Secondary Education

Degree Offered

• Master of Arts

Nature of the Program

The Department of Curriculum and Instruction/Literacy Studies offers opportunities for graduate study leading to teacher certification and a Master of Arts degree in content areas that include math, science, social studies, world languages and English. This program is designed to prepare individuals to become educators in grades 6-12 public school classroom. Students in this programs will work with faculty who contribute as educational scholars to the profession at university, state, and national levels. Additionally, the program offers opportunities to develop technology rich, culturally responsive, and active learning environments associated with greater student achievement. This program has met accreditation standards.

Program Coordinator
Dr. Denise Lindstrom
denise.lindstrom@mail.wvu.edu
Allen Hall, 606B

Department Chair, Dr. Nathan Sorber

Admissions

All applicants for the Secondary Education must:

• Submit WVU Graduate application for admission. The application can be found at https://admissions.wvu.edu/how-to-apply
• Hold a Bachelor’s degree with a 2.75 GPA or above
• Submit a one-page goal statement. The Statement should be of professional experiences, career ambitions and will be considered a writing sample
• Test requirements: Praxis Core Academic Skills for Educators. Student can take the combined test # 5751 this will include the 3 section (reading #5712, writing # 5722 & math #5732).
• The Praxis CORE may be waived with an enhanced ACT score of 26 or higher, a re-centered SAT score of 1125 (April 1995), or a revised SAT of 1170 (March 2005) or higher OR a 26 ACT or Math and Critical Reading SAT total of 1170 (pre-March 2016 test sitting) or an Evidence Based Reading/Writing and Math Section 1240 (post-March 2016 test sitting). (OR) Graduate Records Examination (GRE), minimum score 280 (combined score of verbal and quantitative sections) .
• TOEFL (international students) - TOEFL score must be at least 550 (paper) or 213 (computer) 79-80 iBT or IELTS 6.5.

PROGRAM REQUIREMENTS

• C&I 602 must be taken in the first semester after admission into the program. "B" or better is required in C&I 602.
• All student in the "Secondary Education Program", must purchase a subscription for LiveText.
• State back ground checks are required before entering a public school classroom.
• No more than nine hours at a 400-level plus may count toward this thirty hour master’s degree.
• Application for transient credit for graduate courses taken at other institutions must be approved by the adviser and the Assistant Dean for Student Services.
• Completion of 125 hours of field experience are required before student teaching.
• Passing scores on the Praxis II subject area knowledge assessment are due one full semester before student teaching.
• Passing Scores on the edTPA.
• On-line application to graduate (Contact the Office of Student Success for additional information) http://cehs.wvu.edu/advising

Master of Arts with Areas of Certification Areas in:

• Biology Education (p. 2)
• Chemistry Education (p. 3)
• English Education (p. 3)
• General Science Education (p. 3)
• Math Education (p. 3)
• Physics Education (p. 3)
• Social Studies Education (p. 3)
• World Language Education (p. 3)
MAJOR REQUIREMENTS

A minimum cumulative GPA of 3.0 is required
A grade of C- or higher is required in all graduate coursework

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>C&amp;I 602</td>
<td>Curriculum and Teaching Principles (minimum grade of B)</td>
<td>3</td>
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<tr>
<td>C&amp;I 688</td>
<td>Classroom Organization and Management</td>
<td>3</td>
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<tr>
<td>C&amp;I 689</td>
<td>Cultural Diversity in the Classroom</td>
<td>3</td>
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<td>EDP 600</td>
<td>Educational Psychology</td>
<td>3</td>
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<tr>
<td>LE 622</td>
<td>Disciplinary Literacy (Secondary English education students will take C&amp;I 425 instead of LE 622)</td>
<td>3</td>
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<tr>
<td>SPED 500</td>
<td>Legal/Educational Foundations: Special Education</td>
<td>3</td>
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<tr>
<td>SPED 601</td>
<td>Academic Interventions for Special Needs</td>
<td>3</td>
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<td>Area of Emphasis coursework</td>
<td>9</td>
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Total Hours: 30

OTHER REQUIREMENTS

- A WV state background check is required before entering a public school classroom.
- Completion of 125 hours of field experience are required before student teaching.
- Student teaching application must be completed 1 year in advance if the student teaching semester.
- A standards-based portfolio completed C&I 680 Technology Integration Capstone course.
- Passing scores on the Praxis II in content area, due one full semester before student teaching.
- Passing scores on the edTPA completed during the student teaching semester are required for certification and program completion.

