for successful mentoring, the professional development needs of new teachers, and development of tools for monitoring and evaluation.

EDCI 519 Addressing Equity in Linguistic and Cultural Diversity: 3 Credits (3 Lec)
Examination of the school-society relationship in the United States and of the many issues and variables embedded in this relationship, including equal opportunity, human diversity, ideology, politics, and social change. Foundational perspectives (historical, political, social, and policy) will be explored.

EDCI 520 Visual Arts and Learning: 3 Credits (3 Lec)
PREREQUISITE: Graduate standing. Explores the importance of art in the lives of children and adolescents while finding ways to include art experiences in an integrated curriculum. Emphasizes philosophical and cultural groundings for teaching art, studio experiences and research potentials.

EDCI 521 Content Literacy: 3 Credits (3 Lec)
PREREQUISITE: This course is restricted to students admitted and enrolled in the Master of Arts in Teaching program. EDCI 521 Content Literacy offers literacy foundations (theory) and literacy strategies (practice) that will help content area teacher candidates enhance their students' understanding of discipline-specific content and skill.

EDCI 522 Info Resources & Services: 3 Credits (3 Lec)
PREREQUISITE: Graduate standing. A course in the use of information resources in research, reference, integration, and online learning. Topics include the use and evaluation of traditional and electronic information resources, design and selection of information resources for classrooms and libraries. Restricted to Library Media Certificate students.

EDCI 525 Improvement of Instruction in Science: 3 Credits (3 Lec)
PREREQUISITE: EDU 495 OR EDU 497. This course focuses on theoretical and practical concerns in science education. Research, conceptual frameworks and policy issues will be introduced, as well as teaching and learning activities for elementary and secondary science classrooms.

EDCI 530 Improvement of Math Instruction: 3 Credits (3 Lec)
PREREQUISITE: Graduate Standing. This course will focus on developing mathematical knowledge for teaching through the study of mathematics education literature, designing and testing mathematics lessons, diagnosing student errors, and using those errors as a bridge to better understanding.

EDCI 531 Contemporary Issues in Education: 3 Credits (3 Lec)
This course is designed to establish the necessary social, technical, and research, foundations for cohort groups in the Master's degree program. This course will examine critical issues in education including advanced pedagogy, Indian Education for All, and school law.

EDCI 532 General School Curriculum: 3 Credits (3 Lec)
PREREQUISITE: Graduate standing. A survey of developments in curriculum theory and the role of curriculum reform in school improvement initiatives. Also treated is the relationship between curriculum reform and implementation.

EDCI 533 Middle Years School: 3 Credits (3 Lec)
PREREQUISITE: EDU 495, graduate standing. History, philosophy and organization of Junior High and Middle schools, emphasizing curriculum and instruction based on the characteristics and needs of 10 to 13 year olds.

EDCI 534 Literacy Assessment and Instruction: 3 Credits (3 Lec)
PREREQUISITE: Graduate standing. Current theory and techniques in assessment of reading. Emphasis on instructional strategies and assessment tools developing the literacy of all students. A practicum is included.

EDCI 536 Construction of Curriculum: 3 Credits (3 Lec)
PREREQUISITE: Graduate standing. The development and evaluation of curriculum based on psychological and social foundations of curriculum, curriculum theory, developmental models, design issues, purposes, implementation plans and techniques for assessing the impact of curriculum change.
EDCI 538 Summer Youth Inquiry Camp: 3 Credits (3 Lec)
EDCI 538 Summer Youth Inquiry Camp orient new MAT secondary preservice teachers to the skills and knowledge base of engaging youth in classroom community building. The focus of the course is preparation for and participation in a week-long residential program of youth mentorship, sponsored by a partner youth advocacy organization. MAT preservice teachers will serve as assistant mentors in this community outreach program.

