EDCH 502 Emergent Literacy  3 Credits
This introductory course focuses on the importance of literacy and the teaching skills needed to become a proficient teacher of reading. Meeting the needs of diverse learners (diverse in interest, needs, ability, etc.) with appropriate materials, activities and instructional approaches will be an ongoing discussion woven through the course content. All language processes will be addressed with an appreciation that they are interrelated and support each other. Students will create materials for reading instruction that reflect knowledge of 'best practice' as concluded from research and described in course readings.

EDCH 509 Literacy and the Arts in the Elementary Classroom  3 Credits
Strategies for effective literacy instruction with diverse populations of students will be examined for efficacy. These strategies include research-based approaches with demonstrated success for use with students with disabilities, English Language Learners, Gifted and Talented students and any other students with identified special and/or unique educational needs. Students will examine the qualities that make a successful match with students' needs in the areas of reading, writing, speaking and listening, as well as how to incorporate differentiated instruction based on those needs in a classroom context. Multicultural literature and literature that deals with specific disabilities will be examined for applications in the curriculum. 30 hours of field experience are required.

EDCH 515 Assessment for Instruction  3 Credits
An in-depth study of formal and informal assessment strategies. Utilization of assessment for planning, evaluation and instructional program improvement to provide continuous intellectual, social, emotional and physical development of elementary-aged students will be studied. Candidates will become familiar with norm referenced, criterion-referenced and performance instruments.

EDCH 540 Childhood Learning and Development  3 Credits
The application to classroom practice of the principles of effective learning and the role of motivation and a consideration of motivation and self-worth will be studied. Candidates will critically review basic brain and nerve structure and function as it applies to learning and teaching. Attention will be directed toward the constructs of intelligence, creativity, meta-cognition, transfer of learning and learning styles. Specific theories including those of Skinner, Piaget, Vygotsky and Covington will be analyzed and critiqued. Classroom management options will be considered.

EDCH 543 Elementary Mathematics Instruction  3 Credits
Methods and strategies for developing children's knowledge and skills in number systems, early geometry, arithmetical operations, fractions and decimals, probability and statistics will be examined. Candidates will develop proficiency in the use of instructional and informational technologies to support mathematics. Instruction will be aligned with Common Core Learning Standards. Assessment practices and research regarding mathematics knowledge and skill development will be integrated with teaching methodology.

EDCH 545 Elementary Science Instruction  3 Credits
Methods and strategies for developing children's knowledge and understanding of earth/space science, physical science and the life sciences will be addressed. Candidates will develop proficiency in the use of instructional and informational technologies and hands on activities to support science learning. Instruction will be aligned with the New York State Mathematics, Science and Technology Standards. Application of research in education and formative and summative assessment practices will be stressed.

EDCH 546 Elementary Social Studies Instruction  3 Credits
An in-depth consideration of ethnic, economic, and racial cultures found in elementary schools will share the focus of this course with instructional methods and strategies necessary for effective instruction in the areas of geography, history, anthropology and economics. Use of technology and New York State Learning Standards will be considered as they pertain to cultural diversity and social studies instruction. The role of family, peer and parental involvement in society and the culture of schooling will be studied.

EDCH 547 Social Studies for the Elementary Classroom  3 Credits
Methods and strategies for developing children's knowledge and understanding of social studies will be addressed. Candidates will develop proficiency in the use of instructional and informational technologies to support social studies instruction. The focus of the course will be to align instruction with New York State Learning Standards. Assessment practices and research regarding social studies knowledge and skill development will be integrated with teaching methodology.

EDCH 550 Integrating Content Areas  3 Credits
Methods and strategies for developing children's knowledge and skills in language arts and mathematics will be addressed. Candidates will develop proficiency in the use of instructional and informational technologies to support language arts and mathematics instruction. Instruction will be aligned with Common Core Learning Standards. Assessment practices and research regarding language arts and mathematics knowledge and skill development will be integrated with teaching methodology.

EDCH 551 Literacy Across the Curriculum: A Link Between Language Arts and Mathematics  3 Credits
Methods and strategies for developing children's knowledge and skills in language arts and mathematics will be addressed. Candidates will develop proficiency in the use of instructional and informational technologies to support language arts and mathematics instruction. Instruction will be aligned with Common Core Learning Standards. Assessment practices and research regarding language arts and mathematics knowledge and skill development will be integrated with teaching methodology.

