EDCI - Education Curriculum & Instr

EDCI 501. Educational Statistics I. 3 Credits. (3 Lec) F,S,Su
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) F
PREREQUISITE: Graduate standing. Evaluation as an ongoing process in education. This course will engage students in a discussion regarding the construction, selection and use of criterion-referenced, norm-referenced, and alternative assessment methods. In addition, students will be involved in special projects which allow them to explore evaluation at the classroom and program levels.

EDCI 505. Foundations of Action Research in Teaching and Learning. 3 Credits. (3 Lec) On Demand
PREREQUISITE: Graduate standing. This course presents an overview of classroom-based research for practicing teachers. Students will explore the role of action research in teacher professional development, and review multiple models and methods for action research. Participants will gain experience in data collection and analysis, and will prepare an action research proposal.

EDCI 506. Applied Educational Research. 3 Credits. (3 Lec) F,S,Su
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 509. Implementing Action Research in Teaching and Learning. 3 Credits. (3 Lec) On Demand
PREREQUISITE: EDCI 505 or another foundational course in action research. In this course, students will implement the research design created in EDCI 505 or in a similar course. This will include developing and refining techniques for gathering classroom data, using multiple strategies for data analysis, and communicating the research results in a professional report and in presentation to more than one audience (e.g. other educators, community members).

EDCI 510. Issues and Trends in Social Studies Instruction. 3 Credits. (3 Lec) S
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.

EDCI 512. Writing and Its Improvement. 3 Credits. (3 Lec) On Demand
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) F
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 518. Master Teaching Strategies for Science Educators. 3 Credits. (3 Lec) On Demand
PREREQUISITE: Graduate standing. A professional development class for practicing science educators to learn master teaching strategies to engage grade 6 - 12 students learning science. Intended as a "gateway" online class for teachers interested in exploring an online course in consideration of the MSSE degree. Course an elective for the MSSE degree.

EDCI 520. Visual Arts and Learning. 3 Credits. (3 Lec) On Demand
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 522. Info Resources & Services. 3 Credits. (3 Lec) S
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) S
PREREQUISITE: EDU 495 OR EDCI 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) F
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)Su
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) On Demand
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) On Demand
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) On Demand
PREREQUISITE: EDU 330, EDU 431, teaching experience. 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) On Demand
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 537. Contemporary Issues in Science Education. 2 Credits. (2 Lec) On Demand
PREREQUISITE: Graduate standing. This seminar style course focuses on current problems and controversial issues in science education. Emphasis is placed on those issues which relate directly to science teaching, learning and curriculum. Students investigate a variety of issues especially as they relate to their own teaching practices and student learning in their classroom.

EDCI 540. American Indian Studies for Ed. 3 Credits. (3 Lec) On Demand
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. (2 Lec) On Demand
PREREQUISITE: Graduate standing. This seminar style course focuses on current problems and controversial issues in science education. Emphasis is placed on those issues which relate directly to science teaching, learning and curriculum. Students investigate a variety of issues especially as they relate to their own teaching practices and student learning in their classroom.

EDCI 542. Creative Processes in Education. 3 Credits. (3 Lec) On Demand
PREREQUISITE: EDU 495, 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.

EDCI 544. Philosophical Issues in Education. 3 Credits. (3 Lec) On Demand
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) F
PREREQUISITE: EDU 370 or equivalent and graduate standing. This course students learn application of descriptive and subjective cataloging content and procedures including: Dewey Decimal Classification, Library of Congress headings, AACR II rules, and examine technology issues for automation and management of library holdings. Restricted to Library Media Certificate students.

EDCI 546. School Library Media Specialist. 3 Credits. (3 Lec) Su
PREREQUISITE: EDU 370 or equivalent and graduate standing. This course will examine the management and leadership role of the school library media specialist and how the library media center fits into the educational setting. Restricted to Library Media Certificate students.

EDCI 547. Info Inquiry & Ed Change. 3 Credits. (3 Lec) F
PREREQUISITE: EDU 370 or equivalent and graduate standing. This course presents prospective school library media specialists with content and strategies for working with teachers to incorporate information literacy and media literacy into a changing curriculum and explore information inquiry models. Also included are topics affecting change in libraries and education such as: filtering, censorship, digital ethics, new technologies and other topics as relevant to inquiry and integration. Restricted to Library Media Certificate students.

