

DEPARTMENT OF INTERDISCIPLINARY LEARNING AND TEACHING

Mission Statement

The mission of the Department of Interdisciplinary Learning and Teaching is to:

- Advance the intellectual and professional development of students and faculty through research, critical reflection and dialogue, social responsibility, and transformative leadership;
- Promote equity and social justice by advocating for educational change and reform; and
- Nurture the personal and professional integrity of all learners.

The Department of Interdisciplinary Learning and Teaching offers five Master of Arts degrees: Curriculum and Instruction; Early Childhood and Elementary Education; Learning, Design, and Technology; Literacy Education (formerly Reading and Literacy); and Special Education, as well as the Doctor of Philosophy in Interdisciplinary Learning and Teaching. The Department also offers a Graduate Certificate in I-STEM Education. For individuals seeking Texas Teacher Certification, the Department offers initial Certification in Grades 4-8 Mathematics and Science and Grades 4-8 English, Language Arts, Reading, and Social Studies through the Teacher Certification option of the Master's in Curriculum and Instruction, as well as the Texas Reading Specialist Certification.

Criminal History Policy and Acknowledgement

The College of Education and Human Development (COEHD) prepares educators and professionals for fields which require fieldwork, internship, practicum, service-learning and/or clinical teaching. Placements occur in educational, clinical, health care facilities, hospitals, and/or medical settings which require a criminal background check. The University of Texas at San Antonio is required to inform students of the requirements set forth by the Texas Occupation Code, Chapter 53, Sections 53.001 through 53.105 (<https://statutes.capitol.texas.gov/Docs/OC/htm/OC.53.htm>).

All COEHD prospective students in a licensure or certification program are required to acknowledge that they have been made aware of these requirements and that they have read the COEHD Criminal History Policy. For more information and for completing the acknowledgement form, please visit the Office of Professional Preparation, Assessment, and Accreditation in the College of Education and Human Development.

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Master of Arts Degree in Curriculum and Instruction

This degree creates a context that nurtures interdisciplinary learners who have an understanding of engagement in curriculum and instruction theory, research, practice, policy, and critical issues. The concepts of curricular innovation and teaching excellence are stressed in conjunction with expanded knowledge of content fields and applied research.

Program Admission Requirements

Applicants without adequate preparation in education may be required to complete preparatory courses as a condition of admission. Individuals who do not meet the University-wide graduate admission grade point average standard may be required to submit Graduate Record Examination (GRE) scores for consideration in admission decisions.

Degree Requirements for Option I and Option II

Education degrees have four required components: a core of common courses, a program emphasis, support work, and a comprehensive examination.

Option I: Thesis

Code	Title	Credit Hours
A. Core Courses		9
CI 5003	Theory of Curriculum and Instruction	
CI 5013	Curriculum, Instruction and Assessment	
EDU 5003	Research Methods	
B. Program Emphasis		12
CI 6103	Research in Action	
CI 6673	Policy and Critical Issues in Teaching	
or CI 6123	Critical Perspectives in Curriculum and Instruction	
Any two graduate level CI courses		
C. Support Work		12
CI 6983	Master's Thesis	
6 semester credit hours of graduate electives (3 semester credit hours in an approved statistics course or an additional research course is recommended)		
Students in some programs may take support courses in their teaching fields. It is recommended that thesis students take an appropriate statistics course or an additional research course as part of the support work.		
D. Comprehensive Experience		
For information on the comprehensive experience, students should contact the Graduate Advisor of Record or their academic advisor.		
Total Credit Hours		33

Option II: Non-Thesis

Code	Title	Credit Hours
A. Core Courses		9
CI 5003	Theory of Curriculum and Instruction	
CI 5013	Curriculum, Instruction and Assessment	
EDU 5003	Research Methods	
B. Program Emphasis		12
CI 6103	Research in Action	

- CI 6673 Policy and Critical Issues in Teaching
- or CI 6123 Critical Perspectives in Curriculum and Instruction

Any two graduate level CI courses

C. Support Work **15**

15 semester credit hours of graduate electives

Students in some programs may take support courses in their teaching fields.

D. Comprehensive Experience

For information on the comprehensive experience, students should contact the Graduate Advisor of Record or their academic advisor.

Total Credit Hours **36**

Students who want to specialize in a teaching field may do so by taking courses in that field to support the degree in Curriculum and Instruction. Students should see the Graduate Advisor of Record for information about this option. Students should see their faculty graduate advisor for information about teacher certification option.

Curriculum and Instruction degree emphases include:

- Curriculum and Instruction Specialist
- Curriculum Studies
- Environmental Education
- Mathematics Education
- Middle School Education
- Science Education
- Social Studies Education
- Teacher Leadership

Degree Requirements for Option III: Teacher Certification

The Master of Arts in Curriculum and Instruction with Teaching certification (MACIT) is designed for individuals seeking a graduate degree in Curriculum and Instruction with teaching certification in the middle grades. Graduate students must be admitted into both the degree program and the Teacher Certification program. Courses in the MACIT option explore theories and ideas of curriculum, instruction, and culturally responsive methods of teaching students with diverse learning needs. The MACIT option also includes field experiences in local schools, as students can apply what they have learned in the graduate studies. All MACIT students will complete a portfolio as a culminating experience at the end of their program. The MACIT program is a 36-hour program designed to meet the Texas Teacher Certification requirements for:

- Grades 4–8 Mathematics and Science
- Grades 4–8 English, Language Arts, Reading, and Social Studies

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Refer to Procedures for Teacher Certification (<http://catalog.utsa.edu/policies/admission/graduate/proceduresforteachercertification/>) at the graduate level for additional details.

Grades 4-8 Mathematics and Science

Code	Title	Credit Hours
A. Core Courses		9
CI 5003	Theory of Curriculum and Instruction	
CI 5013	Curriculum, Instruction and Assessment	
EDU 5003	Research Methods	
B. Concentration and Support Courses		12
CI 6123	Critical Perspectives in Curriculum and Instruction	
ESL 5063	Language and Content-Area Instruction	
LTED 5743	Secondary Literacy Development	
SPE 5403	Survey of Special Education	
C. Methods and Internship Courses		15
15 semester credit hours of graduate electives:		
CI 5043	Classroom Management and Motivation	
CI 6303	Advanced Methods in Subject-Matter Fields (Science)	
CI 6303	Advanced Methods in Subject-Matter Fields (Math)	
CI 6943	Interdisciplinary Internship (repeated Fall and Spring)	
or CI 6946	Interdisciplinary Internship	
D. Comprehensive Experience		
For information on the comprehensive experience, students should contact the Graduate Advisor of Record or their academic advisor.		
Total Credit Hours		36

Grades 4-8 English, Language Arts, Reading, and Social Studies

Code	Title	Credit Hours
A. Core Courses		9
CI 5003	Theory of Curriculum and Instruction	
CI 5013	Curriculum, Instruction and Assessment	
EDU 5003	Research Methods	
B. Concentration and Support Courses		12
CI 6123	Critical Perspectives in Curriculum and Instruction	
ESL 5063	Language and Content-Area Instruction	
LTED 5743	Secondary Literacy Development	
SPE 5403	Survey of Special Education	
C. Methods and Internship Courses		15
15 semester credit hours of graduate electives:		
CI 5043	Classroom Management and Motivation	
CI 6303	Advanced Methods in Subject-Matter Fields (Social Studies)	
CI 6303	Advanced Methods in Subject-Matter Fields (ELA)	

CI 6943 Interdisciplinary Internship (repeated Fall and Spring)
 or CI 6946 Interdisciplinary Internship

D. Comprehensive Experience

For information on the comprehensive experience, students should contact the Graduate Advisor of Record or their academic advisor.

Total Credit Hours **36**

Master of Arts Degree in Early Childhood and Elementary Education

This degree is designed to allow professionals the opportunity to acquire knowledge and skills for effective instruction and care, leadership, and advocacy in early childhood and elementary education in a diverse society. Emphasis is on integrating reflective practices with current research perspectives for practical applications. The focus is also on advancing the research and knowledge base in fields of early childhood and elementary education. The program is flexible within areas of emphasis that include child development, early childhood leadership and advocacy, early literacies, family studies, inclusive education, and teaching.

Program Admission Requirements

Applicants without adequate preparation in education may be required to complete preparatory courses as a condition of admission. Individuals who do not meet the University-wide graduate admission grade point average standard may be required to submit Graduate Record Examination (GRE) scores for consideration in admission decisions.