BIOLOGY EDUCATION AREA OF EMPHASIS

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<tr>
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<tbody>
<tr>
<td>C&amp;I 644</td>
<td>Science in the Secondary School</td>
<td>3</td>
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<tr>
<td>C&amp;I 648</td>
<td>Science/Technology: Society Perspectives</td>
<td>3</td>
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<tr>
<td>C&amp;I 649</td>
<td>History/Philosophy of Science</td>
<td>3</td>
</tr>
</tbody>
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Total Hours: 9
## CHEMISTRY EDUCATION AREA OF EMPHASIS
- C&I 644: Science in the Secondary School (3 credits)
- C&I 648: Science/Technology: Society Perspectives (3 credits)
- C&I 649: History/Philosophy of Science (3 credits)

Total Hours: 9

## ENGLISH EDUCATION AREA OF EMPHASIS
- SCFD 640: History of American Education (3 credits)
  or SCFD 620: Philosophy of Education (3 credits)
- C&I 424: Approaches to Teaching Language (3 credits)
- C&I 624: Advanced Methods in English Education (3 credits)

Total Hours: 9

## GENERAL SCIENCE EDUCATION AREA OF EMPHASIS
- C&I 644: Science in the Secondary School (3 credits)
- C&I 648: Science/Technology: Society Perspectives (3 credits)
- C&I 649: History/Philosophy of Science (3 credits)

Total Hours: 9

## MATH EDUCATION AREA OF EMPHASIS
- SCFD 620: Philosophy of Education (3 credits)
  or SCFD 640: History of American Education (3 credits)
- C&I 634/434: Mathematics in the Secondary School (3 credits)
- C&I 632/432: Research in Math Curriculum and Technology (3 credits)

Total Hours: 9

## PHYSICS EDUCATION AREA OF EMPHASIS
- C&I 644: Science in the Secondary School (3 credits)
- C&I 648: Science/Technology: Society Perspectives (3 credits)
- C&I 649: History/Philosophy of Science (3 credits)

Total Hours: 9

## SOCIAL STUDIES EDUCATION AREA OF EMPHASIS
- SCFD 640: History of American Education (3 credits)
  or SCFD 620: Philosophy of Education (3 credits)
- C&I 654: Social Studies in the Secondary School (3 credits)
- C&I 757: Social Studies Curriculum Development, K-12 (3 credits)

Electives: 400 and 500 level from content area or related education courses counted as electives with advisor approval (6 credits)

Total Hours: 15

## WORLD LANGUAGE EDUCATION AREA OF EMPHASIS
- SCFD 620: Philosophy of Education (3 credits)
  or SCFD 640: History of American Education (3 credits)
- LANG 421: The Teaching of Foreign Languages (3 credits)

Electives: Taken at the graduate level in foreign language, C&I, and /or related field with advisor approval (3 credits)

Total Hours: 9
Major Learning Outcomes

SECONDARY EDUCATION

The learning goals for this program are to prepare students who:

• Have commitment and skills to engage in life-long learning;
• Are effective communicators;
• Recognize that teaching is a professional, moral, and ethical enterprise with well-developed ethical frameworks which facilitate effective teaching;
• Will serve as a facilitator of learning for all students;
• Possess in-depth knowledge of both pedagogy and content, and the relationships between them;
• Are reflective practitioners;
• Are aware of, and have respect for, human diversity;
• Value and integrate knowledge from a wide variety of fields, are creative and open to new ideas, and are able to act constructively in a world characterized by technological, cultural, and societal diversity and change.

CURRICULUM AND INSTRUCTION COURSES

C&I 501. Essential Topics for Teaching. 3 Hours.
This course provides an initial exposure for undergraduate and graduate students to themes in education to foster appreciation of the classroom experience by empowering teachers to be classroom leaders.

C&I 524. Middle School Number/Algebra Teaching 1. 1 Hour.
PR or CONC: MATH 524. Issues involved with sets of numbers as examples of algebraic systems, properties of groups, rings and fields. Properties of polynomials and polynomial rings. Mathematical modeling with finite differences and least squares. Applications in model curricula.

C&I 525. Middle School Number/Algebra Teaching 2. 1 Hour.
PR or CONC: MATH 525. Continuation of C&I 524. Issues involved with sets of numbers as examples of algebraic systems, properties of groups, rings, and fields. Properties of polynomials and polynomial rings. Mathematical modeling with finite differences and least squares.

C&I 528. Middle School Function/Change Teaching 1. 1 Hour.
PR or CONC: MATH 528. Teaching and Learning function concept operations on functions, limits, continuity, Intermediate Value Theorem, families of curves, optimization and area. Classroom applications, current research in learning. Applications in model curricula.

C&I 529. Middle School Functions/Change Teaching 2. 1 Hour.

C&I 530. Mathematics in the Elementary School. 3 Hours.
PR: Consent. Addresses current issues and trends in elementary mathematics education. Designed for the practicing elementary teacher.

C&I 533. Corrective Techniques in Mathematics Education. 3 Hours.
PR: Consent. Materials and methods used in diagnosis and remediation of learning difficulties in mathematics.

C&I 581. Independent Research in Curriculum Studies. 1-6 Hours.
Faculty-supervised study of topics not available through regular course offerings.

C&I 584. Student Teaching: Elementary-Early Childhood. 2-12 Hours.
PR: For elementary and early childhood undergraduates who meet eligibility requirements and other guidelines. (Applicable to preschool, nursery, day care, child care, kindergarten, primary grade, or elementary school.).