EDCH 552 Literacy and Numeracy: An Interdisciplinary Approach  3 Credits
Methods and strategies for developing children's knowledge and skills in language arts and mathematics will be addressed. Candidates will develop proficiency in the use of instructional and informational technologies to support language arts and mathematics instruction. Instruction will be aligned with Common Core Learning Standards. Assessment practices and research regarding language arts and mathematics knowledge and skill development will be integrated with teaching methodology.

EDCH 553 Interdisciplinary Approaches to Teaching Social Studies  3 Credits
Methods and strategies for developing children's knowledge and skills in social studies will be addressed. Candidates will develop proficiency in the use of instructional and informational technologies to support social studies instruction. Instruction will be aligned with New York State Learning Standards. Assessment practices and research regarding social studies knowledge and skill development will be integrated with teaching methodology.

EDCH 554 Social Studies for the Elementary Classroom  3 Credits
Methods and strategies for developing children's knowledge and understanding of social studies will be addressed. Candidates will develop proficiency in the use of instructional and informational technologies to support social studies instruction. The focus of the course will be to align instruction with New York State Learning Standards. Assessment practices and research regarding social studies knowledge and skill development will be integrated with teaching methodology.

EDCH 555 Creative Thinking and Problem-Solving  3 Credits
Methods and strategies for developing children's knowledge and skills in creative thinking and problem-solving will be addressed. Candidates will develop proficiency in the use of instructional and informational technologies to support creative thinking and problem-solving instruction. Instruction will be aligned with New York State Learning Standards. Assessment practices and research regarding creative thinking and problem-solving knowledge and skill development will be integrated with teaching methodology.

EDCH 556 Innovative Approaches to Teaching Science  3 Credits
Methods and strategies for developing children's knowledge and skills in science will be addressed. Candidates will develop proficiency in the use of instructional and informational technologies to support science instruction. Instruction will be aligned with New York State Science and Technology Standards. Assessment practices and research regarding science knowledge and skill development will be integrated with teaching methodology.

EDCH 557 Hands-On Learning: Science and Technology  3 Credits
Methods and strategies for developing children's knowledge and skills in science and technology will be addressed. Candidates will develop proficiency in the use of instructional and informational technologies to support science and technology instruction. Instruction will be aligned with New York State Science and Technology Standards. Assessment practices and research regarding science and technology knowledge and skill development will be integrated with teaching methodology.

EDCH 558 Science for the Elementary Classroom  3 Credits
Methods and strategies for developing children's knowledge and understanding of science will be addressed. Candidates will develop proficiency in the use of instructional and informational technologies to support science instruction. Instruction will be aligned with New York State Science and Technology Standards. Assessment practices and research regarding science knowledge and skill development will be integrated with teaching methodology.

EDCH 559 Project-Based Learning in Science  3 Credits
Methods and strategies for developing children's knowledge and skills in science will be addressed. Candidates will develop proficiency in the use of instructional and informational technologies to support science instruction. Instruction will be aligned with New York State Science and Technology Standards. Assessment practices and research regarding science knowledge and skill development will be integrated with teaching methodology.

EDCH 560 Developing Science Inquiry Skills  3 Credits
Methods and strategies for developing children's knowledge and skills in science inquiry will be addressed. Candidates will develop proficiency in the use of instructional and informational technologies to support science inquiry instruction. Instruction will be aligned with New York State Science and Technology Standards. Assessment practices and research regarding science inquiry knowledge and skill development will be integrated with teaching methodology.

EDCH 561 Action Research in Education  3 Credits
The purpose of this course is to enable teacher candidates to develop an understanding of the action research process that will inform and transform their classroom practice. The focus of the course will encompass those skills necessary for examining one's own practice to make informed data driven decisions. Candidates will engage in an action research project related to an area of interest in their own teaching. They will examine the problem by critically analyzing current literature in the field to formulate a research question. The course develops skills and engage candidates all phases of the research process from project inception to the presentation of findings. In addition, students will learn how to critically analyze research studies, discuss ethical considerations in conducting research, and understand the importance of scientific research for educational policy and practice.