Degree Requirements

Education degrees have four required components: a core of common courses, a program emphasis, support work, and a comprehensive experience.

In addition to the core curriculum classes required for all students seeking a Master's degree, courses required include:

Thesis Option

Code	Title	Credit Hours
A. Core Courses 9		
CI 5003	Theory of Curriculum and Instruction	
EDU 5003	Research Methods	
ILT 5003	Principles of Interdisciplinary Learning and Teaching	
B. Program Emphasis 18		
ECE 5133	Language and Discourse Development in Young Children	
ECE 5513	Curriculum, Materials and Methods in Early Childhood/Elementary Education	
ECE 6423	Advanced Studies in Play	
ECE 6453	Responsible Assessment and Evaluation in Early Childhood and Elementary Education	
ECE 6503	Theoretical Foundations of Early Childhood and Elementary Education	
ECE 6523	Family Engagement, Policy and Advocacy	
C. Support Work 6		

ECE 6983 Master's Thesis (6 semester credit hours)

Students in some programs may take support courses in their teaching fields. It is recommended that thesis students take an appropriate statistics course or an additional research course as part of the support work.

D. Comprehensive Experience

Students must contact the Graduate Advisor of Record or their academic advisor for further details.

Total Credit Hours **33**

Non-Thesis Option

Code	Title	Credit Hours
A. Core 9		
CI 5003	Theory of Curriculum and Instruction	
EDU 5003	Research Methods	
ILT 5003	Principles of Interdisciplinary Learning and Teaching	
B. Program Emphasis 21		
ECE 5133	Language and Discourse Development in Young Children	
ECE 5513	Curriculum, Materials and Methods in Early Childhood/Elementary Education	
ECE 6423	Advanced Studies in Play	
ECE 6453	Responsible Assessment and Evaluation in Early Childhood and Elementary Education	
ECE 6503	Theoretical Foundations of Early Childhood and Elementary Education	
ECE 6523	Family Engagement, Policy and Advocacy	
ECE 6653	Action Research in Childhood Settings	
C. Support Work 6		

6 semester credit hours of graduate electives

Students in some programs may take support courses in their teaching fields.

D. Comprehensive Experience

The comprehensive experience for the Master of Arts in Early Childhood and Elementary Education varies depending on the student's selected concentration. Students must contact the Graduate Advisor of Record or their academic advisor for further details.

Total Credit Hours **36**

Master of Arts Degree in Learning, Design, and Technology

The Master of Arts (M.A.) degree in Learning, Design, and Technology offers the opportunity for an advanced study and professional development program in the field of learning and teaching with technology.

The M.A. degree in Learning, Design, and Technology (LDT) focuses on the understanding, design, and application of learning environments and activities supported by current and emergent technologies, in both formal and informal settings. Emphasis is placed on culturally-relevant and technology-mediated approaches to learning and teaching, such as instructional design, games and learning, virtual worlds, educational robotics, new literacies, youth cultures, and digital storytelling. The program is designed for students seeking to expand their knowledge of

learning technologies, instructional design, and multimedia development for learning, as well as those seeking leadership roles in these areas.

Program Admission Requirements

Applicants without adequate preparation in education may be required to complete preparatory courses as a condition of admission. Individuals who do not meet the University-wide graduate admission grade point average standard may be required to submit Graduate Record Examination (GRE) scores for consideration in admission decisions.

Degree Requirements

Degree candidates are required to complete 30 hours. Upon completion of 30 hours, the candidate is required to pass a comprehensive examination.

Courses required for this degree are:

Code	Title	Credit Hours
A. Core Courses		15
LDT 5003	Introduction to Learning, Design, and Technology	
LDT 5313	Development of Learning Technologies	
LDT 5343	Instructional Design	
LDT 5703	Technology and Learning Cultures	
LDT 6003	Research in Learning, Design, and Technology	
B. Program Emphasis		12
12 semester credit hours of graduate courses in Learning, Design, and Technology (LDT)		
C. Support Work		3
3 semester credit hours of graduate electives		
D. Comprehensive Experience		
For information on the comprehensive experience, students should contact the Graduate Advisor of Record or their academic advisor.		
Total Credit Hours		30

All coursework and course substitutions must be approved by the student's academic advisor prior to registration.

Master of Arts Degree in Literacy Education (formerly Reading and Literacy)

NOTE: The M.A. in Reading and Literacy will change to Literacy Education starting fall 2022.

This degree is designed to provide theory, research, knowledge, and field experiences for students who plan to teach humanizing and transformative literacies. Reading and writing are presented as linguistic, cognitive, and sociocultural, sociopolitical, and sociohistorical processes within the language system and in relation to other language arts. Students select one of the following options: Thesis Option, Non-thesis Option, Non-thesis Option for students also pursuing the Texas Reading Specialist Certification, and Non-thesis Option for student seeking dual credit preparation. Students planning to pursue the Reading Specialist certification must apply and be accepted into this program. Core literacy courses (LTED) organize the student experience around a cohort model. Students work with their cohort director (academic advisor) to select other classes to fulfill their professional needs.

Program Admission Requirements

Applicants without adequate preparation in education may be required to complete preparatory courses as a condition of admission. Individuals who do not meet the University-wide graduate admission grade point average standard may be required to submit Graduate Record Examination (GRE) scores for consideration in admission decisions.

Degree Requirements

Education degrees have four required components: a core of common courses, a program emphasis, support work, and a comprehensive examination.

Courses required for the Master of Arts Degree in Literacy Education include:

Option I: Thesis

Code	Title	Credit Hours
A. Core		12
CI 5003	Theory of Curriculum and Instruction	
ILT 5003	Principles of Interdisciplinary Learning and Teaching	
LTED 6033	Survey of Literacy Research	
LTED 6833	Theoretical Foundations of Literacy Education	
B. Program Emphasis		9
LTED 6073	New Literacies Using Critical Perspectives	
LTED 5743	Secondary Literacy Development or LTED 582: Early Language and Literacy Development	
LTED 7863	Russian Contributions to Literacy, Psychology and Learning	
C. Support Work		12
LTED 6983	Master's Thesis (6 semester credit hours of thesis)	
3 semester credit hours of graduate electives		
3 semester credit hours in children's or young adult literature		
Students in some programs may take support courses in their teaching fields. Students in teacher certification programs may take their support work courses in areas that meet certification requirements. It is recommended that thesis students take an appropriate statistics course or an additional research course as part of the support work.		
D. Comprehensive Experience		
For information on the comprehensive experience, students should contact the Graduate Advisor of Record or their academic advisor.		
Total Credit Hours		33

Option II: Non-Thesis

Code	Title	Credit Hours
A. Core		12
CI 5003	Theory of Curriculum and Instruction	
ILT 5003	Principles of Interdisciplinary Learning and Teaching	
LTED 6033	Survey of Literacy Research	
LTED 6833	Theoretical Foundations of Literacy Education	
B. Program Emphasis		9
LTED 6073	New Literacies Using Critical Perspectives	

LTED 5743	Secondary Literacy Development or LTED 582: Early Language and Literacy Development
LTED 6843	Practice-Based Literacy Research

C. Support Work 15

12 semester credit hours of graduate electives
3 semester credit hours in children's or young adult literature
Students in some programs may take support courses in their teaching fields. Students in teacher certification programs may take their support work courses in areas that meet certification requirements.

D. Comprehensive Experience

For information on the comprehensive experience, students should contact the Graduate Advisor of Record or their academic advisor.

Total Credit Hours 36

Option III: Non-Thesis option for students also pursuing the Texas Reading Specialist Certification

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Note that if you are pursuing a professional certification as a Reading Specialist, you will have to apply to the Professional Certification Program in addition to applying for the graduate degree. You will have to provide evidence of your service record, valid teaching certificate, and other admission requirements as listed on the application to the professional certification program. Contact the designated Student Development Specialist or the Assistant Director of the Teacher Certification program for more information.

