Curriculum and Instruction

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COLLEGE OF EDUCATION AND HUMAN SERVICES

Graduate Faculty:

Bacon, Heidi, R., Assistant Professor, Ph.D. University of Arizona, 2014; 2014.

Barrette, Pierre P., Associate Professor, *Emeritus,* Ed.D, University of Massachusetts, 1971; 1978.

Bauner, Ruth E., Associate Professor, *Emerita,* Ph.D., Southern Illinois University Carbondale, 1978; 1956.

Becker, Jerry P., Professor, Ph.D., Stanford University, 1967; 1979.

Bedient, Douglas, Professor, *Emeritus,* Ph.D., Southern Illinois University Carbondale, 1971; 1969.

Boykin, Arsene O., Associate Professor, *Emeritus,* Ed.D., University of Illinois, 1964; 1972.

Bu, Lingguo, Associate Professor, Ph.D., Florida State University, 2008; 2008.

Byfield, LaVern, Assistant Professor, Ph.D. University of Illinois, 2012; 2012.

Campbell, James A., Associate Professor, *Emeritus,* Ph.D., Ohio State University, 1978; 1989.

Copenhaver, Ron, Associate Professor, *Emeritus,* Ed.D., Indiana University, 1979; 1978.

Coscarelli, William, Professor, *Emeritus,* Ph.D., Indiana University, 1977; 1986.

Dale, Doris C., Professor, *Emerita,* D.L.S., Columbia University, 1968; 1969.

Dixon, Billy G., Associate Professor, *Emeritus,* Ph.D., Southern Illinois University Carbondale, 1967; 1961.

Erickson, Lawrence, Professor, *Emeritus,* Ph.D., University of Wisconsin, 1972; 1984.

Fadde, Peter, Professor, Ph.D., Purdue University, 2002; 2003.

Gilbert, Sharon L., Associate Professor, *Emerita,* Ph.D., Ohio State University, 1988; 1988.

Hungerford, Harold R., Professor, *Emeritus,* Ph.D., Southern Illinois University Carbondale, 1970; 1965.

Jackson, James, Associate Professor, *Emeritus,* Ph.D., University of Wisconsin, 1976; 1976.

Jackson, Michael, Professor, *Emeritus,* Ed.D., University of Florida, 1971; 1971.

Jones, Dan R., Associate Professor, *Emeritus,* Ed.D., Indiana University, 1978; 1978.

Karmos, Ann, Associate Professor, *Emerita,* Ph.D., Southern Illinois University Carbondale, 1975; 1975.

Killian, Joyce, Professor, *Emerita,* Ph.D., Pennsylvania State University, 1980; 1981.

Lamb, Morris L., Associate Professor, *Emeritus,* Ed.D., University of Oklahoma, 1970; 1970.

Lin, Cheng-Yao, Associate Professor, Ph.D., University of Illinois at Urbana-Champaign, 2003; 2004.

Loh, Christian Sebastian, Associate Professor, Ph.D., University of Georgia, 2004; 2004.

Malone, Willis E., Professor, *Emeritus,* Ph.D., Ohio State University, 1950; 1939.

Matthias, Margaret, Professor, *Emerita,* Ph.D., Southern Illinois University Carbondale, 1972; 1969.

McIntyre, Christina C., Associate Professor and *Department Chair*, Ph.D., Georgia State University, 2007; 2008.

McIntyre, D. John, Professor, *Emeritus,* Ed.D., Syracuse University, 1977; 1977.

Miller, Grant R., Associate Professor, Ph.D., Boston College, 2007; 2007.

Mogharreban, Catherine N., Associate Professor, Ph.D., Southern Illinois University, 1990; 1998.

Moore, Eryn E., Assistant Professor, *Emerita,* Ph.D., Southern Illinois University Carbondale, 1976; 1968.

Nelson, Joann N., Assistant Professor, *Emerita,* Ph.D., University of Illinois, 1980; 1982.

Norris, William, Associate Professor, *Emeritus,* Ed.D., Indiana University, 1973; 1977.

Pearlman, Susan F., Associate Professor, *Emerita,* Ph.D., University of Missouri-Columbia, 1987; 1989.

Post, Donna M., Associate Professor, *Emerita,* Ph.D., Pennsylvania State University, 1990; 1990.

Pultorak, Edward G., Professor, Ph.D., Indiana University, 1988; 1988.

Shelby-Caffey, Crystal V., Assistant Professor, Ph.D., Southern Illinois University Carbondale, 2008; 2009.

Shepherd, Terry R., Associate Professor, *Emeritus,* Ph.D., University of Illinois, 1971; 1971.

Shrock, Sharon A., Professor, *Emerita,* Ph.D., Indiana University, 1978; 1984.

Smith, Lynn C., Associate Professor*, Emerita,* Ph.D., University of Georgia, 1984; 1984.

Solliday, Michael, Associate Professor, *Emeritus,* Ph.D., Southern Illinois University Carbondale, 1975; 1967.

Thompson, Stacy D., Associate Professor, Ph.D., Iowa State University, 1998; 2005.

Volk, Gertrude, Professor, *Emerita,* Ph.D., Southern Illinois University, 1983; 1987.

Waggoner, Jan E., Associate Professor*, Emerita,* Ed.D., Memphis State University, 1990; 1990.

Wise, Kevin C., Professor, *Emeritus,* Ed.D., University of Georgia, 1983; 1986.

The Department of Curriculum and Instruction offers three graduate degree programs: the Master of Science in Education (M.S.Ed.), The Master of Arts in Teaching (M.A.T.), and the Doctor of Philosophy in Education (Ph.D.). Those pursuing the M.S.Ed. must select either one of the program areas in Curriculum and Instruction or the concentration in Learning Systems Design and Technology. Candidates for the M.A.T. must select an area of endorsement. Upon graduation from the program, M.A.T. students are eligible for a license to teach only in grades 9-12. Those who already possess a bachelor's degree in education are ineligible for the M.A.T. program. Those pursuing the Ph.D. must select from one of the following program areas: curriculum, instruction, and assessment; human development and family studies; language, literacies, and culture; STEM education; or teacher leadership.

The Department also offers State of Illinois endorsements as middle level educators (grades six to nine), reading teachers, and K-12 reading specialists. Endorsement opportunities are available to M.S.Ed. and Ph.D. candidates as part of their specialty area preparation; M.A.T. candidates earn the middle level endorsement after completion of requirements for the

degree. Endorsements in specific secondary level courses (e.g., chemistry, physics, and psychology) are also available. All such endorsements are arranged through the state and may require additional course work as well as a state-level transcript analysis.

Admission. Applicants for graduate programs must submit admission forms for both the Graduate School and the Department of Curriculum and Instruction. General requirements for admission to graduate programs are described in chapter one of this catalog; additional requirements for the M.A.T. program are explained in the section that follows. In all cases, a selection and review committee screens applicants on the basis of prior undergraduate and graduate work, grade point average, as well as standardized test scores, work experience, and letters of recommendation as needed. The committee may recommend admission for candidates with specific academic deficiencies if, in its opinion, a candidate's application materials demonstrate unusual professional promise.

Application materials may be obtained by addressing a request to: Coordinator of Graduate Studies, Department of Curriculum and Instruction, Mail Code 4610, Southern Illinois University, 625 Wham Drive, Carbondale, IL 62901. Specific information may be obtained by calling 618/536-2441 or by Emailing currinst@siu.edu. All programs require a nonrefundable $65 application fee that must be submitted with the application for Admission to Graduate Study in Curriculum and Instruction. Applicants must pay this fee by credit card.

Master of Arts in Teaching Degree

SIU's Master of Arts in Teaching (M.A.T.) program is an alternative certification and degree program intended for persons who have successfully completed an undergraduate degree (Bachelor of Arts, Bachelor of Science, or Bachelor of Fine Arts) in the liberal arts or sciences and desire to pursue licensure for teaching at the secondary school level. Those enrolled engage in a year-long internship (two semesters) in a public school setting while also completing University-based studies culminating in the Master's degree. The M.A.T. is designed as a high-quality, technology-rich, accelerated teacher certification program; time-to-degree is approximately fifteen (15) months, including one full academic year and two adjacent or contiguous summer sessions of course work. Those holding undergraduate degrees in teacher education are ineligible for this program.

M.A.T. candidates select an area of concentration most compatible with coursework in the major content area that was completed during a bachelor's degree program. Area of concentration options include:

Agriculture (General)	History
Biological Sciences	Kinesiology
Business	Mathematics
English	Social Science
Family & Consumer Science	Spanish
French	Visual Arts
Health	

Upon graduation from the program, candidates will be certified to teach in a school system in Illinois or in a state offering reciprocity. They will be broadly prepared in their content areas and will possess leadership experience pertinent to the public school setting. M.A.T. candidates advance through the program as members of an interdisciplinary cohort of no more than 25 students and are required to work collaboratively within that cohort to investigate and make recommendations about school-based programs and issues using action research methodologies.

Admission. Admission to the M.A.T. program is highly competitive. Applicants with undergraduate content area backgrounds currently experiencing national teacher shortages will receive priority in admission decisions, but other applicants meeting admission requirements will be considered. In addition to materials required for general admission to the Department and the Graduate School, M.A.T. applicants must submit: (1) a résumé; (2) original letters of reference from two persons familiar with the candidate's undergraduate performance or who can comment specifically about the candidate's ability to succeed in an accelerated graduate-level degree program; (3) passing scores from the Illinois Certification System Test of Academic Proficiency (September through December test dates are recommended). Unless special consideration is accorded an applicant by the MAT Admissions Committee, candidates must also meet the following minimum grade point requirements (based on a 4.0 scale): (1) an overall undergraduate grade point average of 2.75 (based on a 4.0 scale); (2) a grade point average of 2.75 in the final 60 hours of course work; and (3) a GPA of 2.75 in a minimum of 18 hours of course work completed prior to EDUC 500 in the content area for which certification is sought. In the case of graduate students who have completed 12 or more hours of graduate level course work, the graduate GPA is used, and it must meet or exceed 3.000 (based on a 4.000 scale). MAT Admissions Committee members consider undergraduate major, past performance in the content area for which certification is sought, performance in other relevant course work, professional experience, strength of recommendations, test results, and any available anecdotal information in prioritizing candidates for acceptance to the program. In years where the number of qualified candidates exceeds the Department's capacity to handle projected enrollment numbers, candidates may be asked to attend a half-day admission seminar during which an on-site essay and videotaped interview will be obtained for use in making final selection decisions. As space is available in any cohort, non-declared graduate students may be permitted to enroll in MAT courses offered during summer 1; continued enrollment in M.A.T-related course work as a non-declared graduate student, however, is contingent on meeting or exceeding published admission criteria and obtaining full admission status. Contingent enrollment may be offered by the M.A.T. Admissions Committee in extenuating circumstances, but is not guaranteed and does not constitute a promise of admission to the M.A.T. program.

Retention and Graduation. Students in the M.A.T. program are expected to complete the degree in two intersession/summer terms and one academic year, although variations in this progression are occasionally necessary. To complete degree requirements within the normal 15-month sequence, candidates enroll in the following blocks of courses to earn a minimum of 41/maximum of 50 graduate credits, dependent on the area of concentration selected.

Intersession 1	CI 543 (5):	Fundamentals of Teaching and Learning
Summer 1	CI 500 (3)	Introduction to Research Methods in Education
	SPED 408 (3):	Characteristics and Methods for Teaching Exceptional Children
	EDUC 550 (3)	Experimental Education
Fall	CI 544 (3) CI 545 (3)	Action Research Methods Literacy Instruction for Culturally and Linguistically Diverse Students
	CI 585T (1)	Seminar: Secondary Education
	Content Area Methods (3-6)[1]	
	Content Area Elective (3-4)[2]	
	EDUC 500 (3):	M.A.T. Apprenticeship (graduate level teaching practicum)
Spring:	Content Area Elective (3)[1]	
	EDUC 501 (6):	M.A.T. Internship (graduate level student teaching)
Intersession 2:	CI 571 (3):	Secondary School Curriculum
Summer 2	CI 465 (3):	Advanced Teaching Methods
	CI 533 (3):	Instructional Leadership (Teacher Leadership)
	CI 561 (3):	Reading and Learning Content and Technical Text

[1]Content area methods courses must be taken at the graduate level; six credit hours of content area electives are required for the degree

[2]Content area methods courses vary by area of concentration and credit hour assignment. In addition, they may or may not carry graduate credit, but are required for program completion and certification.