EDCI 539 Methods of Teaching: K-8 Arts and Health Enhancement through Inquiry Camp: 3 Credits (2 Lec, 1 Lab)
PREREQUISITES: M 419, EDCI 561 The purpose of this course is to develop an understanding of Arts and Health Enhancement (HE) standards and pedagogy and ways in which to implement these topics through examination of current theory and practice of Arts and HE education in grades K-8. This course also has a strong inclusive component as it integrates field experience participation pairs MAT students with children with diverse support needs for a week-long camp experience (1Lab, 2Lec) (2 Lec, 1 Lab).

EDCI 540 American Indian Studies for Ed: 3 Credits (3 Lec)
This course serves to equip teachers with the skills, knowledge, and dispositions to meet Indian Education for All requirements for the state of Montana, and fulfills similar expectations in surrounding states. Instruction pertains to the history, traditions, customs, values, beliefs, and contemporary affairs of American Indians, particularly tribal groups in the Northern Plains Region.

EDCI 541 History & Philosophy of Education: 3 Credits (3 Lec)
PREREQUISITE: Graduate standing. In its classical obligation, philosophy meant “a love of learning.” This course traces the growth of cultural and intellectual awareness in human civilizations and examines how we humans learned to create tools for the mind. Teachers learn to see the nature of formal cultural systems in the way they developed, and to recognize the central concepts that are the key to learning any subject

EDCI 542 Creative Processes in Education: 3 Credits (3 Lec)
PREREQUISITE: Graduate standing. Reviews historical and current issues in art education, aesthetic education and related areas which inform how we know our world and construct meaningful ways to pursue creative endeavors. Emphasizes documentation and research while acknowledging growth as teachers and artists -Department of Education.

EDCI 543 Introduction to Curriculum Design and Assessment: 1 Credits (1 Lec)
PREREQUISITES: Must be enrolled in the Master of Arts in Teaching program. Fundamental concepts of educational curriculum planning and assessment for classroom teachers, including the relationship of assessment to educational standards and learning activities, quality of assessment, principles of item construction, evaluation of student responses, interpretation of results, improvement of techniques, and differentiation of planning

EDCI 544 Philosophical Issues in Education: 3 Credits (3 Lec)
PREREQUISITE: Graduate standing. An examination of contemporary educational issues using the perspectives of traditional and contemporary philosophical documents

EDCI 545 Organization of Information in School Library Media Centers: 3 Credits (3 Lec)
PREREQUISITE: Graduate standing. In this course students learn application of descriptive and subjective cataloging content and procedures including: Dewey Decimal and other classification schemes, Sears and Library of Congress subject headings, MARC records, and RDA rules. Technology issues for automation and management of library holdings are also examined. Restricted to Library Media Certificate students

EDCI 546 Administration of the School Library: 3 Credits (3 Lec)
PREREQUISITE: Graduate standing and admission to the library media certificate program. Explore trends, procedures, and techniques in the administration of the school library including management, leadership skills, budgeting, facility design, and evaluation techniques

EDCI 547 Inquiry Based Learning for School Librarians: 3 Credits (3 Lec)
Develop skills and strategies for teaching inquiry-based learning in the school library and in collaboration with other educators. Design lesson and/or unit plans that provide standards-based instruction that address library and content standards. Design assessment and evaluation tools to measure learner’s achievement on library standards.

EDCI 548 Collection Development for School Libraries: 3 Credits (3 Lec)
PREREQUISITE: Graduate standing and admission to the library media certificate program. Examine the principles and explore approaches to the management, development, use, and evaluation of diverse, equitable, and inclusive library collections in school library media centers

EDCI 549 Applications of Literature for Children and Young Adults: 3 Credits (3 Lec)
PREREQUISITE: Graduate standing. This course presents an overview of materials for educational, informational, and literary use by children and young adults (YA) with an emphasis on critical selection and analysis, knowledge of age-level developmental stages, and motivational techniques in libraries. Restricted to Library Media program students