Code	Title	Credit Hours
A. Core		12
CI 5003	Theory of Curriculum and Instruction	
ILT 5003	Principles of Interdisciplinary Learning and Teaching	
LTED 6033	Survey of Literacy Research	
LTED 6833	Theoretical Foundations of Literacy Education	
B. Program Emphasis		12
LTED 5743	Secondary Literacy Development	
LTED 5823	Early Language and Literacy Development	
LTED 6073	New Literacies Using Critical Perspectives	
LTED 6843	Practice-Based Literacy Research	
C. Support Work		12

LTED 5793	Literacy Coaching
LTED 6763	Re-mediating Literacy
LTED 6941	Internship in Literacy (repeated for a total of 3 credit hours)

3 semester credit hours in children's or young adult literature
Students in some programs may take support courses in their teaching fields. Students in teacher certification programs may take their support work courses in areas that meet certification requirements.

D. Comprehensive Experience

For information on the comprehensive experience, students should contact the Graduate Advisor of Record or their academic advisor.

Total Credit Hours 36

Master of Arts Degree in Special Education

The degree in Special Education is designed for those students seeking an opportunity for initial, additional, or advanced preparation for educating individuals with disabilities in the inclusive classroom. It is intended to offer students the opportunity for the acquisition of knowledge, competencies, and understanding, to develop and apply skills for effective instructional practices in working with individuals with disabilities. The special education and related courses must be approved by the student's program advisor prior to enrolling in courses.

Program Admission Requirements

Applicants without adequate preparation in education may be required to complete preparatory courses as a condition of admission. Individuals who do not meet the University-wide graduate admission grade point average standard may be required to submit Graduate Record Examination (GRE) scores for consideration in admission decisions.

Degree Requirements

Education degrees have four required components: a core of common courses, a program emphasis, support work, and a comprehensive examination.

Inclusive Education

This specialization will focus on inclusive educational practices emphasizing the skills and competencies necessary to prepare individuals to be educators and leaders in the field of special education. This program is designed for not only special educators who wish to gain advanced knowledge in their field, but also general educators who wish to learn to implement effective practices for students with disabilities receiving an inclusive education in their classroom.

Code	Title	Credit Hours
A. Core		3
ILT 5003	Principles of Interdisciplinary Learning and Teaching	
B. Program Emphasis		24
SPE 5403	Survey of Special Education	
SPE 5613	Legal Issues in Special Education	
SPE 5633	Methods for Teaching Individuals with Mild/Moderate Disabilities	

SPE 5653	Behavior and Classroom Management in the Inclusive Classroom
SPE 6133	Introduction to Single-Subject Methodology
SPE 6443	Collaboration and Consultation in Educational and Clinical Settings
SPE 6623	Seminar on Current and Critical Issues in Special Education
SPE 6863	Technology for Individuals with Disabilities
C. Support Work	9
9 hours of Graduate Electives	
D. Comprehensive Experience	
For information on the comprehensive experience, students should contact the Graduate Advisor of Record or their academic advisor.	
Total Credit Hours	36

Doctor of Philosophy Degree in Interdisciplinary Learning and Teaching

The Doctor of Philosophy in Interdisciplinary Learning and Teaching (ILT) is a degree program that examines learning and teaching from an interdisciplinary perspective, focusing on varied approaches to teaching and learning from within and across various disciplines. The foundations of the program are: how teaching and learning are addressed within disciplines, how they may intersect with one another, and how each discipline maintains its uniqueness while sharing commonalities with other disciplines.

The Doctoral program objectives include:

1. Preparation of educational researchers who examine the theories, philosophies and multiple paradigms that inform learning and teaching from an interdisciplinary perspective with respect to the varied ways of knowing, situated cognition, and sociocultural contexts, as well as curricular and instructional development;
2. Development of educational leaders who seek ways to address educational and societal issues through multiple perspectives and will work to make major contributions to the improvement of education for culturally, linguistically, and economically diverse populations across the human lifespan; and
3. Preparation of educational researchers to assume the roles of university and community college faculty members, public school teachers/leaders, and adult education and human resource development educators who address, analyze, evaluate, and reform learning and teaching through interdisciplinary approaches in varied sociocultural contexts.

Program Admission Requirements

Admission to the Ph.D. program is limited, and therefore, competitive. Meeting recommended criteria does not ensure admission. Admission to the doctoral degree program occurs once per year in the Fall semester. The following factors for admission into the doctoral program will be considered by the ILT Doctoral Program Committee:

1. A master's degree with a minimum of 33 semester credit hours (with thesis) or 36 semester credit hours (without thesis) in an education field, such as early childhood and elementary education, special education, curriculum, instructional technology, literacy education, or in an academic discipline, such as history, mathematics, the sciences, humanities, or fine arts

2. An official master's degree transcript documenting a grade point average (GPA) of 3.25 or higher
3. For applicants whose native language is not English, the submission of a Test of English as a Foreign Language (TOEFL) score of no less than 60 on the paper-based test (PBT), 79 on the Internet-based test (iBT), or 6.5 on the IELTS. See general UTSA graduate admission guidelines in Chapter 1 of this catalog for further details.
4. Three letters of recommendation from faculty, supervisors, or professional affiliations attesting to the student's academic and professional attributes for success in the program and potential for contributing substantially to a field of study related to the degree
5. A written statement of purpose which includes: (a) reason(s) for pursuing a doctorate in ILT; (b) a biographical overview of experiences related to education; (c) professional goals; and (d) scholarly and/or research interests
6. Graduate Record Examination (GRE) test scores not older than five years
7. A professional curriculum vitae demonstrating experience in a work environment where education was the primary professional emphasis
8. Agreement to participate in an interview, if so invited

Degree Requirements

Program degree requirements include a minimum of 60 semester credit hours in research methods, core courses, cognate courses, doctoral research seminar, and dissertation courses. Students pursuing the Ph.D. in Interdisciplinary Learning and Teaching will be required to pass a qualifying examination prior to admission to candidacy. All candidates will be required to submit a scholarly contribution in the form of a dissertation as partial fulfillment of requirements for this degree. Students pursuing the Ph.D. in Interdisciplinary Learning and Teaching will be required to complete an on-campus residence taking at least 6 semester credit hours per semester or summer term for three consecutive semesters. For more information, refer to Doctoral Degree Regulations in this catalog.

Code	Title	Credit Hours
A. Research Methods Courses:		12
ILR 7643	Advanced Application of Research on Interdisciplinary Learning and Teaching	
ILT 7013	Overview of Research Design for Instructional Inquiry	
6 semester credit hours of approved research methods courses selected from within the College of Education and Human Development (recommended: 3 hours of qualitative research methodology and 3 hours of quantitative research methodology)		
B. Core Courses:		18
ILT 7003	Exploration of Interdisciplinary Learning and Teaching	
ILT 7133	Socio-constructivist and Cognitivist Perspectives on Interdisciplinary Learning & Teaching	
ILT 7143	Internship	
ILT 7153	Critical Cultural Perspectives on Interdisciplinary Learning and Teaching	
ILT 7633	Multiple Behavioral and Contextual Perspectives on Interdisciplinary Learning and Teaching	
ILT 7733	Evaluation of Educational Research	

C. Cognate Courses: 18

Students select a cognate area in academic disciplines/fields related to research interests. Courses are selected from graduate offerings throughout the University and students must meet prerequisites for enrollment.

D. Doctoral Research Seminar and Doctoral Dissertation: 12

3 credit hours of Advanced Research

ILT 7981 Doctoral Dissertation (a minimum of 9 semester credit hours of Doctoral Dissertation are required)

or ILT 7983 Doctoral Dissertation

Total Credit Hours 60

Graduate Certificate in I-STEM Education

This 12-hour Graduate Certificate in I-STEM Education (Interdisciplinary Science, Technology, Engineering, and Math) is designed for graduate students from all disciplines who wish to focus on issues related to I-STEM education. The goals of the Graduate Certificate in I-STEM Education are to provide graduate students with a comprehensive educational foundation to understand local and global STEM issues, and support them to acquire the analytic skills needed to effectively implement appropriate instructional strategies for varying audiences. The Graduate Certificate in I-STEM Education will be awarded to students at the master's or doctoral levels. The Graduate Certificate in I-STEM Education requires 12 credit hours.

The following departmental requirements are applicable to the Graduate Certificate in E-STEM Education:

- A bachelor's degree from an accredited university in an approved area of study (e.g., psychology, education)
- A minimum grade point average (GPA) of 3.0 for the last two years of work toward the bachelor's degree
- To maintain enrollment in the certificate program, students should maintain a 3.0 GPA throughout their tenure in the program.
- Applicants who do not meet University-wide requirements for unconditional admission may be admitted conditionally if scores from the Graduate Record Examination (GRE), letters of recommendation, and/or previous work in the field provide evidence of academic potential.