To remain in the program, M.A.T. candidates must maintain a minimum overall graduate grade point average of 3.000 and obtain successful summative evaluations at the completion of EDUC 500 and 501.

To graduate, the candidate must: (1) prepare and share publicly a professional exhibit to demonstrate professional growth throughout degree program; (2) publicly present results and recommendations from an action research collaborative project to a University and/or school faculty review committee; (3) achieve the equivalent of a 3.000 GPA in the teaching apprenticeship and internship; and (4) successfully implement an instructional unit or lesson plan that requires use of digital resources and technologies.

Master of Science in Education Degree

The Master of Science in Education degree in Curriculum and Instruction requires the completion of a minimum of 32 or 36 hours of course work, depending on the research requirement selected. At least 15 of the required semester hours must be at the 500 level and taken at SIU. The student must also meet Curriculum and Instruction core course requirements, research requirements, and program area requirements. No more than six semester hours of credit earned at another institution may be accepted toward this degree. It is recommended that transfer courses be from institutions accredited by national organizations (i.e., CAEP, NCATE, or TEAC). All transfer credits must be approved by the coordinator of the student's program area.

Each candidate's program is planned in consultation with a faculty adviser from the specialty area selected by the student, with consideration for the student's interests, experience, and specialty area. Nondeclared graduate students are advised to consult with the department chair concerning admission to the master's program.

Admission and Retention. Admission to the master's program requires a 2.7 GPA for the last 60 hours of the bachelor's degree as well as the recommendation of the program area faculty. A TOEFL score of at least 550 (220 computerized score) is also required for international students and must be no more than two years old. Students must maintain an overall 3.0 graduate gpa to be retained in the master's program. The progress of each student is reviewed periodically. Students who do not make satisfactory progress, or who violate the regulations of the department, college, or university, may be dropped from the program.

Program Requirements. The Master of Science in Education degree in Curriculum and Instruction requires a nine-semester hour professional core and program area courses (12 to 15 semester hours). The professional core consists of CI 500, Research Methods in Education; CI 503, Introduction to the Curriculum; and CI 504, Systematic Approaches to Instruction. All professional core courses must be completed with a grade of *C* or better, and an overall grade point average of 3.0 must be obtained for the professional core. The program area program consists of either 23 semester hours of coursework including a thesis or 27 semester hours of coursework. The minimum number of required semester hours is 32 for students completing a thesis or 36 for students completing the coursework only option.

The Master of Science in Education degree in Curriculum and Instruction with a concentration in Learning Systems Design and Technology (LSDT) prepares professionals who use research-based practice to create effective learning and performance support systems utilizing communications technology in educational institutions at all levels as well as non-school, government and business settings. Competencies developed include those employed in online, distance or e-learning, learning within virtual or simulated environments such as games and simulation, content management systems, and traditional classroom environments. A core of seven courses (21 semester hours) is required; students consult with their advisors to select additional, elective courses. At least 15 semester hours must be at the 500-level and taken at SIU. All

professional core courses must be completed with a grade of *C* or better, and an overall grade point average of 3.0 must be obtained for the professional core. Opportunities for practicum, internship, and either a research paper or thesis are available. The minimum number of required semester hours is 32 for students completing a thesis or 36 for students completing the coursework only option.

LSD&T Required Courses (21 Credit Hours)

1. CI 541:   Foundations of Instructional Design & Technology
2. CI 504:   Systematic Approaches to Instruction
3. CI 558:   Instructional Development Studio I
4. CI 557:   Task Analysis and Systematic Design of Instruction
5. CI 540:   Learning Models for Instructional Design
6. CI 553:   Consulting in Learning Systems Design & Technology or CI 484 Interactive Multimedia for Learning
7. CI 500:   Introduction to Research Methods in Education

LSD&T Elective Courses (15 Credit Hours)

1. CI 556:   Virtual and Simulated Learning
2. CI 562:   Social and Informal Learning
3. CI 581:   Digital Video Production
4. CI 591:   Web Resources for Teachers
5. CI 588:   Design and Delivery of e-Learning
6. CI 563:   Instructional and Human Performance Technology
7. CI 596:   Interactive Multimedia for Learning
8. CI 498N: Workshop in Educational Technology
9. CI 551:   Assessment and Learning Using Virtual Environments
10. CI 555:   Instructional Message Design
11. CI 587:   Evaluating Learning and Instructional Programs
12. CI 560:   Content and Learning Management Systems for e-Learning
13. CI 559:   Advanced Instructional Development Studio II
14. CI 585N: Topical Seminar in Educational Technology
15. CI 595N: Internship: Educational Technology

Doctor of Philosophy in Education Degree

The Doctor of Philosophy in Education degree with a concentration in Curriculum and Instruction is designed for teachers and other educational personnel who seek to improve their performance in general and specialized areas in either the public schools or the private sector. This program is designed for students who desire positions requiring advanced preparation at the highest level with emphasis on theories of curriculum and instruction and in-depth preparation in research. For example, this program is oriented toward students who aspire to positions with institutions of higher education, state departments of education in the United States, ministries of education in foreign countries, educational sections of human service agencies, business and industry, and public schools.

Admission. In addition to the application for admission to the Graduate School, the applicant must also complete the departmental application for admission to the concentration and the related program area. A selection and review committee screens the applicant on the basis of prior graduate work, grade point average, standardized test scores (Graduate Record Examination), research ability, work experience, and letters of recommendation. A TOEFL score of at least 550 is required for international students and must be no more than two years old. The GRE score must be no more than five years old. The selection committee recommends admission of the student only if the program area has a faculty member who is qualified to direct dissertations and who agrees to serve as chair of the student's doctoral committee.

The admissions committee may possibly recommend a student for admission who shows some deviation from departmental standards if, in the committee's opinion, the student shows unusual professional promise.

Retention. Any prospective doctoral candidate with a grade point average of less than 3.25 and 20 semester hours of doctoral work will not be allowed to continue in the program and will not be re-admitted at a later date. Students must accumulate an overall grade point average of 3.50 for all doctoral work to qualify to take the preliminary examination.

Prior to the completion of 30 semester hours of course work, students meet with their major professors to determine whether or not to continue as doctoral students. Such matters as grade point average, progress in the program, course completion, motivation, general academic scholarship, and skills in writing and research are considered. A report is then made to the doctoral committee and the department chair. Students who are not making satisfactory progress or who violate the regulations of the department, college, or university, may be dropped from the program.

Program Requirements. The concentration in Curriculum and Instruction has both College of Education and Human Services and departmental requirements. A minimum of 72 semester hours beyond the master's degree is required. The College of Education and Human Services professional core of at least six semester hours consists of EDUC 510, Introduction to Doctoral Studies in Education, and either EDUC 511, Doctoral Seminar in Philosophical and Cultural Foundations of Education, or EDUC 512, Doctoral Seminar in Behavioral and Cognitive Foundations of Education.

The Curriculum and Instruction requirements include a core of nine semester hours; at least 24 semester hours in the selected program area; research tools totaling at least nine semester hours; and a minimum of 24 semester hours of dissertation. An internship of two to eight semester hours is highly recommended. Courses comprising program area hours other than the core courses are determined by the student and the doctoral committee. No more than six semester hours of credit earned at another institution may be accepted toward this degree. It is recommended that transfer courses be from institutions accredited by national organizations (i.e., CAEP, NCATE, or TEAC). All transfer credits must be approved by the coordinator of the student's program area. The professional core of courses in the Curriculum and Instruction concentration includes: CI 582, Advanced Research Methods in Education; CI 583, Instructional Theory, Principles, and Practices; and CI 584, Curriculum Theory, Foundations, and Principles. All professional core courses must be completed with a grade of

C or better, and an overall grade point average of 3.0 must be obtained for the professional core.

Research Requirements. The Ph.D. in Education is a research-oriented degree. Each doctoral student in education must successfully complete three semester hours of Introduction to Qualitative Research (EAHE 587) and three semester hours of Introduction to Quantitative Research in Education (EDUC 505). In addition, each student must complete a minimum of one other three-credit course on research methods (also referred to as "research tool"). Students with previous coursework in introductory research methods can petition to replace these introductory courses with higher-level research methodology coursework. A list of approved research tool courses for the Ph.D. in Education degree is available in the *Ph.D. Policies and Procedures Manual of the College of Education and Human Services.*

Preliminary Examination. The preparation and direction of the preliminary examination are the responsibility of the program area faculty and the student's doctoral committee. Concepts related to curriculum, instruction, and research/evaluation will be integrated into the preliminary examination. Additional oral and written examinations may be required by the student's doctoral committee.

The examination is offered at least 2 times a year: during the fifth week of the term, as decided by the program area. A student may take the examination no more than 3 times.

Prospectus, Dissertation, and Final Oral Examination. Students may not register for more than 6 dissertation hours until they have been advanced to candidacy. Having been admitted to candidacy, students submit prospectuses to their doctoral committees for approval. The dissertation must show high attainment in an independent, original, scholarly, and creative effort. A student's dissertation will be circulated to members of the doctoral committee at least two weeks in advance of the proposed defense.

The Department of Curriculum and Instruction requires an oral examination conducted by the doctoral committee. Oral examinations are open to all interested observers. Notice of the time and place of the examination and the abstract of the dissertation are circulated throughout the department and the College.

Certificate in Gerontology

The Department of Curriculum and Instruction participates in the Certificate in Gerontology interdisciplinary program. For more information on the Certificate program, please see Certificate Programs in Chapter One of the Catalog.

Courses (CI)

CI 401-6 (3,3) Designing Digital Games and Simulations. This course focuses on the design and development of simulated environments (such as digital games and virtual worlds) and how they may be used for the delivery of online learning and instruction. The production process will focus on the use of suitable technologies and game development toolkits to create immediately usable prototypes for learning showcases.

CI 402-3 The Study of Cultural Diversity in Education and Family Services. The student examines origins, characteristics of behavior, learning patterns, family constellations, and lifestyles of the diverse cultural groups in our community, state, and nation. Students will identify their own cultural background and biases; recognize diversity resulting from ethnic origin, gender, age, or disability; and experience ways of learning about cultures other than their own that promote constructive communication and integration into all aspects of schooling, teaching, and family services.

CI 405A-3 Infant and Toddler Development. This course is designed to be an overview of theoretical and research-based understandings of infant development. Principles of development as well as dynamics of human behavior and relations will be explored. A topical approach is taken to allow the understanding of how broad concepts of development apply to infant development. Application of developmental knowledge involved for working with infants and toddlers. Students are required to have concurrent enrollment in CI 405B. Prerequisites: C or better in EDUC 214, CI 217, CI 318A and CI 318B.

CI 405B-1 Infant and Toddler Practicum. This practicum will prepare students to conceptualize and implement optimal learning environments for infants and toddlers. Participation is one half day per week (fall and spring) or two half days per week (summer). Students are required to have concurrent enrollment in CI 405A. Prerequisites: C or better in EDUC 214, CI 217, CI 318A, and CI 318B.

CI 407C-3 Diagnostic Teaching Strategies for Classroom Teachers-Language Arts. Diagnostic instruments and teaching techniques with an emphasis on understanding and teaching students underachieving. Prerequisite: CI 423 or consent of instructor.

CI 407E-3 Diagnostic Teaching Strategies for Classroom Teachers-Mathematics. Diagnostic instruments and teaching techniques with an emphasis on understanding and teaching students underachieving. Prerequisite: CI 322 or consent of instructor.