EDCI 548. Management of Information & Resources. 3 Credits. (3 Lec) Su
PREREQUISITE: EDU 370 or equivalent and graduate standing. Students learn the management, development, use, and evaluation of materials for building library collections in K-12 library media centers. Restricted to Library Media Certificate students.

EDCI 549. Applications of Literature for Children and Young Adults. 3 Credits. (3 Lec) S
PREREQUISITE: EDU 370 or equivalent and 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 551. Education Technology: Teaching, Learning, and Leadership. 3 Credits. (3 Lec) On Demand
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 552. Human Development and the Psychology of Learning. 3 Credits. (3 Lec) On Demand
This is a course on the social dimensions of human learning. We examine how teachers work to build a coherent and supportive community of learners responsive to the unique needs and characteristics of all students. Topics include diversity, learning styles, special needs, disabilities, classroom management, positive discipline, working with families, and meeting the requirements of local, state and national requirements while effectively serving the needs of all students.

EDCI 554. Curriculum Design, Pedagogy, & Assessment. 3 Credits. (3 Lec) On Demand
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. This course integrates the topics of curriculum design, pedagogy, and assessment.

EDCI 555. Technology, Instructional Design, and Learner Success. 3 Credits. Instructional Media; Using Electronic Resources; Software for curriculum and Lesson design; using assessment as an instructional tool; techniques for engaging learners in diverse instructional media; Classroom record keeping systems.

EDCI 556. The Legal, Social, and Practical Basis of Schooling. 3 Credits. (3 Lec) S
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) Su
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. Internship: Methods of Teaching. 3 Credits. (3 Lec) F
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) F
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 develop 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 564. The Comprehensive Portfolio. 3 Credits. (3 Lec) S
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 within school and other 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 571. In-Service Education. 1-4 Credits. (1-4 Lec; 4 cr max) On Demand PREREQUISITE: Graduate standing and employment by sponsoring school organization. An approved supervised group study of an educational problem with a local school supervised by an MSU faculty member which culminates in a special report to be filed with the local district and the.

EDCI 575. Professional Paper/Project. 3 Credits. (3 Ind; 6 cr max) F,S,Su 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.

EDCI 577. Internship: OPI Teacher Certification. 1 Credit. (1 Ind) F,S,Su PREREQUISITE: Consent of instructor and approval of department head. An internship course restricted to OPI teacher certification students.

EDCI 578. Internship-BPE Teacher Certification-Library Media. 1-2 Credits. (1-2 Ind; 7 max) F,S,Su PREREQUISITE: Must be in the An internship course restricted to BPE teacher certification students enrolled in the Library Media Certificate program.

EDCI 588. Professional Development. 1-3 Credits. (1-3 Lab; 3 cr max) On Demand Courses offered on a one-time basis to fulfill professional development needs in service educators. A specific focus is given to each course which is appropriately subtitled.

EDCI 589. Graduate Consultation. 1-3 Credits. (1-3 Ind) F,S,Su 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 (thesis and if on a thesis plan) but who need additional faculty or staff time or help.

EDCI 590. Master’s Thesis. 1-10 Credits. (1-10 Ind; max unlimited) F,S,Su PREREQUISITE: Master's standing. Restricted Entry: Requires contract with major advisor. May be repeated.
EDCI 591. Special Topics. 1-4 Credits. (1-4 Lec; 12 cr max) On Demand
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.

EDCI 592. Independent Study. 1-3 Credits. (1-3 Ind; 6 cr max) On Demand
PREREQUISITE: Graduate standing, consent of instructor, and approval of
department head. Directed research and study on an individual basis.

EDCI 598. Internship. 1-12 Credits. (1-12 Ind; 12 cr max)F,S,Su
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.

EDCI 604. Advanced Educational Psychology. 3 Credits. (3 Lec)S
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. (1-10 Ind; max unlimited) F,S,Su
PREREQUISITE: Doctoral standing. Restricted Entry: Requires contract with
major advisor. Course will address responsible conduct of research.
Font Notice

This document should contain certain fonts with restrictive licenses. For this draft, substitutions were made using less legally restrictive fonts. Specifically:

Times was used instead of Adobe Garamond Pro.

The editor may contact Leepfrog for a draft with the correct fonts in place.