Certificate Program Requirements

To meet the curricular requirements for the Graduate Certificate in I-STEM Education, students must complete 12-semester-credit-hours with a grade point average of 3.0 or above from the following courses:

Code	Title	Credit Hours
Required Courses (choose 12 semester credit hours from the following courses):		
CI 6613	Nature and Meaning of Interdisciplinary STEM Education	12
CI 6623	Inquiry in Interdisciplinary STEM Education	
CI 6633	Equity, Agency, and Participation in Interdisciplinary STEM Education	
CI 6643	Assessment in Interdisciplinary STEM Education	
CI 6913	Advanced Topics in Interdisciplinary STEM Education	

CI 6963	Interdisciplinary STEM Education Trends and Issues
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Total Credit Hours 12

Students seeking admission to the Graduate Certificate in I-STEM Education program who are not enrolled in a graduate degree program will be required to apply to the Graduate School as special graduate students and indicate that they are seeking admission to the Graduate Certificate in I-STEM Education. All other requirements for admission as a special graduate student described in the Student Policies, Admission Policies, are applicable. All other requirements for certificate programs described in Certificate Program Regulations of this catalog apply to this program.

Curriculum and Instruction (CI) Courses

CI 5003. Theory of Curriculum and Instruction. (3-0) 3 Credit Hours.

An examination of theoretical structures underlying curriculum considerations and the implications of these for the work of responsible curriculum decision-makers at all levels, including administrators, instructional supervisors, and classroom teachers. (Formerly C&I 5003. Credit cannot be earned for both C&I 5003 and CI 5003.) Course Fees: DL01 \$75; GH01 \$90; LRH1 \$20; STSH \$30.

CI 5013. Curriculum, Instruction and Assessment. (3-0) 3 Credit Hours.

Prerequisite: CI 5003. Examination of different pedagogical approaches to the teaching and learning process in schools, with emphasis on the development of curriculum for classroom instruction, evaluation, organization, and management. (Formerly C&I 5013. Credit cannot be earned for both C&I 5013 and CI 5013.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

CI 5043. Classroom Management and Motivation. (3-0) 3 Credit Hours.

A detailed investigation of various theories and models of classroom management and motivation. Topics include behavior modification, assertive discipline, control theory, and the concept of the democratic classroom. (Formerly C&I 5043. Credit can only be earned for one of the courses: C&I 5043, EDP 5043, or CI 5043.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

CI 5523. Metacognitive Learning Principles. (3-0) 3 Credit Hours.

Metacognition as a foundational learning construct is considered first as it is presented in the literature and then as a lived experience of reflective practice. Core questions include: What are ways of knowing? How does one know what and how one knows? What are appropriate metacognitive strategies across curricular contexts? Each participant will explore motivation with three foci: theory, practical application toward the self and practical application toward others. (Formerly C&I 5523. Same as ECE 6753. Credit can only be earned for one course: ECE 6753, C&I 5523, or CI 5523.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

CI 5703. Secondary School Curricula. (3-0) 3 Credit Hours.

A systematic analysis of secondary school curricula. A critical study of objectives, methods of organization, content, methods, and learning materials for youth. (Formerly C&I 5703. Credit cannot be earned for both CI 5703 and C&I 5703.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

CI 5933. Service-Learning. (3-0) 3 Credit Hours.

History, rationale, research, methodology, and outcomes of service-learning. Students will conceptualize, plan, and participate in a service-learning project. Emphasis is on how service can be incorporated into curriculum with a primary focus on learning. (Formerly C&I 5933. Credit cannot be earned for both CI 5933 and C&I 5933.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

CI 6063. Research in Subject Matter Fields. (3-0) 3 Credit Hours.

Prerequisite: CI 5003. A study of various past and current educational philosophies, purpose and methods of educational research including research of content, pedagogy, technology, and research on teaching and learning of concepts and skills, standards and assessments. Examination and in-depth discussion of existing links between educational research in specific subject fields and classroom practice. May be offered in: Science; Mathematics; Social Studies; English Language Arts; Foreign Languages; Physical and Health Education; Interdisciplinary. May be repeated once for credit (for a total of 6 hours) when disciplines vary. (Formerly C&I 6063. Credit cannot be earned for both CI 6063 and C&I 6063.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

CI 6103. Research in Action. (3-0) 3 Credit Hours.

Action research across diverse contexts. The course includes a consideration of history and definitions of action research, and an analysis of its purpose, process, and theoretical foundations. Students will engage in practitioner-based research strategies such as observations, interviews, and document analysis and conceptualize, plan, and conduct an action research study. (Formerly C&I 6103. Same as ECE 6653. Credit can only be earned for one course: CI 6103, C&I 6103, or ECE 6653.) Course Fees: DL01 \$75; GH01 \$90; LRH1 \$20; STSH \$30.

CI 6123. Critical Perspectives in Curriculum and Instruction. (3-0) 3 Credit Hours.

An examination of curriculum at the intersection of power, identity, knowledge, and cultural politics. Critical theoretical frameworks introduced in this course include critical social theories and postmodernism. (Formerly C&I 7123 and C&I 6123. Credit can only be earned for one course: CI 6123, C&I 6123 or C&I 7123.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

CI 6133. Curriculum in International Contexts. (3-0) 3 Credit Hours.

This course explores curriculum through comparative analysis of education practices in international contexts. Questions include: How is learning approached globally? How does a global perspective on curriculum transform local and global educational practices? (Formerly C&I 6133. Credit cannot be earned for both CI 6133 and C&I 6133.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

CI 6303. Advanced Methods in Subject-Matter Fields. (3-0) 3 Credit Hours.

Prerequisite: CI 5003 or consent of instructor. Course sections are designed to offer students the opportunity to develop skill in instructional methodology specifically related to and derived from the characteristics of the discipline taught: Science; Mathematics; Social Studies; Language Arts; Foreign Languages; Physical and Health Education; Interdisciplinary; Environmental Education. May be repeated for credit when disciplines vary. (Formerly C&I 6303.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

CI 6383. Community-Based Research. (3-0) 3 Credit Hours.

Overview of curricular and instructional principles for Community-Based Research (CBR). (Formerly ALT 6933 and C&I 6383. Credit can only be earned for one course: C&I 6383, ALT 6933, or CI 6383). Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

CI 6513. Grant Writing. (3-0) 3 Credit Hours.

Grant writing basics and specifics. The course is designed to help educators learn how to conceptualize, write, and submit a grant application. Students will learn how to identify funding entities, develop a theoretical and research base for grants, create timelines, and utilize grant-writing strategies. (Formerly C&I 6513. Same as ECE 6513. Credit can only be earned for one course: C&I 6513, ECE 6513, or CI 6513.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

CI 6603. Critical Pedagogy. (3-0) 3 Credit Hours.

Students will become familiar with key concepts and principles of critical theory, critical pedagogy, and social justice education to inform their teaching, leadership, scholarship, and perhaps, their lives. The course also focuses on writing scholarly essays about critical pedagogy that encourages scholarly discourse with peers. Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

CI 6613. Nature and Meaning of Interdisciplinary STEM Education. (3-0) 3 Credit Hours.

This course focuses on the nature and meaning of STEM with special emphasis on the role of interdisciplinary STEM in educational environments. Participants will be asked to take a critical perspective on questions, such as: "What is Interdisciplinary STEM Education?" and "What about Interdisciplinary STEM Education is most important for a student to know?" The course will address the nature of STEM disciplines (the theories and problems which characterize them); the relationship between theory and empirical work; and the role of learning and teaching in pre-K-16 environments. (Formerly C&I 5613 and C&I 6613. Credit can only be earned for one course: C&I 6613, C&I 5613, or CI 6613.) Course Fees: DL01 \$75; GH01 \$90; LRH1 \$20; STSH \$30.

CI 6623. Inquiry in Interdisciplinary STEM Education. (3-0) 3 Credit Hours.

This course will explore developing and designing learning environments for interdisciplinary STEM Education through inquiry. Provides a broad foundation into the teaching, learning, and research of interdisciplinary STEM Education in both formal and informal contexts. (Formerly C&I 5623 and C&I 6623. Credit can only be earned for one course: C&I 6623, C&I 5623, or CI 6623.) Course Fees: DL01 \$75; GH01 \$90; LRH1 \$20; STSH \$30.