EDCI 550 School Library Ethics & Advocacy: 3 Credits (3 Lec)
PREREQUISITE: Graduate Standing and admission to the Library Media Certificate Program. Apply library ethical principles to the daily work of the school librarian, with particular attention to equity, access, copyright, privacy, and intellectual freedom. Develop a school library advocacy plan with communication strategies to use with various stakeholders, including school and district administrators

EDCI 551 Education Technology: Teaching, Learning, and Leadership: 3 Credits (3 Lec)
PREREQUISITE: Graduate standing. Strategies to harness the power of technology to enhance teaching and learning while promoting 21st century skills, productivity, assessment and communication

EDCI 552 Human Development and the Psychology of Learning: 3 Credits (3 Lec)
A course on the psychology of learning, including social, developmental, cultural, and cognitive aspects. We examine constructivist and social constructivist theories of education, and study the role language, symbols, concepts, and cultural systems play in the life of the mind. We study models and strategies for creating effective learning communities and for building school curriculum around the deep semantic structures and foundational perspectives of the disciplines. Also includes an Early Field Experience.

EDCI 553 Inclusive Strategies for Classroom Organization: 3 Credits (3 Lec)
We will examine how teachers work to build a coherent and supportive community responsive to the unique strengths and needs of each learner. Informed by the principles of universal design for instruction, we will examine and build organizational structures that sustain individual students’ cultural, learning, social, and behavioral needs in light of local, state and national requirements. This course is restricted to students enrolled in the online Master of Arts in Teaching program.
EDCI 554 Methods of Secondary Teaching: 5 Credits (5 Lec)
This is a course on the pedagogical dimensions of schooling. We cover practical strategies for the design and implementation of curriculum, the design and effective uses of evaluation, alignment of curriculum and assessments with standards, and strategies for meeting the needs of all learners by means of appropriate accommodations, adjustments, and interventions. Topics also include strategies to promote student understanding, meeting the needs of ESL students, lesson delivery, motivational techniques for instruction and assessment, and effective work with families and colleagues. This course integrates the topics of curriculum design, pedagogy, and assessment.

EDCI 555 Technology, Instructional Design, and Learner Success: 2 Credits (2 Lec)
PREREQUISITE: Must be enrolled in the Master of Arts in Teaching program. EDCI 555 provides students with a foundation for the skills needed to effectively integrate educational technology tools and resources in a variety of K-12 contexts. This will include a focus on deliberate and intentional uses of technology that are pedagogically-sound and aligned with the research and issues currently shaping the use of educational technology.

EDCI 556 The Legal, Social, and Practical Basis of Schooling: 3 Credits (3 Lec)
This is a course on the history of American educational traditions, institutions, practices, policies, and legal rulings as configured within the framework of democratic institutions. This course informs the judgment of teachers by helping them understand schools as integral with the social, political, ideological, economic, and cultural contexts of the societies they serve. Includes practical information on governance structures, unions, school law, ethics, and the culture of the school as a professional workplace.

EDCI 557 Brain Science, Educational Research, and Teaching: 3 Credits (3 Lec)
This course examines key theories and concepts on the psychology of learning, from behaviorism through gestalt psychology to current variations of constructivism and cognitive science. Topics include brain imaging, cognitive science, a taxonomy of knowledge types, the power of narrative in learning, and a practical study in establishing curricular coherence through the use of foundational perspectives of the subject matter.

EDCI 558 Methods of Teaching Secondary 2: 3 Credits (2 Lec, 1 Lab)
This course provides a research and classroom based study of general teaching methods and covers topics such as culturally responsive teaching, differentiated instruction, and data-driven decision making. Topics also include strategies to promote student understanding, meeting the needs of ESL students, lesson delivery, motivational techniques for instruction and assessment, and effective work with families and colleagues.