CI 407F-3 Diagnostic Teaching Strategies for Classroom Teachers-Reading. Diagnostic instruments and teaching techniques with an emphasis on understanding and teaching students who are underachieving. Prerequisite: CI 432 and CI 433 with grades of C or better or consent of instructor.

CI 408-3 Current Issues in Early Intervention. This course will examine developmental ecology of early intervention and the dynamic processes by which children and their environments interact. A comprehensive overview of the knowledge base and critical assessment and implementation strategies of early childhood intervention along with intervention models and appropriate practice will be covered. Prerequisites: CI 237, SPED 405 or consent of instructor.

CI 409-3 Creative Teaching. To assist pre- and in-service teachers in acquiring methods and materials that will improve instruction in the public school classroom, with special attention to the characteristics and needs of students.

CI 410-2 Creative Writing in the Public School. Techniques of encouraging creative writings in the schools.

CI 412C-3 Improvement of Instruction in Early Childhood Education (Preschool-Grade 3)-Language Arts. Examines recent findings, current practices, and materials used in early childhood education. Prerequisite: specialized methods course for the field of study selected by the student.

CI 412D-3 Improvement of Instruction in Early Childhood Education (Preschool-Grade 3)-Science. Examines recent findings, current practices, and materials used in early childhood

education. Prerequisite: specialized methods course for the field of study selected by the student.

CI 412E-3 Improvement of Instruction in Early Childhood Education (Preschool-Grade 3)-Mathematics. Examines recent findings, current practices, and materials used in early childhood education. Prerequisite: specialized methods course for the field of study selected by the student.

CI 412F-3 Improvement of Instruction in Early Childhood Education (Preschool-Grade 3)-Reading. Examines recent findings, current practices, and materials used in early childhood education. Prerequisite: specialized methods course for the field of study selected by the student.

CI 412G-3 Improvement of Instruction in Early Childhood Education (Preschool-Grade 3)-Social Studies. Examines recent findings, current practices, and materials used in early childhood education. Prerequisite: specialized methods course for the field of study selected by the student.

CI 415-3 Teaching Middle School Mathematics [Grades 4-8]. Examines current approaches to middle school mathematics and the use of meaningful instructional materials, quantitative literacy, and technologies for problem solving. Students will share experiences and design activities for classroom use. Prerequisite: CI 322 and an overall GPA of at least 2.75, or consent of instructor.

CI 417-3 Administration of Early Childhood and Family Programs. This course introduces students to the planning, organizing and daily management of programs serving young children and their families. Topics will include funding/budgeting, staffing, programming, and evaluation. Prerequisite: CI 318.

CI 418-3 Critical Issues in the Profession of Teaching. This course explores the philosophical, social, and psychological foundations of teaching. Students will critically examine the forces that have influenced education at various historical periods. Students will become familiar with the perspective of critical pedagogy in understanding educational decision-making. Students will explore educational contexts that promote optimal learning and development for all students while considering the complexity and multiplicity of cultural variables and identities (e.g., ethnic, linguistic, racial, gender, physical abilities, socioeconomic, etc.). Students will explore, critically analyze, and express a personal philosophy of education. Prerequisite: EDUC 319.

CI 419-3 Child, Family, and Community Engagement. This course is designed to provide students with the knowledge and skills needed to work successfully with families and caregivers in individual and community settings. The focus will be on strengthening relationships within and between home, school and community settings. Family engagement in early childhood programs and elementary schools will be stressed. Co-requisite: EDUC 319.

CI 421-3 Building Family Literacy Programs. This course will provide an in-depth look at family literacy. Emphasis is on the history and foundations of family literacy, related research, program models, programming, evaluation and funding. Designed for both the experienced and the developing family literacy professional. Prerequisite: CI 419.

CI 422-3 Teaching Reading in the Elementary School. Examination of the reading process with emphasis on the factors and conditions that affect reading. Emphasis also on the formulation of a philosophy of reading and its implications in relation to methods, materials, organizational procedures, and evaluation techniques. Enrollment restricted to consent of department.

CI 423-3 Teaching Elementary School English Language Arts. This course covers the oral and written communication processes with emphasis on the English language arts in the elementary school. Focus on the fundamentals of academic and social language of all users of English. Effective planning, delivery, and assessment of literacy lessons align with the Illinois Common Core learning standards for writing, speaking and listening, and reading and that accommodate all learners in the elementary classroom, including English Language Learners (ELL) and students with Individualized Education Programs (IEP). Prerequisite: Communication Studies 101 or equivalent, C or better in CI 321 and CI 435, or consent of instructor. Note: Elementary Education majors must take CI 422 concurrently with this class.

CI 426-3 An Introduction to Teaching Elementary School Science (PreK-4th Grade). Content and methods of elementary school science, grades P-4. Emphasis on materials and strategies for effective science education. One or more field trips. Prerequisites: SCI 210A, and SCI 210B. Restricted to students already admitted to the Teacher Education Program.

CI 427-3 Science Process and Concepts for Teachers (4th-8th Grade). Specifically designed to develop those cognitive processes and concepts needed by elementary and middle level teachers in the teaching of modern science programs. Prerequisite: CI 426, SCI 210A, and SCI 210B.

CI 428-3 Inquiry Skills for Teaching Junior and Senior High School Science. The major focus will be the application of inquiry skills as used in all areas of science instruction at the junior and senior high school levels; students will be expected to demonstrate mastery of basic and integrated science process skills through conducting and reporting results of science investigations.

CI 429-3 Instructional Methods for the Primary Child: Social Studies and Science. Emphasis on creating optimum learning environments, planning for instruction, models of teaching, integrated learning and appropriate instructional methods in science and social sciences, grades 1-3. Concurrent enrollment in CI 430 required. Prerequisites: CI 318A,B, CI 324, or consent of instructor.

CI 430-3 Instructional Strategies for the Primary Child: Mathematics. Emphasis on creating optimum learning environments, integrated learning and appropriate instructional methods in the content area of mathematics, grades 1-3. Concurrent enrollment in CI 429 required. Prerequisite: CI 318A,B, CI 324, with grades of C or better, or consent of instructor.

CI 431-3 Literacy Foundations and Instructional Models. This course provides teacher candidates with the theoretical knowledge necessary to critically examine various models of literacy instruction. It introduces the reading process, including the relationship between reading, writing, listening, and speaking; the importance of differentiating instruction for all learners; and how to select appropriate literature for use in early childhood, elementary, and middle level classrooms. Co-requisites: EDUC 301 and EDUC 313. Restricted to students already admitted to the Teacher Education Program.

CI 432-3 Literacy Development and Assessment (PreK-4th

Grade). This course explores the variables that affect literacy development at the P-4 level. Teacher candidates will learn to employ all four strands of the English/language arts (reading, writing, speaking, and listening) to teach literacy concepts and strategies across the curriculum to accommodate all learners in culturally responsive classrooms. Emphasis will be placed on an understanding of the reading and writing process; the content of literacy instruction; and scientifically based literacy research, methods, and materials used in balanced reading instruction and assessment. Prerequisite: CI 431. Co-requisite: EDUC 302 and EDUC 319.

CI 433-3 Instruction and Assessment of Adolescent Literacy. This course explores the variables that affect literacy development at the middle level (4th-8th grade). Emphasis will be placed on an understanding of the reading and writing process; the content of literacy instruction; and scientifically based literacy research, methods, and materials used in balanced literacy instruction and assessment. There is a focus on language and literacy demands within the content areas, needs of culturally and linguistically diverse adolescent learners, and the identification of adolescents who have literacy challenges. Prerequisite: CI 432. Co-requisite: EDUC 303 and EDUC 308.

CI 434-3 Diagnostic Literacy Assessment and Intervention. This course surveys the principles and practices of literacy assessment. Teacher candidates examine diagnostic approaches and instructional strategies that teachers employ when working with individuals who struggle with learning to read and write. There is an emphasis on the causes of reading and writing difficulties and the contribution of factors such as cultural differences, linguistic variation, student motivation, various diasabilities, and instructional approaches. It focuses on diagnostic techniques and the use of dynamic assessment to inform the design, monitoring, and evaluation of literacy instruction. Prerequisite: CI 432. Co-requisites: EDUC 303 and EDUC 308.

CI 435-3 Literature and Informational Texts for Children and Early Adolescents. Students will engage with studies of various types of literature and informational texts as well as text exemplars from the common core initiative; analysis of literary qualities; selection of literature for various developmental needs of children in preschool, elementary school, and middle level settings; and research-based presentations of books and other media for use in various school settings. Prerequisite: C or better in English 101 and 102, and overall GPA of 2.75; or consent of instructor. Restriction: Admittance to the Teacher Education Program. Lab fee: $10.

CI 462-3 Middle and Junior High School Programs. Focuses on the development of middle and junior high school curriculum and the identification of instructional activities for early adolescents. Emphasis is placed on development of literacy strategies, developmentally appropriate teaching strategies, interdisciplinary unit planning, teaming, and technologies and materials appropriate for teaching early adolescents, ages 10-14. Prerequisite: EDUC 313 or consent of instructor.

CI 463-3 Meeting the Social and Emotional Needs of Gifted Children. Deals with strategies for meeting the social and emotional needs of gifted children in the classroom. In particular, this course focuses on low-incidence gifted students, including underachievers, minorities and females. The course will not only cover particular curriculum and instruction strategies designed for this population and will emphasis strategies for teachers to be more facilitative in assisting these students to accept and realize their potential. Prerequisite: CI 467 or consent of instructor.

CI 466-3 Documenting Accomplished Teaching. This course will help teachers understand and gain requisite skills for participation in the National Board for Professional Teaching Standards (NBPTS) certification process. As part of learning to understand and document NBPTS standards, teachers will describe, analyze and reflect on drafts of written commentaries, videotapes of small and large group lessons, and student work.

CI 467-3 Methods and Materials in the Education of the Gifted. Content focused on the most appropriate instructional strategies and materials to be utilized with the gifted. Time spent practicing teaching models, designing materials and developing teaching units. Emphasis placed on techniques for individualizing instruction for the gifted and talented students.

CI 468-3 Science Methods for Middle and Senior High Schools. A performance-based approach to instructional skills common to teaching natural science at the middle and senior high school levels. Three class hours and one micro teaching laboratory hour per week.

CI 469-3 Teaching Social Sciences in the Secondary School [6-12]. Emphasis is placed on the analysis and evaluation of the social sciences with focus on instructional strategies and curricular designs in the teaching of history, geography, political science, economics, and sociology, as well as content reading for the social sciences. Prerequisite: EDUC 313 or consent of instructor.

CI 473-3 Teaching in Middle Level Schools. Acquaints students with issues of teaching young adolescents and the role of teachers in connecting schools with community resources. Information from current area specialists and exemplary practitioners extend appropriate teaching strategies and supplement background knowledge on special topics related to social, emotional and physical development related to the curriculum. Prerequisite: CI 462, EDUC 313, or consent of instructor. Lab fee: $10.

CI 484-3 Interactive Multimedia for Learning. An introduction to the evaluation, design, and development of interactive instructional multimedia programs. The instructional methods of Tutorial, Drill, Simulation, and Educational Games are covered. Projects include designing, developing, and use-testing an interactive instructional multimedia program. Lab fee: $20.

CI 487-3 Web-based Applications for Teachers and Instructors. Survey of trends and developments and laboratory instruction in the use of Web-based applications representative of those used by teachers, education specialists, or instruction in educational settings. An emphasis is placed upon developing skills used by teachers, education specialists, or instructors which enhance and facilitate the education processes within a Web-based learning environment. Laboratory fee: $20.

CI 493-3 Writing for Research and Publication. The course covers the current American Psychological Association (APA) guidelines (required by the Curriculum and Instruction department for all writing, including theses and dissertations) for reporting and writing reports, annotated bibliographies, and reviews of literature. Participants will read, critique, write, and present four short (5-10 pages each) scholarly research results and/or scholarly reviews of literature. The course will emphasize professional vocabulary, format, and writing style. Participants will write final, detailed and thorough literature

reviews using APA format and style in their fields of study. This course has been recommended by the CI Graduate Faculty for all CI graduate students, especially those who are early in their programs. Instructor approval required for undergraduates.