CI 6633. Equity, Agency, and Participation in Interdisciplinary STEM Education. (3-0) 3 Credit Hours.

This course will focus on equity, agency, and participation issues in interdisciplinary STEM Education as they relate to diverse demographics and communities. Agency is explored both as a process of becoming aware of and confident in one's ability to impact the community at large, as well as an expression and hallmark of democratic settings. (Formerly C&I 5633 and C&I 6633. Credit can only be earned for one course: C&I 6633, C&I 5633, or CI 6633.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

CI 6643. Assessment in Interdisciplinary STEM Education. (3-0) 3 Credit Hours.

This course explores a broad range of issues related to interdisciplinary research in assessment of student understanding in Science, Technology, Engineering, and Mathematics (STEM) and the underlying perspectives that guide what it means for students to understand fundamental STEM ideas. Topics on authentic assessment, elicitation of student thinking, formative assessment, and ethics and equity in assessment from an interdisciplinary perspective in STEM will be covered. Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

CI 6663. Topics in Curriculum and Instruction. (3-0) 3 Credit Hours.

Students are provided the opportunity for in-depth study of specialized areas of curriculum and instruction. The course may be repeated for credit when topics vary. Only 6 hours may be applied to the degree. (Formerly C&I 5663 and C&I 6663.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

CI 6673. Policy and Critical Issues in Teaching. (3-0) 3 Credit Hours.

Prerequisites: CI 5003 and CI 5013. Study of critical issues in school. Investigation of research, practices, and policies related to special education, bilingual and multicultural education, early childhood education, middle and secondary schools and other current broad-based social issues. (Formerly C&I 5673 and C&I 6673. Credit can only be earned for one course: C&I 6673, C&I 5673, or CI 6673.) Course Fees: DL01 \$75; GH01 \$90; LRH1 \$20; STSH \$30.

CI 6693. History, Policy and Critical Issues in Social Studies Education. (3-0) 3 Credit Hours.

This course will present both the history and foundations of social studies education in America and how these have evolved over time. Students will investigate policies that impact social studies education from both historical and current viewpoints. Students will study, debate, and form a position on the research, practices and policies related to current critical issues in social studies education. (Formerly C&I 6693. Credit cannot be earned for both CI 6693 and C&I 6693.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

CI 6733. Fundamentals of Environmental Education. (3-0) 3 Credit Hours.

Provides educators with the knowledge and skills necessary to incorporate quality environmental education into their instruction and curriculum. Explores the explanation of the theory, history, definition, national standards, and goals of environmental education. Provides an understanding of the professional roles and instructional methods and assessment strategies of environmental educators within the context of environmental education. (Same as ECE 6733. Formerly C&I 6733. Credit can only be earned for one course: ECE 6733, C&I 6733, or CI 6733.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

CI 6773. Environmental Education in the Curriculum. (3-0) 3 Credit Hours.

An exploration of the integration of environmental concepts and environmental education curricula into the total school curriculum. Using local, accessible outdoor locations, students will explore the many aspects that come together to create a "Sense of Place." This course will assist students to discover and interpret the natural history and critical environmental issues of their local communities through a variety of mediums. It is designed for educators who want to help learners of all ages to discover the wonders and intricacies of the natural world. (Formerly C&I 6773. Same as ECE 6773. Credit can only be earned for one course: ECE 6773, C&I 6773, or CI 6773.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

CI 6903. Environmental Issues Investigations. (3-0) 3 Credit Hours.

Rationale and strategies for investigating environmental issues at local, state, regional, or national levels. Select and implement actions to resolve issues through political, economic, legal, educational, and lifestyle avenues. (Formerly C&I 6903. Same as ECE 6903. Credit can only be earned for one course: C&I 6903, ECE 6903, or CI 6903.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

CI 6913. Advanced Topics in Interdisciplinary STEM Education. (3-0) 3 Credit Hours.

Topics and critical issues in interdisciplinary STEM education. Topics include focus on (1) research and development of innovative STEM learning and emerging STEM learning environments in both in and out of school settings, and (2) research that advances the field of formal and informal STEM Education. May be repeated for credit when topics vary. (Formerly C&I 6913.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

CI 6923. Mentoring. (3-0) 3 Credit Hours.

Description, analysis, and appraisal of mentoring for prospective and practicing teachers. In addition to learning about the review of research on mentoring, the course focuses on the examination of content, processes, roles, and responsibilities in interactions of mentors and teachers of prekindergarten through high school. (Formerly C&I 5923 and C&I 6923. Credit can only be earned for one course: C&I 6923, C&I 5923, or CI 6923.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

CI 6931. Curriculum and Instruction Practicum. (0-0) 1 Credit Hour.

An exploration of the teaching profession. Required field experience for all graduate-level teacher certification students. (Formerly C&I 6931. Credit cannot be earned for both CI 6931 and C&I 6931.) Course Fees: GH01 \$30; LRH1 \$20; STSH \$10.

CI 6933. Curriculum and Instruction Practicum. (0-0) 3 Credit Hours.

An exploration of the teaching profession. Required field experience for all graduate-level teacher certification students. (Formerly C&I 6933. Credit cannot be earned for both CI 6933 and C&I 6933.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

CI 6943. Interdisciplinary Internship. (0-0) 3 Credit Hours.

Prerequisite: Consent of student's graduate advisor. Individually supervised experience in assigned placements for one semester to assist students in developing professional and leadership skills. May be taken for teaching internship or student teaching. Enrollment in CI 6943 (3 credit hours) requires a total of 130 hours in the field and enrollment in CI 6946 (6 credit hours) requires a total of 260 hours in the field. Taken on a credit/no-credit basis. May be repeated for credit, but not more than 6 hours may be applied toward the M.A. in Education degree. (Formerly C&I 6943.) Course Fees: GH01 \$90; LRH1 \$20; STF1 \$57; STSH \$30.

CI 6946. Interdisciplinary Internship. (0-0) 6 Credit Hours.

Prerequisite: Consent of student's graduate advisor. Individually supervised experience in assigned placements for one semester to assist students in developing professional and leadership skills. May be taken for teaching internship or student teaching. Enrollment in CI 6943 (3 credit hours) requires a total of 130 hours in the field and enrollment in CI 6946 (6 credit hours) requires a total of 260 hours in the field. Taken on a credit/no-credit basis. May be repeated for credit, but not more than 6 hours may be applied toward the M.A. in Education degree. (Formerly C&I 6946.) Course Fees: GH01 \$180; LRH1 \$20; STF1 \$57; STSH \$60.

CI 6951. Independent Study. (0-0) 1 Credit Hour.

Prerequisites: Approval of the instructor and the Graduate Advisor of Record. Independent reading, research, discussion and/or writing under the direction of a faculty member. For students needing specialized work not normally or not often available as part of the regular course offerings. May be repeated for credit, but not more than 6 hours, regardless of discipline, will apply to the degree. (Formerly C&I 6951.) Course Fees: GH01 \$30; STSH \$10.

CI 6953. Independent Study. (0-0) 3 Credit Hours.

Prerequisites: Approval of the instructor and the Graduate Advisor of Record. Independent reading, research, discussion and/or writing under the direction of a faculty member. For students needing specialized work not normally or not often available as part of the regular course offerings. May be repeated for credit, but not more than 6 hours, regardless of discipline, will apply to the degree. (Formerly C&I 6953.) Course Fees: GH01 \$90; STSH \$30.

CI 6963. Interdisciplinary STEM Education Trends and Issues. (3-0) 3 Credit Hours.

Introduction to historical and contemporary K-16 STEM Education developments, opportunities, and challenges from both discipline-based and integrative approaches. Students will examine current Interdisciplinary STEM Education initiatives and considerations pertaining to policy, structure, process, and student learning. (Formerly C&I 6963. Credit cannot be earned for both CI 6963 and C&I 6963.) Course Fees: DL01 \$75; GH01 \$90; LRH1 \$20; STSH \$30.

CI 6973. Special Problems. (3-0) 3 Credit Hours.

Prerequisite: Consent of instructor. An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Problems courses may be repeated for credit when topics vary, but not more than 6 hours, regardless of discipline, will apply to the M.A. in Education degree. (Formerly C&I 6973.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

CI 6983. Master's Thesis. (0-0) 3 Credit Hours.