EDCI 559 Internship: Equity, Special Needs, and Diversity: 3 Credits (3 Lec)
This course focuses on the practical implementation of professional knowledge, skills, and dispositions in the social dimensions of teaching, knowing how to manage a classroom and development an effective learning community. It provides a research and classroom based study of equity; special education laws, theory and practice; diversity, directing theory into practice; and meeting national, state and local standards.

EDCI 561 Language Acquisition: Decoding and Encoding: 3 Credits (3 Lec)
PREREQUISITE: Must be enrolled in the Master of Arts in Teaching program. The course introduces students to: (1) literacy fundamentals and (2) how a teacher can be an academic coach-guide who helps all students experience success. Course topics include approaches to reading and how the alphabetic code aids in decoding/word recognition and encoding/spelling.

EDCI 563 Language and Literacy Teaching and Assessment: 3 Credits (3 Lec)
PREREQUISITE: Must be enrolled in the Master of Arts in Teaching program. This class is based on the understanding that reading is a complex, multi-faceted process, which involves active processing of text. Skilled readers have strong word recognition skills, are fluent, possess an expansive vocabulary, and understand that reading is the construction of meaning. While reading, they self-regulate and use any number of fix-up strategies when comprehension breaks down. Struggling or striving readers benefit from a teacher who can guide them to become competent, strategic readers. Additionally, such a teacher knows how to use formative assessments to inform instruction. How these topics interface is the focus of this class.

EDCI 564 The Comprehensive Portfolio: 3 Credits (3 Lec)
This course guides the process of creating the capstone Comprehensive Portfolio in which students summarize all of their learning from the NPTT program and demonstrate how that learning has manifested in the success of the K-12 learners they teach. We study the use of portfolios as a mechanism for authentic assessment of professional practice by various professional organizations. Students engage in self-critique, peer evaluations, and the professional evaluation of your portfolio by faculty and other professional evaluators, and model the habits of self-study, reflection, and critique expected of teachers as life-long learners.

EDCI 565 Methods of Teaching: K8 Mathematics: 2 Credits (2 Lec)
PREREQUISITES: M 419 and EDCI 561
This course focuses on mathematics knowledge for teaching and research-based mathematics teaching methods in the K-8 classroom.

EDCI 566 Methods of Teaching: K8 Science: 2 Credits (2 Lec)
PREREQUISITES: M 419 and EDCI 561
This course focuses on teaching science in elementary and middle school settings. The content is based on cognitive psychology of learning and the structure of scientific disciplines. Emphasis is on teaching by inquiry and self-reflection on teaching practices.

EDCI 567 Methods of Teaching: K8 Language Arts: 2 Credits (2 Lec)
PREREQUISITES: M 419 and EDCI 561
The intent of EDCI 567 is to acquaint you with the current theory and practice of English Language Arts (ELA) education in grades K-8. The course focuses on preparing you to assume responsibilities as responsive teachers and informed professionals who can contribute to dialogues regarding K-8 ELA education. This course provides instruction in best practices for teacher candidates which links current theory and practice of literacy instruction in grades K-8.

EDCI 568 Methods of Teaching: K-8 Social Studies: 2 Credits (2 Lec)
PREREQUISITES: M419 and EDCI 561
EDCI 568 engages prospective K-8 teachers with the theory, research, and practice of social studies education. EDCI 568 integrates initial teacher licensure requirements with graduate level analysis. Course topics examine current issues and trends in K-8 social studies education; characteristics and dispositions of effective social studies teachers; strategies to promote student social understanding, civic efficacy, critical thinking, and engagement; and professional reflectivity.

EDCI 569 Reflective Inquiry in Rural Education: 3 Credits (3 Lec)
The course is designed for students to engage in professional inquiry and analysis of theory, research, and practices that support and sustain effective rural teachers from recruitment to retirement. Students will construct a deep understanding of the complexities of the nature and work of rural teachers, including the knowledge, skills, and attitudes needed to thrive in rural classrooms, rural schools, and rural communities in Montana and beyond. Integration of theory, research, and practice will be emphasized.
EDCI 571 In-Service Education: 1-4 Credits (1-4 Lec)
PREREQUISITE: Graduate standing and employment by sponsoring school organization. An approved supervised group study of an educational problem within a local school supervised by an MSU faculty member which culminates in a special report to be filed with the local district and the Department of Education.
Repeatable up to 4 credits.