C&I 585. Student Teaching: Secondary Education. 2-12 Hours.
PR: Students enrolled in secondary education undergraduate programs who meet eligibility requirements and other guidelines.

C&I 587. Advanced Clinical Experience. 1-6 Hours.
PR: Consent. Clinical experience in teaching-learning situations at any level.

C&I 588. Professional Field Experience. 2 Hours.
Students are placed in classroom settings where they are required to observe classroom teachers and engage in instructional and non-instructional programming.

C&I 591. Advanced Topics. 1-6 Hours.
PR: Consent. Investigation of advanced topics not covered in regularly scheduled courses.

C&I 592. Directed Study. 1-6 Hours.
Directed Study, reading, and/or research.

C&I 593. Special Topics. 1-6 Hours.
A study of contemporary topics selected from recent developments in the field.
C&I 594. Seminar. 1-6 Hours.
Special seminars arranged for advanced graduate students.

C&I 600. United States Education for International Students. 3 Hours.
PR: International students with graduate status and developing oral and written English skills. To assist international students in understanding the U.S. system of education. Included: dominant U.S. values related to education, structure of U.S. education at all levels, models and strategies, field trips, and international comparisons.

C&I 601. The Elementary-School Curriculum. 3 Hours.
PR: 20 hours of undergraduate credit in elementary education, or consent. Analysis of curriculum designs in elementary education with emphasis on methods and techniques of development.

C&I 602. Curriculum and Teaching Principles. 3 Hours.
This course will give the student a basic foundation in the principles, development, and design of curriculum and teaching models.

C&I 603. Counselors & Classrooms. 3 Hours.
Bridging theory and practice, this course helps P-12 school counselors create effective learning environments for all students specifically during their classroom-based lessons.

C&I 604. School Curriculum. 3 Hours.
PR: Teaching experience or consent. Emphasizes socioeconomic and cultural influences on curriculum; principles of curriculum development; curriculum building in various teaching fields; and techniques of experimentation and evaluation.

C&I 605. Twenty-First Century Teaching and Learning. 3 Hours.
Interdisciplinary content if a 3 credit hour course. This course examines new and emerging technologies as they relate to classroom integration and pedagogy.

C&I 606. Curriculum for Middle Childhood. 3 Hours.
Survey course which includes: historical, social, and cultural influences on the curriculum; the learner characteristics; curriculum and instructional organization and their relationship to facilities available; and evaluation and implementation of middle childhood curriculum.

C&I 608. Introduction to Alternative Learning Environments. 3 Hours.
This course will provide opportunities for educators to explore and analyze the trends and issues in alternative learning environments in public education.

C&I 609. Experiences in Alternative Learning Environments. 6 Hours.
PR: C&I 608 and SCFD 620 and consent. This course helps teachers to learn and practice skills that are needed to be an effective teacher in an alternative teaching environment. (Alternate years.).

C&I 612. Early Childhood Curriculum. 3 Hours.
PR: C&I 410 and C&I 411 or consent. Curriculum development for early childhood education Pre-K to 4th grade, including social, creative, cognitive, physical, and academic goals. Societal, historical, and theoretical influences on early childhood curriculum are examined.

C&I 614. Early Childhood Instruction. 3 Hours.
PR: C&I 410 and C&I 411 or consent. Design of instruction for continuous improvement toward mastery of curriculum goals for early childhood education Pre-K to 4th grade.

C&I 615. Issues in Holocaust Education. 3 Hours.
Course examines important issues related to the Holocaust, and their implications for inclusion in curriculum. It examines instructional procedures helpful to youth in trying to comprehend the Holocaust's meaning for living in the 21st century.

C&I 616. Early Childhood Program Development and Evaluation. 3 Hours.
PR: C&I 410 and C&I 411 or consent. Development, administration, and evaluation of facilities, programs, and support systems for early childhood education Pre-K to 4th grade. Includes a focus on family connections and support systems related to early childhood classrooms.

C&I 617. Language Arts in Early Childhood. 3 Hours.
Designing instruction for an integrated development of writing, reading, speaking and listening with an emphasis on literacy acquisition in early childhood education Pre-K to 4th grade.

C&I 618. Storytelling in Early Childhood. 3 Hours.
This course will assist students in telling, reading, and creating stories for children. Techniques, methods, and research effective in the art of storytelling will be examined and applied as they relate to total child development.

C&I 623. Contemporary Issues in English Education. 3 Hours.
PR: Graduate standing. Provides the student with a knowledge of several contemporary issues in English teaching which have immediate and long-range ramifications for secondary-school English instruction. (1 hr. lec., 2 hr. sem.).