Prerequisites: Permission of the Graduate Advisor of Record and thesis director. Thesis research and preparation. May be repeated for credit, but not more than 6 hours will apply to the Master's degree. Credit will be awarded upon completion of the thesis. Enrollment is required each term in which the thesis is in progress. (Formerly C&I 6983.) Course Fees: GH01 \$90; STSH \$30.

CI 7153. Critical Multicultural Education in Urban Schools. (3-0) 3 Credit Hours.

Historical and theoretical overview of multicultural education across multiple contexts including urban education. Specific focus is paid to the emergence of Critical Multicultural Education as a pedagogical and curricular tool used to transform schools through the exploration of research in the field and in engaging with curriculum transformation processes. Students engage in the development of a strong theoretical foundation from which to think more complexly about equity and diversity related schooling processes. (Formerly C&I 7153. Credit cannot be earned for both CI 7153 and C&I 7153.) Course Fees: GH01 \$75; LRH1 \$10; STSH \$18.

CI 7771. Independent Study. (0-0) 1 Credit Hour.

Prerequisites: Doctoral standing and permission in writing (form available) of the instructor and the student's Graduate Advisor of Record. Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work as part of the regular course offerings. May be repeated for credit, but no more than 6 hour will apply to the Doctoral degree. (Formerly C&I 7771.) Course Fees: GH01 \$30; STSH \$10.

CI 7773. Independent Study. (0-0) 3 Credit Hours.

Prerequisites: Doctoral standing and permission in writing (form available) of the instructor and the student's Graduate Advisor of Record. Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work as part of the regular course offerings. May be repeated for credit, but no more than 6 hours will apply to the Doctoral degree. (Formerly C&I 7773.) Course Fees: GH01 \$90; STSH \$30.

CI 7893. Directed Doctoral Research. (0-0) 3 Credit Hours.

Supervised research on a topic in Interdisciplinary Learning and Teaching. May be repeated for credit, but no more than 6 hours may be applied to the Doctoral degree. (Formerly C&I 7893.) Course Fees: GH01 \$90; STSH \$30.

Early Childhood (ECE) Courses

ECE 5123. Seminar in Infancy and Toddler Development. (3-0) 3 Credit Hours.

Prerequisite: EDP 5003 or consent of instructor. Examines the biological and environmental influences on infant and toddler development. A discussion of the diverse environments where children thrive and potential negative factors that may hinder development. Identifies issues related to early intervention including culturally and linguistically appropriate assessment and instructional practice. Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

ECE 5133. Language and Discourse Development in Young Children. (3-0) 3 Credit Hours.

This course focuses on the study of early acquisition and development of all aspects of language knowledge. Emphasis on identifying the sequence of expressive and receptive language development in terms of the child's related abilities and learning experiences. Language acquisition and discourse in linguistically and culturally diverse children. Course Fees: DL01 \$75; GH01 \$90; LRH1 \$20; STSH \$30.

ECE 5443. Social/Emotional Development in Children. (3-0) 3 Credit Hours.

Study of children's socioemotional development of diverse children. Focus on building positive parent-child relationships, sibling relationships, peer relationships, sense of self, resiliency, self-control, friendship, and prosocial behaviors. Examination of societal issues that may lead to aggression in children. (Formerly ECE 5453. Credit cannot be earned for both ECE 5443 and ECE 5453.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

ECE 5513. Curriculum, Materials and Methods in Early Childhood/Elementary Education. (3-0) 3 Credit Hours.

This course focuses on the study of curriculum and instructional methods in early childhood and elementary classrooms. Emphasis on identification and analysis of curriculum design, methods of instruction, and materials that are congruent with developmentally appropriate practices (DAP). Course Fees: DL01 \$75; GH01 \$90; LRH1 \$20; STSH \$30.

ECE 6123. Leadership in Early Childhood Education. (3-0) 3 Credit Hours.

This course is designed for those who are interested in becoming leaders in early childhood contexts. Students explore the various components related to successful leadership of early childhood programs in inclusive setting. The students will be able to identify ways to build systems for professional relationships, examine ways to promote authentic learning, and become familiar with leadership and management standards. (Formerly titled "Leadership and Administration of Early Childhood Programs.") Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

ECE 6163. Brain-Based Research and Learning in EC and Elementary Education. (3-0) 3 Credit Hours.

This course is designed to examine the numerous influences on early brain development and learning for young children. Students examine brain research from a multicultural dimension as they focus on meeting the demands of learners within our ever-changing society. Discussions concentrate on implications for classroom practice and on forming positive relationships with families to positively impact our work with young children. (Formerly titled "Biological Basis of Child Development: Brain Based Research and Learning.") Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

ECE 6183. Reconceptualizing Sociocultural Contexts in Early Childhood Education. (3-0) 3 Credit Hours.

Exploration of sociocultural contexts in early childhood education. Focus on social justice issues affecting children in the U.S. and globally such as immigration, poverty, genocide, discrimination, hunger, education, domestic violence, child abuse and child labor among others. A view of cultural practices with a particular emphasis on gender issues across diverse groups. (Formerly titled "Seminar in Early Childhood Education in Cross-Cultural Perspective.") Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

ECE 6213. Current Issues in Early Childhood and Elementary Education. (3-0) 3 Credit Hours.

Studies of current issues in early childhood and elementary schools and other educational settings with an emphasis on critical reflection on how these issues impact diverse populations. Investigation of research, practices, and positions related to the issues studied. Exploration of available models for possible solutions or resolution of issues, as well as factors that may have an impact on desired outcomes. Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

ECE 6363. Differentiated Instruction in a Diverse Classroom. (3-0) 3 Credit Hours.

Application of instructional strategies for promoting the learning of diverse groups of children in typical classrooms. Implementing teaching strategies and techniques matched to individual learners, characteristics of subject matter and demands of the learning environment. Emphasis on acquiring a variety of teaching strategies to differentiate instruction within a social learning environment. (Formerly ECE 5473 and ECE 6373. Credit cannot be earned for more than one of the following: ECE 5473, ECE 6363, or ECE 6373.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

ECE 6423. Advanced Studies in Play. (3-0) 3 Credit Hours.

This course focuses on the examination and analysis of play research and practice as it relates to different areas of young children's development including cultural, cognitive, social, emotional, physical, and linguistic—birth through age eight. Examination of play theories, the role of the adult as facilitators of play, and contexts of play for all children including culturally and linguistically diverse children and children with special needs. Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

ECE 6453. Responsible Assessment and Evaluation in Early Childhood and Elementary Education. (3-0) 3 Credit Hours.

This course focuses on appropriate measures to collect, document, and assess young children in classroom settings. Students examine current research on effective assessment strategies for understanding children's development in multiple contexts. Class discussions concentrate on the various influences on assessment outcomes and the implications for developing supportive interactions with families as a means to influence the growth of every child. Course Fees: DL01 \$75; GH01 \$90; LRH1 \$20; STSH \$30.

ECE 6473. Seminar in Early Childhood and Elementary Education Research. (3-0) 3 Credit Hours.

Examination of research topics in early childhood and elementary education, including an extensive study of methodology, research findings, and publications applied to early childhood and elementary programs. Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

ECE 6503. Theoretical Foundations of Early Childhood and Elementary Education. (3-0) 3 Credit Hours.

This course analyzes the theoretical basis for young children's development within our culturally and linguistically diverse society. Pedagogical applications and implications of theoretical principles are examined for relevance in today's classrooms. Readings focus on the need to create respectful partnerships with families and learning environments that are healthy, supportive, and challenging for every child. (Formerly ECE 5503. Credit cannot be earned for both ECE 6503 and ECE 5503.) Course Fees: DL01 \$75; GH01 \$90; LRH1 \$20; STSH \$30.

ECE 6513. Grant Writing. (3-0) 3 Credit Hours.

Grant writing basics and specifics. The course is designed to help educators learn how to conceptualize, write, and submit a grant application. Students will learn how to identify funding entities, develop a theoretical and research base for grants, create timelines, and utilize grant-writing strategies. (Same as CI 6513. Formerly C&I 6513. Credit can only be earned for one course: ECE 6513, C&I 6513, or CI 6513.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

ECE 6523. Family Engagement, Policy and Advocacy. (3-0) 3 Credit Hours.