CI 496-2 to 6 (2 to 4 per semester) Field Study Abroad. Orientation and study before travel, readings, reports, and planned travel. Includes visits to cultural and educational institutions. Maximum credit hours in any term are 4.

CI 498A-1 to 15 (1 to 3 per topic) Workshops in Education-Curriculum. Critical evaluation of innovative programs and practices. Acquaints teachers within a single school system or in a closely associated cluster of school systems with the philosophical and psychological considerations and methods of implementation of new programs and practices. Maximum of six hours toward a master`s degree. Special approval needed from the instructor.

CI 498B-1 to 15 (1 to 3 per topic) Workshops in Education-Supervision for Instructional Improvement. Critical evaluation of innovative programs and practices. Acquaints teachers within a single school system or in a closely associated cluster of school systems with the philosophical and psychological considerations and methods of implementation of new programs and practices. Maximum of six hours toward a master`s degree. Special approval needed from the instructor.

CI 498C-1 to 15 (1 to 3 per topic) Workshops in Education-Language Arts. Critical evaluation of innovative programs and practices. Acquaints teachers within a single school system or in a closely associated cluster of school systems with the philosophical and psychological considerations and methods of implementation of new programs and practices. Maximum of six hours toward a master`s degree. Special approval needed from the instructor.

CI 498D-1 to 15 (1 to 3 per topic) Workshops in Education-Science. Critical evaluation of innovative programs and practices. Acquaints teachers within a single school system or in a closely associated cluster of school systems with the philosophical and psychological considerations and methods of implementation of new programs and practices. Maximum of six hours toward a master`s degree. Special approval needed from the instructor.

CI 498E-1 to 15 (1 to 3 per topic) Workshops in Education-Mathematics. Critical evaluation of innovative programs and practices. Acquaints teachers within a single school system or in a closely associated cluster of school systems with the philosophical and psychological considerations and methods of implementation of new programs and practices. Maximum of six hours toward a master`s degree. Special approval needed from the instructor.

CI 498F-1 to 15 (1 to 3 per topic) Workshops in Education-Reading. Critical evaluation of innovative programs and practices. Acquaints teachers within a single school system or in a closely associated cluster of school systems with the philosophical and psychological considerations and methods of implementation of new programs and practices. Maximum of six hours toward a master`s degree. Special approval needed from the instructor.

CI 498G-1 to 15 (1 to 3 per topic) Workshops in Education-Social Studies. Critical evaluation of innovative programs and practices. Acquaints teachers within a single school system or in a closely associated cluster of school systems with the

philosophical and psychological considerations and methods of implementation of new programs and practices. Maximum of six hours toward a master`s degree. Special approval needed from the instructor.

CI 498H-1 to 15 (1 to 3 per topic) Workshops in Education-Early Childhood Education. Critical evaluation of innovative programs and practices. Acquaints teachers within a single school system or in a closely associated cluster of school systems with the philosophical and psychological considerations and methods of implementation of new programs and practices. Maximum of six hours toward a master`s degree. Special approval needed from the instructor.

CI 498I-1 to 15 (1 to 3 per topic) Workshops in Education-Elementary Education. Critical evaluation of innovative programs and practices. Acquaints teachers within a single school system or in a closely associated cluster of school systems with the philosophical and psychological considerations and methods of implementation of new programs and practices. Maximum of six hours toward a master`s degree. Special approval needed from the instructor.

CI 498J-1 to 15 (1 to 3 per topic) Workshops in Education-The Middle School. Critical evaluation of innovative programs and practices. Acquaints teachers within a single school system or in a closely associated cluster of school systems with the philosophical and psychological considerations and methods of implementation of new programs and practices. Maximum of six hours toward a master`s degree. Special approval needed from the instructor.

CI 498K-1 to 15 (1 to 3 per topic) Workshops in Education-Secondary Education. Critical evaluation of innovative programs and practices. Acquaints teachers within a single school system or in a closely associated cluster of school systems with the philosophical and psychological considerations and methods of implementation of new programs and practices. Maximum of six hours toward a master`s degree. Special approval needed from the instructor.

CI 498M-1 to 15 (1 to 3 per topic) Workshops in Education-Instruction. Critical evaluation of innovative programs and practices. Acquaints teachers within a single school system or in a closely associated cluster of school systems with the philosophical and psychological considerations and methods of implementation of new programs and practices. Maximum of six hours toward a master`s degree. Special approval needed from the instructor.

CI 498N-1 to 15 (1 to 3 per topic) Workshops in Education-Educational Technology. Critical evaluation of innovative programs and practices. Acquaints teachers within a single school system or in a closely associated cluster of school systems with the philosophical and psychological considerations and methods of implementation of new programs and practices. Maximum of six hours toward a master`s degree. Special approval needed from the instructor.

CI 498O-1 to 15 (1 to 3 per topic) Workshops in Education-Environmental Education. Critical evaluation of innovative programs and practices. Acquaints teachers within a single school system or in a closely associated cluster of school systems with the philosophical and psychological considerations and methods of implementation of new programs and practices. Maximum of six hours toward a master`s degree. Special approval needed from the instructor.

CI 498P-1 to 15 (1 to 3 per topic) Workshops in Education-Children`s Literature. Critical evaluation of innovative programs and practices. Acquaints teachers within a single school system or in a closely associated cluster of school systems with the philosophical and psychological considerations and methods of implementation of new programs and practices. Maximum of six hours toward a master`s degree. Special approval needed from the instructor.

CI 498Q-1 to 15 (1 to 3 per topic) Workshops in Education-Family Studies. Critical evaluation of innovative programs and practices. Acquaints teachers within a single school system or in a closely associated cluster of school systems with the philosophical and psychological considerations and methods of implementation of new programs and practices. Maximum of six hours toward a master`s degree. Special approval needed from the instructor.

CI 498S-1 to 15 (1 to 3 per topic) Workshops in Education-Gifted and Talented Education. Critical evaluation of innovative programs and practices. Acquaints teachers within a single school system or in a closely associated cluster of school systems with the philosophical and psychological considerations and methods of implementation of new programs and practices. Maximum of six hours toward a master`s degree. Special approval needed from the instructor.

CI 498T-1 to 15 (1 to 3 per topic) Workshops in Education-Teacher Education. Critical evaluation of innovative programs and practices. Acquaints teachers within a single school system or in a closely associated cluster of school systems with the philosophical and psychological considerations and methods of implementation of new programs and practices. Maximum of six hours toward a master`s degree. Special approval needed from the instructor.

CI 500-3 Introduction to Research Methods in Education. The student will evaluate and synthesize research, demonstrate a basic understanding of research concepts and principles, and compare and contrast specific methods for conducting research.

CI 501-3 Improving School Reading Programs. For teachers, reading specialists, instructional leaders. Current issues, trends, practices in improving school reading programs at all levels. Special emphasis on school based management, teachers as change agents, curriculum evaluation, staff development and roles of school personnel. Participants assess existing programs and develop improvement plans. Prerequisite: CI 512, CI 513 or CI 561.

CI 502-3 Child Maltreatment. Examines the many facets of child maltreatment including the impact on the child`s development, the family dynamics and the communites` role. Emphasis is on current research in the field, as well as the roles and responsibilities of various professionals who work with children and their families.

CI 503-3 Introduction to the Curriculum. Deals with the nature, purposes and functions of curriculum planning and development; curriculum design and organization; curriculum implementation and maintenance; and curriculum evaluation as each component relates to the total curriculum.

CI 504-3 Systematic Approaches to Instruction. Gives graduate students an opportunity to investigate, discuss and apply systematic approaches to instruction. Special emphasis is given to that element of the instructional system, that allows for the integration of instructional media into the process.

CI 505-3 Infant/Toddler Development. This course is designed to be an overview of theoretical and research-based understandings of infant development. Principles of development as well as dynamics of human behavior and relations will be explored. A topical approach is taken to allow the understanding of how broad concepts of development apply to infant development.

CI 506-3 Professional Services for Diverse Family Structures. Case analysis of different family structures through seminar teams. Each team will be responsible for analysis of the interaction of the family structure and the economic, nutritional, and socializing activities carried out within the family-household. Role and sources of assistance through current programs will be included. Special approval needed from the instructor.

CI 507-3 The Impact of Public Policy on Family Life. This course focuses on an analysis of policies that impact the lives of children and families and includes an overview of the legislative process at the local, state, and national levels. The course emphasizes practical ways in which we can become proactive and effective advocates for children and their families.

CI 508-3 Systematic Observation and Analysis of Instruction. Students will learn to use conferencing techniques and to construct and use valid and reliable systematic observation instruments to provide the basis for analysis and feedback about classroom instruction.

CI 509-3 Foundations of Environmental Education. Designed specifically to provide teachers, administrators and curriculum specialists with the knowledge and skills necessary to implement environmental education strategies in both elementary and middle schools. Includes work in ecological foundations, programs currently in use, unit designs, methods and research. One or two field trips may be required.

CI 512-3 Reading in the Elementary School. First course in the reading sequence. Survey of the reading process. Introduction to factors affecting the reading process, the common core of skills, teaching strategies, materials and research.

CI 513-3 Emergent Literacy. A study of early literacy. Explores the foundations of family literacy as the basis for continued development of reading and writing in kindergarten and the primary grades.

CI 514-3 Advanced Child Development. Major theories of child development as a framework for understanding of the contexts of development for young children will be examined. Emphasis will be on current research and issues in child development and implications for practice.

CI 515-3 Advanced Remediation in Mathematics. Strategies for the design of prescribed systematic instruction for correcting identified mathematics difficulties. Experience in designing and preparing materials for corrective purposes. Prerequisite: CI 407E or consent of instructor.

CI 516-3 Teaching Mathematics in the Elementary School. Master`s degree level course, which acquaints the student with approaches to teaching, development of curriculum materials and authoritative positions on the mathematics of grades K-8. Emphasis on teaching aids, problem solving and recent developments at this level.

CI 517-3 Early Childhood Programs: Organization and Administration. Presents an overview of the organization and administration of programs for children ages three to eight with experiences in planning for operating and administering such programs. Prerequisite: CI 518 or consent of instructor.

CI 518-3 Critical Issues in Early Childhood. A survey of current problems and practices in early childhood education for children from three to eight years of age, with emphasis on reading in current research literature. Special approval needed from the instructor.

CI 520-3 Action Research in Early Childhood. (Same as CI 544) Major trends and current issues in research as they relate to child development and early childhood programs will be explored. Special emphasis will be placed on the relationship of research to professional preparation and practice. Restricted to early childhood students who have taken all core courses for completion of the master`s degree. Letter grade/DEF.

CI 521-4 Advanced Diagnostic Teaching of Reading. Emphasizes diagnostic teaching strategies that teachers and reading specialists employ when dealing with under achievement in reading. Students use informal and formal tests, observation and trial lessons to select instructional materials and activities appropriate to different reading/writing problems. Each student tutors persons while being supervised in the Clinical Center. Prerequisite: CI 512 or CI 513 or CI 561, CI 407F. Special approval needed from the instructor.

CI 522-3 Integration of Technology in Mathematics and Science Teaching. Integrating technology in Math and Science teaching. Technology may include calculators, computer software, computer-based laboratories, data collection devices, interactive manipulatives, and other internet resources. Special approval needed from the instructor.

CI 523-3 Language Arts in the Elementary School. The practical bearing of investigation and theory on the improvement of current practices in the teaching of the language arts other than reading. Attention given to evaluation of teaching materials in these areas. Prerequisite: CI 423 or consent of instructor.

CI 524-3 Methods for Teaching Social Sciences in the Elementary School [Pre-K-6]. A study of theory and practices of teaching and developing programs in elementary school social sciences. Particular attention to be given to trends and issues in social sciences. Various social science models will be examined and evaluated for practical use. Students must demonstrate competencies and skills related to content reading for the social sciences.