C&I 624. Advanced Methods in English Education. 3 Hours.
PR: C&I 602 and EDP 600 and Graduate standing. (For classroom teachers of English.) Analysis of recent trends and innovations in methodology. Readings and discussions will lead to the development of instructional strategies and units for secondary English classrooms. (1 hr. lec., 1 hr. lab., 1 hr. sem.).
C&I 625. Leadership Field Experiences and Clinical Practice. 3 Hours.
Students engage in a sequence of field experiences and clinical practice. Activities emphasize school-based leadership focused experiences. Participants interview educational stakeholders and develop a data focused understanding of school improvement foci and efforts. Participants also develop, implement, and report on an inquiry project focused on the planning, enactment, and analytical reflection of an implemented professional development experience.

C&I 630. Problem Solving in Math. 3 Hours.
PR: C&I 602 and EDP 600. A capstone course designed to further develop student's conceptual understanding of mathematics.

C&I 631. Mathematics in the Elementary School. 3 Hours.
PR: Consent. Addresses current issues and trends in elementary mathematics education. Designed for the practicing elementary teacher.

C&I 632. Research in Math Curriculum and Technology. 3 Hours.
This graduate level course is designed to focus on research and trends associated with applications of technology and curriculum in mathematics settings. Class topics will span curriculum, technology, and assessment in math education.

C&I 633. Mathematics in the Junior High School and Middle School. 3 Hours.
A methods course designed to teach selected topics including lesson planning, developing appropriate teaching/learning methods, and evaluations from middle school mathematics.

C&I 634. Mathematics in the Secondary School. 3 Hours.
PR: C&I 602 and EDP 600 and Consent. Patterns of mathematics curriculum in the secondary school; practices in teaching mathematics; preparation, selection and use of instructional materials. Designed for the practicing secondary mathematics teacher.

C&I 635. Selecting, Designing, and Using Mathematical Tasks in K-6. 2 Hours.
PR: Consent. This is the first of four mathematics pedagogy courses in the elementary mathematics specialist endorsement program. Topics include identifying the cognitive demand of tasks, identifying influences of cognitive demand on student learning, instructional moves that maintain cognitive demand of tasks, and strategies for adapting tasks to increase cognitive demand. Tasks examined will cover a range of K-6 mathematics.

C&I 636. Learning Trajectories in Elementary Mathematics. 2 Hours.
PR: C&I 635. This is the second of four mathematics pedagogy courses designed for students pursuing the elementary mathematics specialist endorsement. This course examines research-based descriptions of learning trajectories for how children's thinking and understanding develop for specific mathematical content. Learning trajectories studied include those for quantity, counting, computation, and shape. Students will examine effective use of learning trajectories in instruction.

C&I 637. Classroom Practices for Effective Learning Environments in Elementary Mathematics. 2 Hours.
PR: C&I 636. This is the third of four mathematics pedagogy courses designed for students pursuing the elementary mathematics specialist endorsement. Students will examine strategies for developing a classroom environment that supports all students in learning mathematics. Emphasis will be placed on understanding teaching practices and pedagogical strategies identified in mathematics education research literature as being effective in supporting student learning.

C&I 638. Planning, Implementing, and Assessing Mathematics Instruction. 2 Hours.
PR: C&I 637. This is the fourth of four mathematics pedagogy courses designed for students pursuing the elementary mathematics specialist endorsement. This course provides opportunities for students to plan, implement, assess, and reflect upon their own mathematics instruction, drawing upon knowledge, skills, and practices developed in the prerequisite courses of the elementary mathematics specialist endorsement sequence.

C&I 639. Science Research and Technology Ethics. 3 Hours.
PR: Graduate Standing. Students learn basic concepts of responsible research conduct, public communication and teaching research ethics by way of on-line discussions, and peer-review of case-solutions/reasoning and application projects.

C&I 640. Science in the Elementary School. 3 Hours.
PR: 20 hours of undergraduate credit in elementary education or consent. Analysis of methods, curriculum patterns, and trends in elementary school science. Understanding and development of scientific attitudes appropriate at the elementary-school level.

C&I 643. Brain-Based Teaching and Learning. 3 Hours.
This course provides an integrative, interactive, and collaborative introduction to the emerging interdisciplinary field of brain-based teaching and learning. Through synchronous and asynchronous classroom discussions and applied exercises, students will draw on knowledge from neuroscience, cognitive psychology, biology, and education to explore the theoretical foundations, methods, and applications of teaching and learning from a brain-based perspective.

C&I 644. Science in the Secondary School. 3 Hours.
PR: C&I 602 and EDP 600 or appropriate professional experience. Nature and function of science in secondary schools supported by current research and development; includes analysis of structure and practice of science curriculum and instruction issues.

C&I 645. Global Climate Change. 3 Hours.
A graduate-level web-based course that presents the scientific evidence related to global climate change and the implications for science, technology and society.

C&I 646. Science: Native American Views. 3 Hours.
This course examines the science and non-scientific views in areas of health and healing, environment, and technological applications in traditional Native American and Western cultures.
C&I 647. Science and Mathematics Applications for Nutrition and Energy Content. 3 Hours.
This course is designed for teachers (4-12) of science or math. The course integrates nutrition and physical activity content applicable to students’ lives.