Examination of family theories and their influence on increasing understanding about families. Identification of different parenting styles that support/affect children's well-being. Focus on social policies that directly impact children, families and communities in a culturally, linguistically, and socioeconomic diverse society. Emphasis on inclusive family engagement. (Formerly titled Family Development, Policy and Advocacy.) Course Fees: DL01 \$75; GH01 \$90; LRH1 \$20; STSH \$30.

ECE 6653. Action Research in Childhood Settings. (3-0) 3 Credit Hours.

Prerequisite: EDU 5003. This is a capstone course restricted to students in their last semester of the program. Advisor code required. Application of research concepts and skills in field studies. Participants conduct directed research in early childhood and elementary school settings. (Formerly ECE 6643 and C&I 6103. Same as CI 6103. Credit can only be earned for one course: ECE 6653, ECE 6643, C&I 6103, or CI 6103.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

ECE 6733. Fundamentals of Environmental Education. (3-0) 3 Credit Hours.

Provides educators with the knowledge and skills necessary to incorporate quality environmental education into their instruction and curriculum. Explores the explanation of the theory, history, definition, national standards, and goals of environmental education. Provides an understanding of the professional roles and instructional methods and assessment strategies of environmental educators within the context of environmental education. (Same as CI 6733, formerly C&I 6733. Credit can only be earned for one course: ECE 6733, C&I 6733 or CI 6733.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

ECE 6773. Environmental Education in the Curriculum. (3-0) 3 Credit Hours.

An exploration of the integration of environmental concepts and environmental education curricula into the total school curriculum. Using local, accessible outdoor locations, students will explore the many aspects that come together to create a "Sense of Place." This course will assist students to discover and interpret the natural history and critical environmental issues of their local communities through a variety of mediums. It is designed for educators who want to help learners of all ages to discover the wonders and intricacies of the natural world. Same as CI 6773 formerly C&I 6773. Credit can only be earned for one course: ECE 6773, C&I 6773 or CI 6773. Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

ECE 6903. Environmental Issues Investigations. (3-0) 3 Credit Hours.

Rationale and strategies for investigating environmental issues at local, state, regional, or national levels. Select and implement actions to resolve issues through political, economic, legal, educational, and lifestyle avenues. Same as CI 6903 (formerly C&I 6903). Credit can only be earned for one course: ECE 6903, C&I 6903, or CI 6903. Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

ECE 6951. Independent Study. (0-0) 1 Credit Hour.

Prerequisites: Approval of the instructor and the Graduate Advisor of Record. Independent reading, research, discussion and/or writing under the direction of a faculty member. For students needing specialized work not normally or not often available as part of the regular course offerings. May be repeated for credit, but not more than 6 hours, regardless of discipline, will apply to the degree. Course Fees: GH01 \$30; STSH \$10.

ECE 6953. Independent Study. (0-0) 3 Credit Hours.

Prerequisites: Approval of the instructor and the Graduate Advisor of Record. Independent reading, research, discussion and/or writing under the direction of a faculty member. For students needing specialized work not normally or not often available as part of the regular course offerings. May be repeated for credit, but not more than 6 hours, regardless of discipline, will apply to the degree. Course Fees: GH01 \$90; STSH \$30.

ECE 6983. Master's Thesis. (0-0) 3 Credit Hours.

Prerequisites: Permission of the Graduate Advisor of Record and thesis director. Thesis research and preparation. May be repeated for credit, but not more than 6 hours will apply to the Master's degree. Credit will be awarded upon completion of the thesis. Enrollment is required each term in which the thesis is in progress. Course Fees: GH01 \$90; STSH \$30.

ECE 7123. Cognitive Development in Early Childhood. (3-0) 3 Credit Hours.

Theories and research of cognitive and intellectual development in early childhood within sociocultural contexts. Implications for early childhood programs, environments, learning and teaching. Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

ECE 7893. Directed Doctoral Research. (0-0) 3 Credit Hours.

Supervised research on a topic in Interdisciplinary Learning and Teaching. May be repeated for credit, but no more than 6 hours may be applied to the Doctoral degree. Course Fees: GH01 \$90; STSH \$30.

Instructional Leadership (ILR) Courses

ILR 7133. Introduction to Single-case Methodology. (3-0) 3 Credit Hours.

Prerequisite: SPE 5503 or approval of the instructor. The content of this course will examine questions appropriate for single-case research, data collection procedures, selection, implementation, analysis of research designs, and manuscript development/structure. (Same as SPE 7133. Credit cannot be earned for both ILR 7133 and SPE 7133.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

ILR 7203. Leadership in Curriculum Development. (3-0) 3 Credit Hours.

An examination of processes related to the facilitation and management of curricular innovation and delivery systems in varied educational settings including school systems, higher education, and other human service institutions. Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

ILR 7643. Advanced Application of Research on Interdisciplinary Learning and Teaching. (3-0) 3 Credit Hours.

Prerequisite: Completion of or concurrent enrollment in ILT 7733, or consent of instructor. Design and development of interdisciplinary research studies including appropriate data collection and analysis methods. Participants conduct directed educational research. Course Fees: DL01 \$75; GH01 \$90; LRH1 \$20; STSH \$30.

ILR 7873. Survey Research Methods. (3-0) 3 Credit Hours.

Prerequisite: Introductory statistics course; or consent of instructor. Exploration of survey research methodology, development of survey, questionnaire or inventory, including item construction. Discussion and application of sampling and data collection procedures. Coding data, piloting instrument and conducting reliability and validity of instrument. Conducting data analysis procedures using SPSS to respond to research question(s) will include application of descriptive and inferential statistics. Data analysis will include employing factor analysis as a data reduction technique and to determine underlying constructs measured by instrument. Course Fees: GH01 \$75; LRH1 \$10; STSH \$18.

Interdisciplinary Learning and Teaching (ILT) Courses

ILT 5003. Principles of Interdisciplinary Learning and Teaching. (3-0) 3 Credit Hours.

This course emphasizes fundamental theories for interdisciplinary learning and teaching. A focus is given to issues of social justice and equity, students as diverse learners, student motivation, and meta-cognitive processes associated with student learning and its relation to teaching. Course Fees: DL01 \$75; GH01 \$90; LRH1 \$20; STSH \$30.

ILT 6961. Comprehensive Examination. (0-0) 1 Credit Hour.

Prerequisite: Approval of the appropriate Graduate Program Committee to take the Comprehensive Examination. Independent study course for the purpose of taking the Comprehensive Examination. May be repeated as many times as approved by the Graduate Program Committee. Enrollment is required each term in which the Comprehensive Examination is taken if no other courses are being taken that term. The grade report for the course is either "CR" (satisfactory performance on the Comprehensive Examination) or "NC" (unsatisfactory performance on the Comprehensive Examination). Course Fees: GH01 \$30; STSH \$10.

ILT 7003. Exploration of Interdisciplinary Learning and Teaching. (3-0) 3 Credit Hours.

This course introduces students to the history and theoretical underpinnings of interdisciplinarity and interdisciplinary studies in education. Through group and individual examination of interdisciplinary issues, topics and problems, students will engage in scholarly literature study and research practice. Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

ILT 7013. Overview of Research Design for Instructional Inquiry. (3-0) 3 Credit Hours.

Prerequisite: Research methods or statistics course. Overview of research design for quantitative, qualitative, and mixed-methods studies in Interdisciplinary Learning and Teaching. The emphasis of this course includes the situatedness of interdisciplinary research and the design of a research study positioned within an appropriate theoretical frame. Course Fees: DL01 \$75; GH01 \$90; LRH1 \$20; STSH \$30.

ILT 7133. Socio-constructivist and Cognitivist Perspectives on Interdisciplinary Learning and Teaching. (3-0) 3 Credit Hours.

This course focuses on the historical roots, theories, and impact of socio-constructivist, sociocultural and cognitivist philosophies on teaching and learning. (Formerly titled "Perspectives and Approaches to Interdisciplinary Learning & Teaching.") Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

ILT 7143. Internship. (0-0) 3 Credit Hours.

Students, with their advisor's recommendation, will complete an internship in which they collaborate and apprentice with departmental and college faculty on teaching. May be repeated for credit. Course Fees: GH01 \$; INT1 \$150; STSH \$30.

ILT 7153. Critical Cultural Perspectives on Interdisciplinary Learning and Teaching. (3-0) 3 Credit Hours.