CI 525-3 Integration of Technology into Mathematics Education [PreK-8]. Technology use in mathematics teaching and learning, such as handheld calculators/computers; hands-on experience in teaching with easily learned tools for teaching/learning mental computation, computation, algebra, geometry, probability, statistics and use of software - e.g., Shapemakers, Geometer`s Sketchpad, Excel, graphing calculators, computer-based laboratories, data collection devices, interactive websites and other internet resources.

CI 526-3 Problems in Elementary School Science Education. Emphasis upon identifying problems and trends within elementary school science education and planning for research in this field. Prerequisite: CI 426.

CI 527-3 Advanced Family Studies. Examination of the major theoretical approaches and current research in family development. Review the nature and value of theory to the study of the family and evaluate the use of theory in empirical research. Implications for policy.

CI 528-3 Methods for Teaching Mathematics in the Preschool and Early Childhood Grades (Pre K-3). Acquaints the student with the learning characteristics of children and teaching methods at grades pre K-3. Emphasis on concrete manipulative teaching aids, learning readiness and diagnosis of learning difficulties.

CI 529-3 Modern Approaches to Teaching Secondary School Mathematics. (Same as MATH 511) Topics will include problem solving, applications of mathematics and teaching proofs in secondary school mathematics. Practical classroom use of materials will also be emphasized. Special approval needed from the instructor.

CI 530-3 Teaching Problem Solving in School Mathematics (Grades K-8). Designed to acquaint teachers with problem solving processes and how to integrate problem solving into their teaching. Emphasis is placed on teaching the process of problem solving. Restricted to graduate standing or consent of adviser.

CI 531-3 Curriculum for Elementary & Middle Level Schools. Designed to assist teachers and administrators in making curricular decisions for elementary and middle level schools based on knowledge of educational foundations, standards, learning experiences, research, materials and methods, instructional programming and evaluation.

CI 533-3 Instructional Leadership. A study of research and related literature concerning the roles and responsibilities of various instructional leaders in public and private schools, professional development centers, state departments of education and college or university settings. Leadership styles and behaviors, especially as they apply to the academic circumstances and environments in specific case studies, are examined.

CI 534-3 Organization of the Elementary School. An analysis of types of elementary school organizations with special attention to influence of school organization upon the educational program. Application of research findings to selection and use of materials of instruction. Special consideration to classroom teachers` professional problems.

CI 535-3 Reading and Language Arts Research Seminar. Students survey current research in Reading and Language studies and present a research paper to the seminar participants. Prerequisite: CI 500, nine hours coursework in reading and language arts. Special approval needed from the instructor.

CI 536-3 Partnerships and Mentoring the New Professional. A study of the theories, practices and research of Professional Development Schools and other collaborative teacher education and school reform initiatives with special attention given to the issues of collaboration and cooperation, team building and consensus building, honoring diversity and change, and educators as problem solvers.

CI 537-3 Current Issues in Mathematics Education. This course provides graduate students with opportunities to study, discuss, and critically analyze issues and research in mathematics education. Students will become familiar with the major problems and issues facing mathematics educators at all school levels. Examination of recent mathematics education literature will be included as students gain an overall perspective on the discipline of mathematics education.

CI 538-3 Research in Mathematics Education. This course provides graduate students with opportunities to study, discuss, and make critical analyses of recent mathematics education literature and issues in the USA and other countries. Students will gain a better perspective on NCTM Standards and their relationship to research as they develop a detailed lesson plan

in mathematics and conduct both a literature review and a data analysis report in mathematics education. Prerequisite: CI 537.

CI 539-3 Leadership in Mathematics and Science. An exploration of current literature in math and science leadership and the application of principles and skills necessary for mentoring instructional development in math and science. Special approval needed from the instructor.

CI 540-3 Learning Models for Instructional Design. Surveys models of learning as they apply to the fields of Instructional Design and Instructional Technology. Models ranging from behaviorism to constructivism are covered along with theories concerning cognitive development and motivation. Theories are applied to analyzing instructional situations.

CI 541-3 Foundations of Instructional Design and Technology. This course provides students with an overview of the issues related to instructional (systems) design and technology. Historical perspectives, current practice, emerging trends, and future development in the field. Appropriate use of digital technologies (procedures) for learning and training will be discussed.

CI 542-3 Literacy in the Middle Grades. This course focuses on the developmental literacy continuum of adolescents in the middle grades. There is a strong emphasis on language and literacy demands with the content areas, needs of culturally and linguistically diverse adolescent learners, and teaching reading and writing in the middle grades. Exploration of multiple venues for valuing and encouraging new literacy practices within middle level classroom contexts. Prerequisites: CI 512 or CI 513, other foundational literacy course, or consent of instructor.

CI 543-5 Fundamentals of Teaching and Learning. First course in the Master of Arts in Teaching (M.A.T.) program sequence. Its focus is on development of a specific set of planning skills secondary level teachers need to appropriately design, implement, manage, and assess student learning. The course is offered annually during spring intersession only. Special approval needed from the instructor.

CI 544-3 Action Research Methods. (Same as CI 520) The focus of the course is on learning about action research, learning to develop and use various data collection tools, developing an action research question, learning about and using various data analysis tools, developing a report, and presenting a research report to an audience of colleagues and peers. Prerequisite: CI 543 (required for MAT students) or consent of instructor. Letter grade/DEF.

CI 545-3 Literacy Instruction for Culturally and Linguistically Diverse Students. This course introduces students to issues related to first- and second-language development, language variation, cultural diversity, second-language instruction, English as a Second Language (ESL) and bilingual education, and culturally and linguistically responsive instruction. These topics will be explored in terms of student learning and teaching and prepare students to teach English language learners (ELLs), dialect speakers, and students from diverse cultural and linguistic backgrounds. The course will serve as an examination of contemporary language acquisition theory; overview of ELL reading research; exploration of methods for motivating and sheltering instruction for ELLs; and investigation of the impact of federal policies on the types of experiences ELLs are afforded. The course is required for students working toward the reading specialist endorsement.

CI 546-3 Family and Community Literacies and Involvement. This course provides students with the knowledge and skills needed to work successfully with families and parent groups in individual, group, school and community settings. A socio-cultural perspective is evident as the focus will be on acknowledging and valuing the multiple literacies within families and communities, and strengthening adult-child relationships and parent-staff relationships in home, school, and community settings. An awareness of strategies in developing positive and supportive relationships with families of children, including the social, cultural, educational, health, economic, and political dimensions of community and family life, philosophical basis for family participation, family-centered services, and strategies for working with socially, culturally, and linguistically diverse families will be included. Prerequisite: CI 545.

CI 547-3 Instructional Strategies and Curriculum Development for Adult Literacy and Education. This course focuses on understanding adult learners and related practices in diverse adult educational and community contexts. It provides a philosophical, historical, and practical framework for adult literacy learning to include a critical analysis of policies, programs, practices and assumptions about adult learners that undergird the field of adult education. The course is taught through a sociocultural lens with an emphasis on instructional practices that are relevant to the lives and literacies of adult learners.

CI 548-3 Science Education Research Investigations. This course involves the study of special problems and related research associated with practical educational situations in science education or related fields. The main objective is to provide doctoral students with opportunities to develop research skills in science education by conducting research projects on science education topics. Designed to help students learn the basics of research but not a research methods course.

CI 549-3 New Literacies & Emerging Technologies in a Participatory Culture. This course explores the changing landscape of reading and writing as emerging technologies place new demands, challenges, and opportunities before readers and writers. Drawing from a socio-cultural perspective, this course aims to deepen students` understandings of the reading and writing processes with written, hyper, and multi-modal texts as well as strategies for supporting students` development in these processes. Particular emphasis will be on acknowledging and valuing the multiple literacies evident within families, communities, and contemporary society, and strengthening understanding of how best to support learners as they enact new literacy practices that rely upon emerging technologies. Techniques for incorporating new technologies into teaching, as well as the legal and ethical challenges for both teachers and students, will be examined. Prerequisite: CI 512, CI 513, or CI 561.

CI 550-3 Language Development in Young Children. Language and communicative development of young children is the focus of this course. Students will learn about both typical and atypical language development in the areas of phonology, syntax, morphology, semantics, and pragmatics. The relationship between language and other areas of development will be explored as will ways to support language development in young children. Students will observe, record, analyze samples of young children`s communication.

CI 551-3 Assessment and Learning Using Virtual Environments. This course covers the foundations and trends in the research literature regarding the use of game, simulated and virtual environments for online learning and assessments. Issues and implications of these environments for instructional delivery, decision-making analysis of users and performance assessment methodologies are included.

CI 552-3 Seminar in Language, Literacies, and Culture. This seminar focuses on influential readings considered foundational to the study of language, literacies and culture. Students will identify a list of influential readings and participate in intensive reading, reflection, and discussion of them.

CI 553-3 Consulting in Learning Systems Design and Technology. This course applies current research and technology to the solution of instructional problems in higher education and corporate training environments. The student is guided through the systematic process of identifying instructional and performance problems, specifying learning objectives, analyzing tasks and learners, organizing resources, specifying methods and media, and assessing outcomes. Special approval needed from the instructor.

CI 554-3 Utilization of Educational Media. The utilization of print and non-print materials in instructional implementation and curriculum development. Structured for teachers, media directors, administrators and instructional designers. The increasing role of technological advances in education is stressed as those advances relate to learning theory and curriculum development.

CI 555-3 Instructional Message Design. Emphasizes the use of cognitive theory and research-based principles for creating effective instructional text, pictures, and graphics. Topics include principles of perception, memory, concept, procedure, and principle learning, mental models, problem-solving, motivation and attitude change. A review of research issues in the study of instructional media and message design is included.

CI 556-3 Virtual and Simulated Learning. (Same as CI 401) This course focuses on the design of interactive and virtual simulated environments (such as serious game, simulation, and virtual reality) and for the delivery of learning, training, and instruction. The design process includes gamification, analysis, and deconstruction of job tasks into measurable learning objectives and events for performance assessment and improvement.

CI 557-3 Task Analysis and Systematic Design of Instruction. Builds competence in applying the most current task and content analysis techniques used to make explicit the components of complex human performances and knowledge. Includes learning hierarchy analysis, information processing analysis, path analysis, job task analysis, skills analysis, fault tree analysis, concept analysis, knowledge engineering, matrix analysis, and pattern noting. Prerequisite: CI 504 or consent of instructor.

CI 558-3 Instructional Development Studio. The "Studio" environment provides students with the opportunity to learn and use authoring systems, languages and product development tools to design, develop, and produce online resources for learning and instruction. Participants will showcase learning artifacts created using a variety of commercial productivity tools and creativity suites. Prerequisite: CI 406.

CI 559-3 Advanced Instructional Development Studio. The advanced instructional development studio environment provides students who have taken the basic development studio course with further opportunities to design, develop, and produce online learning courses for learning, training, and instruction. Participants will showcase learning artifacts created using a variety of commercial authoring tools and creativity suites. Prerequisite: CI 558.

CI 560-3 Content and Learning Management Systems for e-Learning. The course covers the design and development of Content and Learning Management Systems (CMS/LMS) for the management and online delivery of learning resources in education, business and other training settings. Emphasis will be placed on the rapid development and management of e-Learning systems using CMS/LMS development tools and Web 2.0 technologies.

CI 561-3 Disciplinary and Content Area Literacy Instruction for Secondary and Adult Education. This course is for secondary teachers and others who desire strategies to help students learn from texts. Special emphasis is on how to help students improve their ability to comprehend, study, and use texts and other print materials encountered in secondary schools and the workplace. This course focuses on theory, research, and methods to enable student engagement with texts, particularly content texts. Emphasis is on strategies for teaching vocabulary, comprehension, reasoning, and organization in specialty subject areas at the high school level, and fundamentally promotes differentiated instruction for diverse populations and the incorporation of technology.