C&I 648. Science/Technology: Society Perspectives. 3 Hours.
Course provides students with an understanding of the characteristic relationships between science, technology, and society. Course examines impacts of these relationships on social and natural communities.

C&I 649. History/Philosophy of Science. 3 Hours.
Examines the nature of science and how social forces have interacted with the process of science to promote the dynamic development of the current body of scientific knowledge.

C&I 650. Social Studies in the Elementary School. 3 Hours.
PR: C&I 602 and EDP 600 or consent. Comprehensive consideration of objectives, content, methods, including unit procedures; materials including objects, models, exhibits, and museum items, as well as textbooks, collateral reading, maps, and graphs; means of evaluating social growth and development.

C&I 654. Social Studies in the Secondary School. 3 Hours.
PR: C&I 602 and EDP 600 or consent. Nature and function of social studies in the secondary school; utilization of community, state, national, and world resources in teaching; selection of content for teaching purposes; curriculum construction with emphasis on resource and teaching units.

C&I 655. Challenges in Teaching History. 3 Hours.
This course will provide an initial exposure for pre-service social studies teachers to address the challenge of teaching controversial public issues of recent history.

C&I 657. Principles of Economic Education. 3 Hours.
Workshop for principals, teachers, and supervisors with emphasis on the economic structure of our society and methods of integrating economics into the school program. (Sponsored jointly by College of Human Resources and Education and College of Business and Economics.)

C&I 660. Games, Learning, & Design. 3 Hours.
Play, gaming, and design are explored as they relate to constructionist views of learning, common in makerspaces, formal and informal learning environments, and project-based learning environments. Students will engage in an iterative design process as part of a team, while considering the pedagogical implications of integrating play and design into K-12 learning environments.

C&I 661. Computational Literacy and Coding for Learning. 3 Hours.
Students will engage in research- and project-based learning activities as well as online discussions to learn about computer science in ways that supports meaningful learning in both formal (K-12 classrooms, professional development) and informal (DIY communities, afterschool, camp, Makerspaces) learning environments.

C&I 662. Hypermedia in Learning. 3 Hours.
Survey of theory, research, and application of hypermedia and the authoring language - Authorware.

C&I 663. Software Development. 3 Hours.
Principles and models of software design and the authoring language-HyperCard.

C&I 670. Practitioner Inquiry. 3 Hours.
PR: Departmental approval. Engaging in inquiry enables students to explore the underlying assumptions, biases, values, and ideologies inherent in their curricula and pedagogies and the policies and practices of their contexts. In this course, students design and conduct studies and cultivate the tools and habits of mind necessary for transforming the ways we do school and improving the life chances of all students.

C&I 671. Assessing the Impact of Computer-Based Learning. 3 Hours.
Survey of the current findings in computer-based learning; couples statistical features and design scenarios.

C&I 672. Professional Learning Communities: Creating Spaces for Collaboration, Coaching, and Praxis. 3 Hours.
PR: C&I 670. This course introduces students to strategies for developing and engaging in professional learning communities and learning to teach through studying teaching. Students explore the philosophical/research-based foundations and practices of student-centered coaching; engage in analyzing children’s thinking and work/performances, explore connections between their current practice and student thinking/performance; and plan for and engage in a coaching cycle that addresses student needs.

C&I 673. Teacher Leadership: Transforming Identities, Contexts, and Practices. 3 Hours.
PR: C&I 670 and C&I 672. This course focuses on understanding the current scholarship of the leadership roles teacher leaders pursue (e.g., teacher as exemplary practitioner, curriculum decision-maker, researcher, change agent, facilitator of job-embedded professional development) as they facilitate teacher learning and school renewal. Students also identify and create possible action plans for the reform and transformation of the sacred stories of their place(s).

C&I 677. Children’s Television: Problems and Potentials. 4 Hours.
PR: Consent. Provides parents and teachers with strategies for monitoring, evaluating, and directing television viewing habits of youth; pertinent research studies, school and community action programs, and home and school education programs are discussed and practiced.

C&I 680. Technology Integration Through Capstone Experience. 3 Hours.
Capstone for elementary and secondary education programs.
C&I 681. Independent Research in Curriculum and Instruction. 1-6 Hours.
Faculty supervised study of topics not available through regular course offerings.

C&I 685. Supervision of Student Teachers. 3 Hours.
PR: Consent. For persons working or intending to work with education students in field experiences. Course focuses on the development and application of supervisory skills in effective guidance of student teachers and education students.

C&I 686. Teaching Strategies for Middle Childhood. 3 Hours.
Surveys instructional strategies appropriate for facilitating preadolescent learning. Includes the role of the teacher and how the teacher uses resources within and outside the classroom as they relate to instruction of the learner, age 10-14 years.

C&I 687. Advanced Teaching Strategies. 3 Hours.
PR: Graduate standing. Examines ways and means to describe, plan the use of, implement, and evaluate teaching methods. Analysis and implementation of teaching methods and component skills of teaching.

