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 570 Seminar in Teaching and Assessment: Childhood 3 Credits
This course is intended to prepare students for the broader responsibilities required in student teaching. In childhood-level settings, grades 1-6, students will begin to plan and teach lessons, as well as continue to observe master teachers. They will prepare classroom materials, design long-range plans and examine site based parent involvement projects. On-campus meetings will provide opportunities for professional reflection with a team and workshop experiences on topics related to classroom management, increasing family involvement, teaching to higher standards and assessment. 70 hours of field experience required. This course is normally taken during the semester prior to student teaching.

EDCH 593 Student Teaching: Childhood 9 Credits
Requires two supervised teaching placements in schools appropriate to certification level and includes experience in high-needs schools or schools serving socio-economically disadvantaged students.

Prerequisite: required coursework and an overall QPA of 3.0. Some school districts may require tuberculosis or other health tests.

EDCH 594 Student Teaching Seminar 0 Credits
Student Teaching Seminar enhances the student teaching experience through opportunities to foster professional growth and guided reflection on planning, instruction and assessment of learning. The course provides a professional learning community to assist candidates in the transition to careers in teaching.

EDCH 599 Independent Study 3 Credits
Independent studies require an application and approval by the associate dean.

Prerequisite: permission of the instructor, department chair, & associate dean.

EDCH 615 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.