CI 562-3 Social and Informal Learning. Covers games, simulations, role-playing, discussion forums, and social networking as informal modes of learning in both education and training contexts. Both face-to-face and online aspects of social and informal learning are considered.

CI 563-3 Instructional and Human Performance Technology. For those persons interested in the role that learning systems and instructional design and technology play in the field of human performance technology. Emphasis is upon performance problem identification, the distinction between skill/knowledge deficits and other performance problems, and the rationale for instructional solutions as well as electronic performance support systems, feedback and incentives, certification and other HP technologies.

CI 564-3 Curriculum Development for Gifted Students. Explorations of the knowledge and decision-making required to develop curriculum for gifted students, including philosophy, goals and objectives; designing and sequencing activities; curriculum models for gifted students; evaluation and modification of curriculum. Emphasis is placed on the development of curriculum to be used in schools for gifted students.

CI 566-3 Instructional Strategies for Problem Solving. The focus is on developing those teaching strategies, which will foster and enhance problem solving skills and heuristic thinking. Representative of these teaching skills would be inductive and deductive approaches, discovery and inquiry techniques, and questioning strategies.

CI 567-3 Seminar in Children`s Literature. The focus of this course is the role of literature in literacy development. Emphasis on methods that support children as they learn to read using literature as a medium of instruction and interpretation that enriches and extends the curriculum. Prerequisite: CI 512, CI 513, CI 561, other foundational course, or consent of instructor.

CI 568-3 Literature for Children and Young Adults in a Multicultural Society. This course is designed to guide educators in the development of a framework from which they examine the impact of cultural, linguistic, and ethnic diversity in literature. As such, emphasis is placed on the development of a critical lens that embraces culturally sustaining practices for groups that have been traditionally underrepresented and inauthentically portrayed in texts. Entails introspection, examinations of bias, power, and privilege, and evaluation of texts. Prerequisite: CI 512 or CI 513 or CI 561, or consent of instructor.

CI 570-3 Teaching and Learning NonFiction Sources for Adolescent and Adult Learners. This graduate-level course will help students develop instructional materials and curricular designs using non-fiction resources for classrooms at the secondary level and beyond. Students will also have an opportunity to gather, analyze, corroborate, and synthesize student data for the purposes of planning instruction with an emphasis on informational sources such as written documents, images, and multimedia. Integrating technology for differentiating instruction, assessment, and content reading for the disciplines (with a specific focus on the social sciences) will also be emphasized.

CI 571-3 Secondary School Curriculum. An introductory course designed to explore the nature and development of the curriculum at the secondary school level. Historical perspective and foundations of curriculum are examined. Functional applications to the public secondary schools are emphasized.

CI 572-3 Instruction and Assessment with Primary Sources. In this course, students will have opportunities to create classroom assessments with artifacts and informational sources, analyze pupil data to inform instruction, learn ways to differentiate instruction to support critical thinking skills, develop local history and place-based curriculum, and participate in local field-based learning.

CI 573-3 Perspectives on the Future and Its Schools. Deals with the future development of education and social trends, which will influence that development. Emphasis is placed upon alternative models of education and their social bases.

CI 574-3 Advanced Teaching Methods. This course focuses on advanced instructional models and strategies designed to improve professional practice and student achievement. Teachers analyze teaching models and methods to examine the connections between theory and practice, vary instructional methods, and explore common applications of the models. Course goals center on developing instruction that enables teachers to differentiate instruction to meet the needs of diverse learners and engage students in learning content. The course is appropriate for teachers at all levels of education.

CI 575-3 Critical Issues in Instructional Supervision. Students will examine the history, nature and evolution of supervision for instructional improvement. Students will be introduced to concepts, theory and research findings from many fields of study that have implications for today`s supervisory process. Supervisory assumptions and practices will be examined in light of current knowledge of teaching effectiveness.

CI 576-3 Critical Issues in Teacher Education. Students will examine critical issues, problems, and trends in teacher education. Emphasis is placed on strategies for clarifying the issues, solving the problems and examining the possible impact of the trends.

CI 577-3 Seminar in International Mathematics in Education. Deals with goals, contents, teaching methods, teacher training, curriculum development and research literature on mathematics education at the international level. Restricted to graduate standing or consent of adviser.

CI 578-3 Advanced Study of Mathematics Education. Study of the practical and theoretical development of mathematics curricula and instruction, and viewing mathematics curricula and instruction from philosophical and psychological perspectives. Restricted to advanced graduate study or consent of adviser.

CI 579-3 Classic and Contemporary Literature for Young Adults. This course includes an examination of landmark and contemporary literature for young adults. Students will critically evaluate young adult literature and the implications for classroom use. Emphasis will be placed on the use of young adult literature within the framework of current standards. Prerequisites: CI 512 or CI 513 or CI 561, another foundational literacy course, or consent of instructor.

CI 580-3 Current Trends in Education. Trends, issues, problems in education related to the student, program, school organization, staff, material and media, the school building, and the process of innovation and change.

CI 581-3 Digital Video Production. Video has become an essential aspect of teaching, training, and communications. This course is an intensive workshop that provides a thorough understanding of video formats, video production, and video editing techniques. No previous experience with video production is required. Lab fee: $20.

CI 582-3 Advanced Research Methods in Education. The study and application of advanced skills used in planning, executing, reporting, and utilizing educational research. Students must have an approved Program of Study on file prior to enrolling. Prerequisite: EAHE 587 and EDUC 505.

CI 583-3 Instructional Theory, Principles, and Practices. Presentation of conceptual formulations and skills concerning instructional theory and principles; foundations of instruction; instructional systems and models; delivery processes (logistics), systems, and maintenance of quality control; and evaluation of teachers and students.

CI 584-3 Curriculum Theory, Foundations, and Principles. The course will emphasize the study of the perspectives on curriculum theory that have guided the development of curriculum practice in the United States. Students will critically examine these perspectives and utilize them to develop and defend positions on contemporary curriculum issues.

CI 585A-1 to 15 (1 to 3 per semester) Topical Seminar. A graduate level seminar that involves the study of special problems and related research associated with practical educational situations. Problems available for critiquing and analyzing are the following: Curriculum. Maximum of six hours toward a Master`s degree. Special approval needed from the instructor.

CI 585B-1 to 15 (1 to 3 per semester) Topical Seminar. A graduate level seminar that involves the study of special problems and related research associated with practical educational situations. Problems available for critiquing and analyzing are the following: Supervision for instructional improvement. Maximum of six hours toward a Master`s degree. Special approval needed from the instructor.

CI 585C-1 to 15 (1 to 3 per semester) Topical Seminar. A graduate level seminar that involves the study of special problems

and related research associated with practical educational situations. Problems available for critiquing and analyzing are the following: Language arts. Maximum of six hours toward a Master`s degree. Special approval needed from the instructor.

CI 585D-1 to 15 (1 to 3 per semester) Topical Seminar. A graduate level seminar that involves the study of special problems and related research associated with practical educational situations. Problems available for critiquing and analyzing are the following: Science. Maximum of six hours toward a Master`s degree. Special approval needed from the instructor.

CI 585E-1 to 15 (1 to 3 per semester) Topical Seminar. A graduate level seminar that involves the study of special problems and related research associated with practical educational situations. Problems available for critiquing and analyzing are the following: Mathematics. Maximum of six hours toward a Master`s degree. Special approval needed from the instructor.

CI 585F-1 to 15 (1 to 3 per semester) Topical Seminar. A graduate level seminar that involves the study of special problems and related research associated with practical educational situations. Problems available for critiquing and analyzing are the following: Reading. Maximum of six hours toward a Master`s degree. Special approval needed from the instructor.

CI 585G-1 to 15 (1 to 3 per semester) Topical Seminar. A graduate level seminar that involves the study of special problems and related research associated with practical educational situations. Problems available for critiquing and analyzing are the following: Social studies. Maximum of six hours toward a Master`s degree. Special approval needed from the instructor.

CI 585H-1 to 15 (1 to 3 per semester) Topical Seminar. A graduate level seminar that involves the study of special problems and related research associated with practical educational situations. Problems available for critiquing and analyzing are the following: Early Childhood education. Maximum of six hours toward a Master`s degree. Special approval needed from the instructor.

CI 585I-1 to 15 (1 to 3 per semester) Topical Seminar. A graduate level seminar that involves the study of special problems and related research associated with practical educational situations. Problems available for critiquing and analyzing are the following: Elementary education. Maximum of six hours toward a Master`s degree. Special approval needed from the instructor.

CI 585J-1 to 15 (1 to 3 per semester) Topical Seminar. A graduate level seminar that involves the study of special problems and related research associated with practical educational situations. Problems available for critiquing and analyzing are the following: The Middle school. Maximum of six hours toward a Master`s degree. Special approval needed from the instructor.

CI 585K-1 to 15 (1 to 3 per semester) Topical Seminar. A graduate level seminar that involves the study of special problems and related research associated with practical educational situations. Problems available for critiquing and analyzing are the following: Secondary education. Maximum of six hours toward a Master`s degree. Special approval needed from the instructor.

CI 585M-1 to 15 (1 to 3 per semester) Topical Seminar. A graduate level seminar that involves the study of special problems and related research associated with practical educational situations. Problems available for critiquing and analyzing are the following: Instruction. Maximum of six hours toward a Master`s degree. Special approval needed from the instructor.

CI 585N-1 to 15 (1 to 3 per semester) Topical Seminar. A graduate level seminar that involves the study of special problems and related research associated with practical educational situations. Problems available for critiquing and analyzing are the following: Educational technology. Maximum of six hours toward a Master`s degree. Special approval needed from the instructor.

CI 585O-1 to 15 (1 to 3 per semester) Topical Seminar. A graduate level seminar that involves the study of special problems and related research associated with practical educational situations. Problems available for critiquing and analyzing are the following: Environmental education. Maximum of six hours toward a Master`s degree. Special approval needed from the instructor.

CI 585P-1 to 15 (1 to 3 per semester) Topical Seminar. A graduate level seminar that involves the study of special problems and related research associated with practical educational situations. Problems available for critiquing and analyzing are the following: Children`s literature. Maximum of six hours toward a Master`s degree. Special approval needed from the instructor.

CI 585Q-1 to 15 (1 to 3 per semester) Topical Seminar. A graduate level seminar that involves the study of special problems and related research associated with practical educational situations. Problems available for critiquing and analyzing are the following: Family studies. Maximum of six hours toward a Master`s degree. Special approval needed from the instructor.

CI 585S-1 to 15 (1 to 3 per semester) Topical Seminar. A graduate level seminar that involves the study of special problems and related research associated with practical educational situations. Problems available for critiquing and analyzing are the following: Gifted and talented education. Maximum of six hours toward a Master`s degree. Special approval needed from the instructor.

CI 585T-1 to 15 (1 to 3 per semester) Topical Seminar. A graduate level seminar that involves the study of special problems and related research associated with practical educational situations. Problems available for critiquing and analyzing are the following: Teacher education. Maximum of six hours toward a Master`s degree. Special approval needed from the instructor.

CI 586-3 Curriculum Design and Development. Presentations concerning educational planning and curricular decision-making relating to curriculum: aims, goals, and objectives; nature of knowledge, disciplines, and subjects; curriculum structures: sequence and scope; substantive structural models; content and activity selection, product analysis and production; evaluation; and curriculum modification and change.

CI 587-3 Evaluating Learning and Instructional Programs. The course emphasizes both the evaluation of individual learner performance and program evaluation in the interest of assessing curriculum and instruction effectiveness. The rationales and assumptions supporting criterion-referenced assessment are contrasted with those of norm-referenced assessment. Both qualitative and quantitative data collection strategies are included. Attention is also given to the construction of evaluation reports.

CI 588-3 Design and Delivery of e-Learning. Investigates e-learning in both higher education and corporate training contexts. The course draws upon the tradition of distance education in covering the design, delivery, and evaluation of online and blended learning in higher education. The course also draws upon the tradition of computer-based training (CBT) in covering the design, delivery, and evaluation of web-delivered training in corporations and organizations.