C&I 688. Classroom Organization and Management. 3 Hours.
Discusses research identifying components of classroom organization and environment which influence learning; reviews teacher behaviors and learning activities which research indicates lead to more effective teaching. Stresses implementation strategies relevant to classroom settings.

C&I 689. Cultural Diversity in the Classroom. 3 Hours.
PR: Graduate standing or consent. Provides opportunities for educators to increase awareness of their own ethnic backgrounds, foster understandings of the inter-active effects of gender, race, ethnicity and socio-economic status, and develop appropriate teaching materials and methods.

C&I 691. Advanced Topics. 1-6 Hours.
PR: Consent. Investigation of advanced topics not covered in regularly scheduled courses.

C&I 692. Directed Study. 1-6 Hours.
Directed study, reading, and/or research.

C&I 693. Special Topics. 1-6 Hours.
A study of contemporary topics selected from recent developments in the field.

C&I 694. Seminar. 1-6 Hours.
Special seminars arranged for advanced graduate students.

C&I 695. Independent Study. 1-6 Hours.
Faculty supervised study of topics not available through regular course offerings.

C&I 696. Graduate Seminar. 1 Hour.
PR: Consent. Each graduate student will present at least one seminar to the assembled faculty and graduate student body of his or her program.

C&I 697. Research. 1-15 Hours.
PR: Consent. Research activities leading to thesis, problem report, research paper or equivalent scholarly project, or a dissertation. (Grading may be S/U.)

C&I 701. Curriculum Development. 3 Hours.
PR: Consent. The study of the concepts underlying school curriculum.

C&I 707. Theories, Models and Research of Teaching. 3 Hours.
PR: SCFD 620 or consent. The theories behind selected models of teaching as well as research in teaching and best practices.

C&I 708. Contemporary Determinants of Curriculum. 3 Hours.
PR: C&I 701 and SCFD 640 or consent. Contemporary determinants of curriculum development.

C&I 709. Curriculum Theories. 3 Hours.
PR: C&I 708 or consent. Theories underlying curriculum from the past to the present and projected to the future.

C&I 710. Advanced Supervision. 3 Hours.
PR: Consent. Exploring theories, research, and practices of pre-service and in-service instructional supervision in the classrooms of novice and mature teachers. (Also listed as EDLS 701).

C&I 738. Survey of Major Issues in Mathematics Education. 3 Hours.
PR: Consent. Individual and group research on selected topics in mathematics education.

C&I 757. Social Studies Curriculum Development, K-12. 3 Hours.
PR: C&I 601 or C&I 604 and C&I 650 or C&I 654. Stresses the application of principles and procedures pertinent to the development of social studies programs in elementary and secondary schools. Strong emphasis will be placed on the analysis of current social studies curriculum materials.

C&I 786. Curriculum Evaluation. 3 Hours.
This course enables students to develop skills and strategies necessary for curriculum evaluation and improvement of programs. Included will be a historical review of evaluation and analysis of approaches to curriculum evaluation.
C&I 787. Professional Development for Teaching Effectiveness. 3 Hours.
PR: Advanced graduate standing or consent. Explores professional learning tools that lead to effective teaching; investigates the conditions that facilitate professional learning and effective teaching by examining the teacher, learner, content and environment; examines how educators study and resolve problems.

C&I 788. Higher Education Curriculum. 3 Hours.
Analysis and evaluation of post-secondary curriculum with emphasis on organizing, translating, and applying findings. Topics include curriculum shaping forces; institutional patterns; policy, components and change; and principles and techniques of development, experimentation, and evaluation.

C&I 789. Teaching in Higher Education. 3 Hours.
PR: Graduate standing. A general methods course involving instructional concepts and strategies for present/prospective faculty in higher education. Comprehensive consideration of objectives, planning criteria and methods, teaching strategies, and evaluation in meeting the needs of adult learners.

C&I 790. Teaching Practicum. 1-3 Hours.
PR: Consent. Supervised practice in college teaching of curriculum and instruction. Note: This course is intended to insure that graduate assistants are adequately prepared and supervised when they are given college teaching responsibility. It will also present a mechanism for students not on assistantships to gain teaching experience. (Grading will be S/U.).

C&I 791. Advanced Topics. 1-6 Hours.
PR: Consent. Investigation of advanced topics not covered in regularly scheduled courses.

C&I 792. Directed Study. 1-6 Hours.
Directed study, reading, and/or research.

C&I 793. Special Topics. 1-6 Hours.
A study of contemporary topics selected from recent developments in the field.

C&I 794. Seminar. 1-6 Hours.
Special seminars arranged for advanced graduate students.

C&I 795. Independent Study. 1-9 Hours.
Faculty supervised study of topics not available through regular course offerings.

C&I 796. Graduate Seminar. 1 Hour.
PR: Consent. Each graduate student will present at least one seminar to the assembled faculty and graduate student body of his or her program.