EDCI 575 Professional Paper/Project: 3 Credits (3 Other)
PREREQUISITE: Graduate standing, MSSE 501, EDCI 504, EDCI 505, EDCI 509 or equivalent. This is the culminating research course in which students implement and report their research findings. The topic must have been mutually agreed upon by the student and his or her major advisor and graduate committee.
Repeatable up to 6 credits.

EDCI 577 Internship: OPI Teacher Certification: 1 Credits (1 Other)
PREREQUISITE: Consent of instructor and approval of department head. An internship course restricted to OPI teacher certification students.
Repeatable up to 99 credits.

EDCI 578 Internship-BPE Teacher Certification-Library Media: 1-2 Credits (1-2 Other)
PREREQUISITE: Must be in the Department of Education BPE Internship program. An internship course restricted to BPE teacher certification students enrolled in the Library Media Certificate program.
Repeatable up to 7 credits.

EDCI 588 Western Transportation Institute: Connecting Rural Students to Road Science Research: 1-3 Credits (3 Lec, 3 Lab, 3 Other)
Courses offered on a one-time basis to fulfill professional development needs of in-service educators. A specific focus is given to each course which is appropriately subtitled.
Repeatable up to 6 credits.

EDCI 589 Graduate Consultation: 1-3 Credits (1-3 Other)
PREREQUISITE: Master's standing and approval of the department head. This course may be used only by students who have completed all of their coursework (and thesis if on a thesis plan) but who need additional faculty or staff time or help.
Repeatable up to 6 credits.

EDCI 590 Master's Thesis: 1-10 Credits (1-10 Other)
PREREQUISITE: Master's standing. Restricted Entry: Requires contract with major advisor. May be repeated.
Repeatable up to 99 credits.

EDCI 591 Special Topics: 4 Credits (4 Lec)
PREREQUISITE: Upper division courses and others as determined for each offering. Courses not required in any curriculum for which there is a particular one time need, or given on a trial basis to determine acceptability and demand before requesting a regular course number.
Repeatable up to 12 credits.

EDCI 592 Independent Study: 1-3 Credits (1-3 Other)
PREREQUISITE: Graduate standing, consent of instructor, and approval of department head. Directed research and study on an individual basis.
Repeatable up to 6 credits.

EDCI 595 Student Teaching: 1-6 Credits (1-6 Lab)
MAT secondary student teaching (EDCI 595) is a full time 14-week unpaid teaching experience that takes place in a classroom setting. Successful student teaching is required for initial teacher licensure. It is a university supervised instructional experience. The teacher candidate shadows a mentor or cooperating teacher. A field supervisor is assigned by the university to act as a liaison between the university and the cooperating teacher. The teacher candidate's teaching performance is evaluated by the cooperating teacher and the field supervisor.

EDCI 598 Internship: 1-12 Credits (1-12 Other)
PREREQUISITE: Graduate standing, consent of instructor and approval of department head. An individualized assignment arranged with a school, agency, business or other organization to provide guided experience in the field.
Repeatable up to 12 credits.

EDCI 604 Advanced Educational Psychology: 3 Credits (3 Lec)
PREREQUISITES: Graduate standing or permission of the instructor. An examination of theory and research related to the diverse learning and motivation needs of K-12 students. Practical implications for effective teaching will be identified throughout the course.

EDCI 690 Doctoral Thesis: 1-12 Credits (1-12 Other)
PREREQUISITE: Doctoral standing. Restricted Entry: Requires contract with major advisor. Course will address responsible conduct of research.
Repeatable up to 99 credits.