CI 589-3 The Work of the Director of Curriculum and Instruction. The role of the director of curriculum and instruction is the focus of this course. Such topics as the background, current status, and tasks and functions of the position are examined. Additionally, such broad areas of the director's role as needs assessment, program planning and evaluation, and in-service education planning are covered. Prerequisite: CI 586 or CI 587 or consent of instructor.

CI 590A-1 to 15 (1 to 3 per topic) Independent Readings-Curriculum. Directed readings in literature and research. Maximum of four hours toward a Master's degree. Special approval needed from the instructor.

CI 590B-1 to 15 (1 to 3 per topic) Independent Readings-Supervision for Instructional Improvement. Directed readings in literature and research. Maximum of four hours toward a Master's degree. Special approval needed from the instructor.

CI 590C-1 to 15 (1 to 3 per topic) Independent Readings-Language Arts. Directed readings in literature and research. Maximum of four hours toward a Master's degree. Special approval needed from the instructor.

CI 590D-1 to 15 (1 to 3 per topic) Independent Readings-Science. Directed readings in literature and research. Maximum of four hours toward a Master's degree. Special approval needed from the instructor.

CI 590E-1 to 15 (1 to 3 per topic) Independent Readings-Mathematics. Directed readings in literature and research. Maximum of four hours toward a Master's degree. Special approval needed from the instructor.

CI 590F-1 to 15 (1 to 3 per topic) Independent Readings-Reading. Directed readings in literature and research. Maximum of four hours toward a Master's degree. Special approval needed from the instructor.

CI 590G-1 to 15 (1 to 3 per topic) Independent Readings-Social Studies. Directed readings in literature and research. Maximum of four hours toward a Master's degree. Special approval needed from the instructor.

CI 590H-1 to 15 (1 to 3 per topic) Independent Readings-Early Childhood. Directed readings in literature and research. Maximum of four hours toward a Master's degree. Special approval needed from the instructor.

CI 590I-1 to 15 (1 to 3 per topic) Independent Readings-Elementary Education. Directed readings in literature and research. Maximum of four hours toward a Master's degree. Special approval needed from the instructor.

CI 590J-1 to 15 (1 to 3 per topic) Independent Readings-Middle School. Directed readings in literature and research. Maximum of four hours toward a Master's degree. Special approval needed from the instructor.

CI 590K-1 to 15 (1 to 3 per topic) Independent Readings-Secondary Education. Directed readings in literature and research. Maximum of four hours toward a Master's degree. Special approval needed from the instructor.

CI 590M-1 to 15 (1 to 3 per topic) Independent Readings-Instruction. Directed readings in literature and research. Maximum of four hours toward a Master's degree. Special approval needed from the instructor.

CI 590N-1 to 15 (1 to 3 per topic) Independent Readings-Educational Technology. Directed readings in literature and research. Maximum of four hours toward a Master's degree. Special approval needed from the instructor.

CI 590O-1 to 15 (1 to 3 per topic) Independent Readings-Environmental Education. Directed readings in literature and research. Maximum of four hours toward a Master's degree. Special approval needed from the instructor.

CI 590P-1 to 15 (1 to 3 per topic) Independent Readings-Children's Literature. Directed readings in literature and research. Maximum of four hours toward a Master's degree. Special approval needed from the instructor.

CI 590Q-1 to 15 (1 to 3 per topic) Independent Readings-Family Studies. Directed readings in literature and research. Maximum of four hours toward a Master's degree. Special approval needed from the instructor.

CI 590S-1 to 15 (1 to 3 per topic) Independent Readings-Gifted and Talented Education. Directed readings in literature and research. Maximum of four hours toward a Master's degree. Special approval needed from the instructor.

CI 590T-1 to 15 (1 to 3 per topic) Independent Readings-Teacher Education. Directed readings in literature and research. Maximum of four hours toward a Master's degree. Special approval needed from the instructor.

CI 591-3 Web Resources for Teachers. Investigates use of the Internet in classroom instruction and for professional development. Focus is on the "4 Cs" of Internet use by teachers: Communication, Content, Collaboration, and Community.

CI 592-3 Mixed Methods in Educational Research. An examination of how to combine qualitative and quantitative research methods and to defend such studies with reference to the tenets of the underlying constructivist and post-positivistic research paradigms. The objective of the course is for students to design and defend a mixed methods educational research study. Prerequisite: EAHE 587 and EPSY 505 or consent of instructor.

CI 593A-1 to 15 (1 to 3 per topic) Individual Research in Education-Curriculum. The selection, investigation and writing of a research topic under the personal supervision of a member of the departmental graduate staff. Maximum of three hours counted toward a Master's degree. Special approval needed from the instructor.

CI 593B-1 to 15 (1 to 3 per topic) Individual Research in Education-Supervision for Instructional Improvement. The selection, investigation and writing of a research topic under the personal supervision of a member of the departmental graduate staff. Maximum of three hours counted toward a Master's degree. Special approval needed from the instructor.

CI 593C-1 to 15 (1 to 3 per topic) Individual Research in Education-Language Arts. The selection, investigation and writing of a research topic under the personal supervision of a member of the departmental graduate staff. Maximum of three hours counted toward a Master's degree. Special approval needed from the instructor.

CI 593D-1 to 15 (1 to 3 per topic) Individual Research in Education-Science. The selection, investigation and writing of a research topic under the personal supervision of a member of the departmental graduate staff. Maximum of three hours counted toward a Master's degree. Special approval needed from the instructor.

CI 593E-1 to 15 (1 to 3 per topic) Individual Research in Education-Mathematics. The selection, investigation and writing of a research topic under the personal supervision of a member of the departmental graduate staff. Maximum of three hours counted toward a Master's degree. Special approval

needed from the instructor.

CI 593F-1 to 15 (1 to 3 per topic) Individual Research in Education-Reading. The selection, investigation and writing of a research topic under the personal supervision of a member of the departmental graduate staff. Maximum of three hours counted toward a Master`s degree. Special approval needed from the instructor.

CI 593G-1 to 15 (1 to 3 per topic) Individual Research in Education-Social Studies. The selection, investigation and writing of a research topic under the personal supervision of a member of the departmental graduate staff. Maximum of three hours counted toward a Master`s degree. Special approval needed from the instructor.

CI 593H-1 to 15 (1 to 3 per topic) Individual Research in Education-Early Childhood. The selection, investigation and writing of a research topic under the personal supervision of a member of the departmental graduate staff. Maximum of three hours counted toward a Master`s degree. Special approval needed from the instructor.

CI 593I-1 to 15 (1 to 3 per topic) Individual Research in Education-Elementary Education. The selection, investigation and writing of a research topic under the personal supervision of a member of the departmental graduate staff. Maximum of three hours counted toward a Master`s degree. Special approval needed from the instructor.

CI 593J-1 to 15 (1 to 3 per topic) Individual Research in Education-Middle School. The selection, investigation and writing of a research topic under the personal supervision of a member of the departmental graduate staff. Maximum of three hours counted toward a Master`s degree. Special approval needed from the instructor.

CI 593K-1 to 15 (1 to 3 per topic) Individual Research in Education-Secondary Education. The selection, investigation and writing of a research topic under the personal supervision of a member of the departmental graduate staff. Maximum of three hours counted toward a Master`s degree. Special approval needed from the instructor.

CI 593M-1 to 15 (1 to 3 per topic) Individual Research in Education-Instruction. The selection, investigation and writing of a research topic under the personal supervision of a member of the departmental graduate staff. Maximum of three hours counted toward a Master`s degree. Special approval needed from the instructor.

CI 593N-1 to 15 (1 to 3 per topic) Individual Research in Education-Educational Technology. The selection, investigation and writing of a research topic under the personal supervision of a member of the departmental graduate staff. Maximum of three hours counted toward a Master`s degree. Special approval needed from the instructor.

CI 593O-1 to 15 (1 to 3 per topic) Individual Research in Education-Environmental Education. The selection, investigation and writing of a research topic under the personal supervision of a member of the departmental graduate staff. Maximum of three hours counted toward a Master`s degree. Special approval needed from the instructor.

**CI 593P-1 to 15 (1 to 3 per topic) Individual Research in Education-Children`s Literature.** The selection, investigation and writing of a research topic under the personal supervision of a member of the departmental graduate staff. Maximum of three hours counted toward a Master`s degree. Special approval

needed from the instructor.

CI 593Q-1 to 15 (1 to 3 per topic) Individual Research in Education-Family Studies. The selection, investigation and writing of a research topic under the personal supervision of a member of the departmental graduate staff. Maximum of three hours counted toward a Master`s degree. Special approval needed from the instructor.

CI 593S-1 to 15 (1 to 3 per topic) Individual Research in Education-Gifted and Talented Education. The selection, investigation and writing of a research topic under the personal supervision of a member of the departmental graduate staff. Maximum of three hours counted toward a Master`s degree. Special approval needed from the instructor.

CI 593T-1 to 15 (1 to 3 per topic) Individual Research in Education-Teacher Education. The selection, investigation and writing of a research topic under the personal supervision of a member of the departmental graduate staff. Maximum of three hours counted toward a Master`s degree. Special approval needed from the instructor.

CI 594A-(2 to 9 per topic) Practicum-Curriculum. For Master`s degree students: professional consultation, teaching demonstration, practical application of advanced theory, work with clinical cases, or program development implementation, and evaluation in school systems, community colleges, or universities. In addition, may involve reading and research directed to special problems involved in on-site situations. A maximum of nine hours credit may be applied toward a Master`s degree. Special approval needed from the instructor.

CI 594B-(2 to 9 per topic) Practicum-Supervision for Instructional Improvement. For Master`s degree students: professional consultation, teaching demonstration, practical application of advanced theory, work with clinical cases, or program development implementation, and evaluation in school systems, community colleges, or universities. In addition, may involve reading and research directed to special problems involved in on-site situations. A maximum of nine hours credit may be applied toward a Master`s degree. Special approval needed from the instructor.

CI 594C-(2 to 9 per topic) Practicum-Language Arts. For Master`s degree students: professional consultation, teaching demonstration, practical application of advanced theory, work with clinical cases, or program development implementation, and evaluation in school systems, community colleges, or universities. In addition, may involve reading and research directed to special problems involved in on-site situations. A maximum of nine hours credit may be applied toward a Master`s degree. Special approval needed from the instructor.

CI 594D-(2 to 9 per topic) Practicum-Science. For Master`s degree students: professional consultation, teaching demonstration, practical application of advanced theory, work with clinical cases, or program development implementation, and evaluation in school systems, community colleges, or universities. In addition, may involve reading and research directed to special problems involved in on-site situations. A maximum of nine hours credit may be applied toward a Master`s degree. Special approval needed from the instructor.

CI 594E-(2 to 9 per topic) Practicum-Mathematics. For Master`s degree students: professional consultation, teaching demonstration, practical application of advanced theory, work with clinical cases, or program development implementation,

and evaluation in school systems, community colleges, or universities. In addition, may involve reading and research directed to special problems involved in on-site situations. A maximum of nine hours credit may be applied toward a Master's degree. Special approval needed from the instructor.

CI 594F-(2 to 9 per topic) Practicum-Reading. For Master's degree students: professional consultation, teaching demonstration, practical application of advanced theory, work with clinical cases, or program development implementation, and evaluation in school systems, community colleges, or universities. In addition, may involve reading and research directed to special problems involved in on-site situations. A maximum of nine hours credit may be applied toward a Master's degree. Special approval needed from the instructor.

CI 594G-(2 to 9 per topic) Practicum-Social Studies. For Master's degree students: professional consultation, teaching demonstration, practical application of advanced theory, work with clinical cases, or program development implementation, and evaluation in school systems, community colleges, or universities. In addition, may involve reading and research directed to special problems involved in on-site situations. A maximum of nine hours credit may be applied toward a Master's degree. Special approval needed from the instructor.