C&I 797. Research. 1-15 Hours.
PR: Consent. Research activities leading to thesis, problem report, research paper or equivalent scholarly project, or a dissertation. (Grading may be S/U.).

C&I 798. Thesis or Dissertation. 1-6 Hours.
PR: Consent. This is an optional course for programs that wish to provide formal supervision during the writing of student reports (698), or dissertations (798). Grading is normal.

C&I 799. Graduate Colloquium. 1-6 Hours.
PR: Consent. For graduate students not seeking coursework credit but who wish to meet residency requirements, use the University's facilities, and participate in academic and cultural activities sponsored by their program, and retain all of the rights and privileges of duly enrolled students. Grading is S/U; colloquium credit may not be counted against credit requirements for masters programs. Registration for one credit of 699/799 graduate colloquium satisfies the University requirement of registration in the semester in which graduation occurs.

C&I 930. Professional Development. 1-6 Hours.
Professional development courses provide skill renewal or enhancement in a professional field or content area (e.g., education, community health, geology). These tuition-waived continuing education courses are graded on a pass or fail grading scale and do not apply as graduate credit toward a degree program.

C&I 931. Professional Development. 1-6 Hours.
Professional development courses provide skill renewal or enhancement in a professional field or content area (e.g., education, community health, geology). These tuition-waived continuing education courses are graded on a pass/fail grading scale and do not apply as graduate credit toward a degree program.

C&I 932. Profession Development. 1-6 Hours.
Professional development courses provide skill renewal or enhancement in a professional field or content area (e.g., education, community health, geology). These tuition-waived continuing education courses are graded on a pass/fail grading scale and do not apply as graduate credit toward a degree program.
C&I P187. 3 Hours.

EDUCATION COURSES

EDUC 600. Teacher as Researcher. 3 Hours.
PR: Consent, EDUC 612. Preparation for action research; documentation of observations of researchable topics in school settings and completion of an extended classroom-based study.

EDUC 601. Context of Education. 3 Hours.
PR: Grade of C or better in EDUC 612. Critical, analytical, and reflective thinking on schooling through the integration of social, cultural, historical, philosophical, and political perspectives; examination of the contexts of students' own educational practice.

EDUC 602. Professional Identity: Teacher as Leader. 3 Hours.
PR: Grade of C or better in EDUC 612. Preparation for professional development as educational leaders. Examination, synthesis, and application of literature on teacher development, autonomy and school reform.

EDUC 612. Professional Internship/Technology Applications. 1-12 Hours.
PR: EDUC 411 and (EDUC 401 or SPED 203). Full-time professional internship in public school teaching including the integration of instructional technologies in teaching; satisfactory completion is required for recommendation for professional licensure and graduation with an educational degree.

EDUC 672. Instructional Design and Technology: Professional Internship. 4-6 Hours.
PR: EDUC 674. This course provides students a supervised learning experience central to applied roles in instructional design and technology. Experience will focus on: communication technology, education and corporate training, distance education, and multimedia design/production.

EDUC 674. Instructional Design and Technology Research and Development Seminar 1. 2 Hours.
PR: EDUC 605. The purpose of this seminar is to prepare effective instructional design consultants capable of identifying instructional problems, determining alternative solutions, and implementing appropriate changes within organizational systems.

EDUC 675. Instructional Design Technology Research and Design Seminar 2. 2 Hours.
PR: EDUC 394. This course provides participants with practice writing, presenting, and critiquing research. Learn and practice professional skills including creating portfolios, constructing vitas or resumes, and interviewing.

EDUC 687. Instructional Practicum/Technology Application. 3 Hours.
PR: EDUC 612 and EDUC 600. Teaching and mentoring in public schools and university settings; collaborative design of individualized practicum contracts on topics of mutual interest and need including the exploration of instructional technologies.

EDUC 692. Directed Study. 1-6 Hours.
Directed study, reading, and/or research.

EDUC 693. Special Topics. 1-6 Hours.
A study of contemporary topics selected from recent developments in the field.

EDUC 930. Professional Development. 1-6 Hours.
Professional development course providing skill renewal or enhancement in a professional field or content area (e.g., education, community health, geology). These tuition-waived, continuing education courses are graded on a pass/fail grading scale and do not apply as graduate credit toward a degree program.
EDUC P100. . 1 Hour.
EDUC P200. . 3 Hours.
EDUC P293. . 1-6 Hours.
EDUC T001. . 1 Hour.
EDUC T100. . 1,3 Hour.
EDUC T101. . 2 Hours.
EDUC T102. . 2 Hours.
EDUC T111. . 1 Hour.
EDUC T112. . 1 Hour.
EDUC T200. . 3 Hours.
EDUC T201. . 3 Hours.
EDUC T202. . 2 Hours.
EDUC T300. . 3 Hours.
EDUC T301. . 3 Hours.
EDUC T302. . 2 Hours.
EDUC T305. . 3 Hours.
EDUC T311. . 1 Hour.
EDUC T312. . 1 Hour.

SOCIAL CULTURAL FOUNDATIONS COURSES

SCFD 600. Sociology of Education. 3 Hours.
Education as a social institution; cultural and class influences on education; social roles and career patterns in the school system; the school and problems of the community. (Also listed as SOCA 332.)

SCFD 615. Qualitative Research Methods. 3 Hours.
An introduction to the nature of qualitative research and to techniques of interviewing, observation, and the analysis of documents and other cultural artifacts. Includes guided experience in designing and implementing a qualitative research study.

SCFD 620. Philosophy of Education. 3 Hours.
Examines different systems of educational philosophies focusing on aims, values, and criteria of education. Stresses the application of philosophic thinking to educational language, issues, methods, and subject matter.

SCFD 640. History of American Education. 3 Hours.
Major forces affecting U.S. educational developments at all school levels are examined in political, social, economic, and cultural context. Major historical periods include colonial, early national, pre/post civil war, and late nineteenth to mid-twentieth century.

SCFD 650. Comparative Education. 3 Hours.
PR: Graduate standing. Compares educational systems in selected foreign countries with the United States. Examines formal and informal educational influences in historical and contemporary contexts and in socioeconomic, political, and philosophical perspectives.

SCFD 685. Practicum. 1-12 Hours.
PR: Consent.

SCFD 693. Special Topics. 1-6 Hours.
A study of contemporary topics selected from recent developments in the field.

SCFD 694. Seminar. 1-6 Hours.
Selected topics in historical, sociological, and philosophical foundations of education. (Titles to be announced each semester.)

SCFD 697. Research. 1-15 Hours.
PR: Consent. Research activities leading to thesis, problem report, research paper or equivalent scholarly project, or a dissertation. (Grading may be S/U.)

SCFD 700. John Dewey Studies. 3 Hours.
This seminar focuses on the work of John Dewey. Students examine secondary and primary works. The course traces the influence of Dewey's life and thought from 1859 to present.

SCFD 715. Advanced Qualitative Research. 3 Hours.
PR: SCFD 615. Advanced exploration of methodological issues related to qualitative research, including basic interpretive, case study, grounded theory, phenomenological, and mixed-methods dissertations and research projects. The course also provides a service course for doctoral students in other colleges.
SCFD 781. Nature of Inquiry 1. 1 Hour.
PR: HR&E Interdisciplinary PhD students or consent. First course in a sequence focusing on epistemological, ontological, cultural, and political contexts of educational inquiry. (Grading S/U.).

SCFD 782. Nature of Inquiry 2. 1 Hour.
PR: SCFD 781 or consent. Second course in a sequence focusing on epistemological, ontological, cultural, and political contexts of educational inquiry. (Grading S/U.).

SCFD 783. Nature of Inquiry 3. 1 Hour.
PR: SCFD 782 or consent. Third course in a sequence focusing on epistemological, ontological, cultural, and political contexts of educational inquiry. (Grading S/U.).

SCFD 790. Teaching Practicum. 1-3 Hours.
PR: Consent. Supervised practice in college teaching of SCFD. Note: This course is intended to insure that graduate assistants are adequately prepared and supervised when they are given college teaching responsibility. It will also present a mechanism for students not on assistantships to gain teaching experience. (Grading will be S/U.).

SCFD 791. Advanced Topics. 1-6 Hours.
PR: Consent. Investigation of advanced topics not covered in regularly scheduled courses.

SCFD 792. Directed Study. 1-6 Hours.
Directed study, reading, and/or research.

SCFD 793. Special Topics. 1-6 Hours.
A study of contemporary topics selected from recent developments in the field.

SCFD 794. Seminar. 1-6 Hours.
Special seminars arranged for advanced graduate students.

SCFD 795. Independent Study. 1-9 Hours.
Faculty supervised study of topics not available through regular course offerings.

SCFD 796. Graduate Seminar. 1 Hour.
PR: Consent. Each graduate student will present at least one seminar to the assembled faculty and graduate student body of his or her program.

SCFD 797. Research. 1-15 Hours.
PR: Consent. Research activities leading to thesis, problem report, research paper or equivalent scholarly project, or a dissertation. (Grading may be S/U.).

SCFD 798. Thesis or Dissertation. 1-6 Hours.
PR: Consent. This is an optional course for programs that wish to provide formal supervision during the writing of students reports (698), or dissertations (798). Grading is normal.

SCFD 799. Graduate Colloquium. 1-6 Hours.
PR: Consent. For graduate students not seeking course work credit but who wish to meet residency requirements, use the university's facilities, and participate in its academic and cultural programs. Note: Graduate students who are not actively involved in coursework or research are entitled, through enrollment in their department's 699/799 Graduate Colloquium to consult with graduate faculty, participate in both formal and informal academic activities sponsored by their program, and retain all of the rights and privileges of duly enrolled students. Grading is S/U; colloquium credit may not be counted against credit requirements for masters programs. Registration for one credit of 699/799 graduate colloquium satisfies the University requirement of registration in the semester in which graduation occurs.