CI 594H-(2 to 9 per topic) Practicum-Early Childhood. For Master's degree students: professional consultation, teaching demonstration, practical application of advanced theory, work with clinical cases, or program development implementation, and evaluation in school systems, community colleges, or universities. In addition, may involve reading and research directed to special problems involved in on-site situations. A maximum of nine hours credit may be applied toward a Master's degree. Special approval needed from the instructor.

CI 594I-(2 to 9 per topic) Practicum-Elementary Education. For Master's degree students: professional consultation, teaching demonstration, practical application of advanced theory, work with clinical cases, or program development implementation, and evaluation in school systems, community colleges, or universities. In addition, may involve reading and research directed to special problems involved in on-site situations. A maximum of nine hours credit may be applied toward a Master's degree. Special approval needed from the instructor.

CI 594J-(2 to 9 per topic) Practicum-Middle School. For Master's degree students: professional consultation, teaching demonstration, practical application of advanced theory, work with clinical cases, or program development implementation, and evaluation in school systems, community colleges, or universities. In addition, may involve reading and research directed to special problems involved in on-site situations. A maximum of nine hours credit may be applied toward a Master's degree. Special approval needed from the instructor.

CI 594K-(2 to 9 per topic) Practicum-Secondary Education. For Master's degree students: professional consultation, teaching demonstration, practical application of advanced theory, work with clinical cases, or program development implementation, and evaluation in school systems, community colleges, or universities. In addition, may involve reading and research directed to special problems involved in on-site situations. A maximum of nine hours credit may be applied toward a Master's degree. Special approval needed from the instructor.

CI 594M-(2 to 9 per topic) Practicum-Instruction. For Master's degree students: professional consultation, teaching demonstration, practical application of advanced theory, work with clinical cases, or program development implementation, and evaluation in school systems, community colleges, or universities. In addition, may involve reading and research directed to special problems involved in on-site situations. A maximum of nine hours credit may be applied toward a Master's degree. Special approval needed from the instructor.

CI 594N-(2 to 9 per topic) Practicum-Educational Technology. For Master's degree students: professional consultation, teaching demonstration, practical application of advanced theory, work with clinical cases, or program development implementation, and evaluation in school systems, community colleges, or universities. In addition, may involve reading and research directed to special problems involved in on-site situations. A maximum of nine hours credit may be applied toward a Master's degree. Special approval needed from the instructor.

CI 594O-(2 to 9 per topic) Practicum-Environmental Education. For Master's degree students: professional consultation, teaching demonstration, practical application of advanced theory, work with clinical cases, or program development implementation, and evaluation in school systems, community colleges, or universities. In addition, may involve reading and research directed to special problems involved in on-site situations. A maximum of nine hours credit may be applied toward a Master's degree. Special approval needed from the instructor.

CI 594P-(2 to 9 per topic) Practicum-Children`s Literature. For Master's degree students: professional consultation, teaching demonstration, practical application of advanced theory, work with clinical cases, or program development implementation, and evaluation in school systems, community colleges, or universities. In addition, may involve reading and research directed to special problems involved in on-site situations. A maximum of nine hours credit may be applied toward a Master's degree. Special approval needed from the instructor.

CI 594Q-(2 to 9 per topic) Practicum-Family Studies. For Master's degree students: professional consultation, teaching demonstration, practical application of advanced theory, work with clinical cases, or program development implementation, and evaluation in school systems, community colleges, or universities. In addition, may involve reading and research directed to special problems involved in on-site situations. A maximum of nine hours credit may be applied toward a Master's degree. Special approval needed from the instructor.

CI 594S-(2 to 9 per topic) Practicum-Gifted and Talented Education. For Master's degree students: professional consultation, teaching demonstration, practical application of advanced theory, work with clinical cases, or program development implementation, and evaluation in school systems, community colleges, or universities. In addition, may involve reading and research directed to special problems involved in on-site situations. A maximum of nine hours credit may be applied toward a Master's degree. Special approval needed from the instructor.

CI 594T-(2 to 9 per topic) Practicum-Teacher Education. For Master's degree students: professional consultation, teaching demonstration, practical application of advanced theory, work with clinical cases, or program development implementation, and evaluation in school systems, community colleges, or universities. In addition, may involve reading and research

directed to special problems involved in on-site situations. A maximum of nine hours credit may be applied toward a Master`s degree. Special approval needed from the instructor.

CI 595A-(2 to 8 per topic) Internship-Curriculum. Culminating experience for Ph.D. or specialist degree students. Students engage in specialized service areas either in their own or a cooperating school or school system or university. Weekly on-campus or on-site seminar will be held with the intern supervisor. A maximum of eight hours credit may be applied toward a Ph.D. or specialist degree. Special approval needed from the instructor.

CI 595B-(2 to 8 per topic) Internship-Supervision for Instructional Improvement. Culminating experience for Ph.D. or specialist degree students. Students engage in specialized service areas either in their own or a cooperating school or school system or university. Weekly on-campus or on-site seminar will be held with the intern supervisor. A maximum of eight hours credit may be applied toward a Ph.D. or specialist degree. Special approval needed from the instructor.

CI 595C-(2 to 8 per topic) Internship-Language Arts. Culminating experience for Ph.D. or specialist degree students. Students engage in specialized service areas either in their own or a cooperating school or school system or university. Weekly on-campus or on-site seminar will be held with the intern supervisor. A maximum of eight hours credit may be applied toward a Ph.D. or specialist degree. Special approval needed from the instructor.

CI 595D-(2 to 8 per topic) Internship-Science. Culminating experience for Ph.D. or specialist degree students. Students engage in specialized service areas either in their own or a cooperating school or school system or university. Weekly on-campus or on-site seminar will be held with the intern supervisor. A maximum of eight hours credit may be applied toward a Ph.D. or specialist degree. Special approval needed from the instructor.

CI 595E-(2 to 8 per topic) Internship-Mathematics. Culminating experience for Ph.D. or specialist degree students. Students engage in specialized service areas either in their own or a cooperating school or school system or university. Weekly on-campus or on-site seminar will be held with the intern supervisor. A maximum of eight hours credit may be applied toward a Ph.D. or specialist degree. Special approval needed from the instructor.

CI 595F-(2 to 8 per topic) Internship-Reading. Culminating experience for Ph.D. or specialist degree students. Students engage in specialized service areas either in their own or a cooperating school or school system or university. Weekly on-campus or on-site seminar will be held with the intern supervisor. A maximum of eight hours credit may be applied toward a Ph.D. or specialist degree. Special approval needed from the instructor.

CI 595G-(2 to 8 per topic) Internship-Social Studies. Culminating experience for Ph.D. or specialist degree students. Students`engage in specialized service areas either in their own or a cooperating school or school system or university. Weekly on-campus or on-site seminar will be held with the intern supervisor. A maximum of eight hours credit may be applied toward a Ph.D. or specialist degree. Special approval needed from the instructor.

CI 595H-(2 to 8 per topic) Internship-Early Childhood. Culminating experience for Ph.D. or specialist degree students. Students engage in specialized service areas either in their own or a cooperating school or school system or university. Weekly on-campus or on-site seminar will be held with the intern

supervisor. A maximum of eight hours credit may be applied toward a Ph.D. or specialist degree. Special approval needed from the instructor.

CI 595I-(2 to 8 per topic) Internship-Elementary Education. Culminating experience for Ph.D. or specialist degree students. Students engage in specialized service areas either in their own or a cooperating school or school system or university. Weekly on-campus or on-site seminar will be held with the intern supervisor. A maximum of eight hours credit may be applied toward a Ph.D. or specialist degree. Special approval needed from the instructor.

CI 595J-(2 to 8 per topic) Internship-Middle School. Culminating experience for Ph.D. or specialist degree students. Students engage in specialized service areas either in their own or a cooperating school or school system or university. Weekly on-campus or on-site seminar will be held with the intern supervisor. A maximum of eight hours credit may be applied toward a Ph.D. or specialist degree. Special approval needed from the instructor.

CI 595K-(2 to 8 per topic) Internship-Secondary Education. Culminating experience for Ph.D. or specialist degree students. Students engage in specialized service areas either in their own or a cooperating school or school system or university. Weekly on-campus or on-site seminar will be held with the intern supervisor. A maximum of eight hours credit may be applied toward a Ph.D. or specialist degree. Special approval needed from the instructor.

CI 595M-(2 to 8 per topic) Internship-Instruction. Culminating experience for Ph.D. or specialist degree students. Students engage in specialized service areas either in their own or a cooperating school or school system or university. Weekly on-campus or on-site seminar will be held with the intern supervisor. A maximum of eight hours credit may be applied toward a Ph.D. or specialist degree. Special approval needed from the instructor.

CI 595N-(2 to 8 per topic) Internship-Educational Technology. Culminating experience for Ph.D. or specialist degree students. Students engage in specialized service areas either in their own or a cooperating school or school system or university. Weekly on-campus or on-site seminar will be held with the intern supervisor. A maximum of eight hours credit may be applied toward a Ph.D. or specialist degree. Special approval needed from the instructor.

CI 595O-(2 to 8 per topic) Internship-Environmental Education. Culminating experience for Ph.D. or specialist degree students. Students engage in specialized service areas either in their own or a cooperating school or school system or university. Weekly on-campus or on-site seminar will be held with the intern supervisor. A maximum of eight hours credit may be applied toward a Ph.D. or specialist degree. Special approval needed from the instructor.

CI 595P-(2 to 8 per topic) Internship-Children`s Literature. Culminating experience for Ph.D. or specialist degree students. Students engage in specialized service areas either in their own or a cooperating school or school system or university. Weekly on-campus or on-site seminar will be held with the intern supervisor. A maximum of eight hours credit may be applied toward a Ph.D. or specialist degree. Special approval needed from the instructor.

CI 595Q-(2 to 8 per topic) Internship-Family Studies. Culminating experience for Ph.D. or specialist degree students. Students engage in specialized service areas either in their own

or a cooperating school or school system or university. Weekly on-campus or on-site seminar will be held with the intern supervisor. A maximum of eight hours credit may be applied toward a Ph.D. or specialist degree. Special approval needed from the instructor.

CI 595S-(2 to 8 per topic) Internship-Gifted and Talented Education. Culminating experience for Ph.D. or specialist degree students. Students engage in specialized service areas either in their own or a cooperating school or school system or university. Weekly on-campus or on-site seminar will be held with the intern supervisor. A maximum of eight hours credit may be applied toward a Ph.D. or specialist degree. Special approval needed from the instructor.

CI 595T-(2 to 8 per topic) Internship-Teacher Education. Culminating experience for Ph.D. or specialist degree students. Students engage in specialized service areas either in their own or a cooperating school or school system or university. Weekly on-campus or on-site seminar will be held with the intern supervisor. A maximum of eight hours credit may be applied toward a Ph.D. or specialist degree. Special approval needed from the instructor.

CI 597-1 to 3 Problem-Based Learning for STEM Educators. This course surveys the history and development of Problem-Based Learning (PBL) and its applications in Science, Technology, Engineering, and Mathematics (STEM) education and place-based education. Participants will discuss PBL principles and pedagogy and critique or create PBL modules with respect to national and state STEM education standards in support of K-12 classroom implementation, adaptation, assessment, and iterative design of PBL instruction or intervention.

CI 599-1 to 6 Thesis. Minimum of three hours to be counted toward a Master`s degree. Restricted to admission to Master`s degree program.

CI 600-1 to 32 (1 to 16 per semester) Dissertation. Minimum of 24 hours for the Doctor of Philosophy degree.

CI 601-1 per semester Continuing Enrollment. For those graduate students who have not finished their degree programs and who are in the process of working on their dissertation, thesis, or research paper. The student must have completed a minimum of 24 hours of dissertation research, or the minimum thesis, or research hours before being eligible to register for this course. Concurrent enrollment in any other course is not permitted. Graded S/U or DEF only.

CI 699-1 Postdoctoral Research. Must be a Postdoctoral Fellow. Concurrent enrollment in any other course is not permitted.