This course focuses on the historical roots and theories of critical, cultural and postmodernist philosophies and their impact on teaching and learning. (Formerly titled "Interdisciplinary Learning and Teaching in Sociocultural Contexts.") Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

ILT 7203. Applications of Qualitative Interdisciplinary Research Methods. (3-3) 3 Credit Hours.

This course provides multiple opportunities to deepen understanding of qualitative research methods on such topics as grounded theory, phenomenological study, case study, content analysis and document analysis in Interdisciplinary Learning and Teaching. The course examines various design elements of qualitative research including sampling, data collection and data analysis from various theoretical frameworks. Specific attention will focus on the development of observation, interview skills, focus groups, and recording of data as well as the political and ethical issues in qualitative research. May be repeated for credit when topics vary. Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

ILT 7213. Quantitative Analysis and Research Design in Interdisciplinary Learning and Teaching. (3-0) 3 Credit Hours.

This course examines the design decisions researchers make when conducting experimental, quasi-experimental, and correlational studies in learning and teaching settings. Topics include: design considerations in interdisciplinary educational research, ensuring the validity of causal inferences, calculating and graphically depicting descriptive statistics, the conceptual basis of inferential statistics and hypothesis testing, analytical approaches for comparing data across groups, and introduction to multiple regression analysis. Students practice interpreting and reporting statistical findings in academic writing. Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

ILT 7303. Oral and Written Discourse Analysis. (3-0) 3 Credit Hours.

This course examines methods for analysis of oral and written discourse. Students will focus on authentic samples of discourse including family communications, teacher-student and peer interaction, other institutional or community, workplace, and everyday discourse with the goal of understanding life-long learning. (Formerly C&I 6823. Credit cannot be earned for both C&I 6823 and ILT 7303.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

ILT 7633. Multiple Behavioral and Contextual Perspectives on Interdisciplinary Learning and Teaching. (3-0) 3 Credit Hours.

This course focuses on the historical roots and theories of behavior analysis and functional contextualization and their impact on teaching and learning. (Formerly titled "Multiple Perspectives on Learning and Teaching.") Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

ILT 7733. Evaluation of Educational Research. (3-0) 3 Credit Hours.

Prerequisites: ILT 7013, ILT 7203 or a qualitative course, and ILT 7213 or a quantitative course. This course offers students multiple opportunities to explore and analyze common practices in educational research. Students will take a critical look at strengths and challenges across the entire spectrum of research paradigms, including quantitative, qualitative, and mixed models. Students will evaluate which research methodologies will best be suited to finding answers to different kinds of research questions around current issues in education. Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

ILT 7743. Mixed Methods Analysis and Application. (3-0) 3 Credit Hours.

Course focuses on conceptualizing mixed methods research, developing a mixed method design, and conducting data analysis and inferences using mixed methods. Takes into account historical and epistemological antecedents leading to the development of mixed methods research. Includes an examination of mixed method studies pertinent to the field of interdisciplinary learning and teaching. Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

ILT 7891. Doctoral Seminar in Interdisciplinary Learning and Teaching. (1-0) 1 Credit Hour.

This seminar is designed as a general seminar for all ILT doctoral students to be taken three times across the doctoral program. The seminar will: (1) introduce students to the doctoral community and resources that support doctoral work; (2) provide students with an overview of the requirements for completing the doctoral proposal and dissertation and serve as a forum for discussing proposal and dissertation-related concerns and issues with other students; and (3) prepare students to participate in professional networks beyond the university. May be repeated for credit, but no more than 3 hours will count toward student's program of study. Course Fees: GH01 \$30; LRH1 \$20; STSH \$10.

ILT 7893. Doctoral Seminar in Interdisciplinary Learning and Teaching. (3-0) 3 Credit Hours.

This seminar is designed as a general seminar for all ILT doctoral students to be taken three times across the doctoral program. The seminar will: (1) introduce students to the doctoral community and resources that support doctoral work; (2) provide students with an overview of the requirements for completing the doctoral proposal and dissertation and serve as a forum for discussing proposal and dissertation-related concerns and issues with other students; and (3) prepare students to participate in professional networks beyond the university. May be repeated for credit, but no more than 3 hours will count toward student's program of study. Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

ILT 7951. Independent Study. (0-0) 1 Credit Hour.

Prerequisites: Doctoral standing and permission in writing (form available) from the instructor and the student's faculty advisor. Independent reading, research, discussion, and/or writing under the direction of a faculty member for students needing specialized work. May be repeated for credit, but not more than 6 hours, regardless of discipline, will apply to the Doctoral degree. Course Fees: GH01 \$30; STSH \$10.

ILT 7953. Independent Study. (0-0) 3 Credit Hours.

Prerequisites: Doctoral standing and permission in writing (form available) from the instructor and the student's faculty advisor. Independent reading, research, discussion, and/or writing under the direction of a faculty member for students needing specialized work. May be repeated for credit, but not more than 6 hours, regardless of discipline, will apply to the Doctoral degree. Course Fees: GH01 \$30; STSH \$20.

ILT 7961. Qualifying Examination. (0-0) 1 Credit Hour.

Prerequisite: Approval of the appropriate Graduate Program Committee to take the Qualifying Examination. Course for the purpose of taking the Qualifying Examination. May be repeated once as approved by the Graduate Program Committee. The grade report for the course is either "CR" (satisfactory performance on the Qualifying Examination) or "NC" (unsatisfactory performance on the Qualifying Examination). Course Fees: GH01 \$30; STSH \$10.

ILT 7973. Special Topics Seminar. (3-0) 3 Credit Hours.

An organized special topics seminar offering the opportunity for in-depth study on topics of interest and cutting-edge research. Special topics seminar courses may be repeated for credit when topics vary, but not more than 6 hours will apply to the Doctoral degree. Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

ILT 7981. Doctoral Dissertation. (0-0) 1 Credit Hour.

Prerequisites: Admission to candidacy and consent of student's faculty advisor. May be repeated for credit, but not more than 9 hours may be applied toward the Doctoral degree. Credit will be awarded upon completion of the dissertation. Course Fees: GH01 \$30; STSH \$10.

ILT 7983. Doctoral Dissertation. (0-0) 3 Credit Hours.

Prerequisites: Admission to candidacy and consent of student's faculty advisor. May be repeated for credit, but not more than 9 hours may be applied toward the Doctoral degree. Credit will be awarded upon completion of the dissertation. Course Fees: GH01 \$90; STSH \$30.

ILT 7986. Doctoral Dissertation. (0-0) 6 Credit Hours.

Prerequisites: Admission to candidacy and consent of student's faculty advisor. May be repeated for credit, but not more than 9 hours may be applied toward the Doctoral degree. Credit will be awarded upon completion of the dissertation. Course Fees: GH01 \$180; STSH \$60.

Learning, Design and Technology (LDT) Courses

LDT 5003. Introduction to Learning, Design, and Technology. (3-0) 3 Credit Hours.

This introductory course provides an overview of the theoretical and practical foundations that inform learning, design, and technology. Course content and activities are designed to lead to an understanding of the history, theories, and philosophies driving the field. (Formerly IST 5003. Credit cannot be earned for both LDT 5003 and IST 5003.) Course Fees: DL01 \$75; GH01 \$90; LRH1 \$20; STSH \$30.

LDT 5223. Digital Citizenship. (3-0) 3 Credit Hours.

This course explores what it means to be a good citizen in a digital society with respect to how we present ourselves online, consume and use digital resources, interact with others in digital environments, and how we use technologies in our everyday lives. This course investigates digital citizenship issues as they relate to K-12 and adult learning environments, professional and academic contexts, and everyday life. Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

LDT 5233. Universal Design and Learning. (3-0) 3 Credit Hours.

This course focuses on key concepts related to universal design for learning and their application in instructional design, training, and education. Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

LDT 5313. Development of Learning Technologies. (3-0) 3 Credit Hours.

This course is an introduction to technology development for technology-based learning environments. It provides knowledge and skills to create effective and accessible user interfaces, experiences, and designs. The course also explores key concepts and industry standard practices for eLearning project. (Formerly IST 5313. Credit cannot be earned for both LDT 5313 and IST 5313.) Course Fees: DL01 \$75; GH01 \$90; LRH1 \$20; STSH \$30.

LDT 5323. Learner-Centered Design. (3-0) 3 Credit Hours.

This course provides an overview of learner-centered theories, design, and tools. Course content and activities provide opportunities to develop an understanding of the history, frameworks, philosophy, tools, and technologies that support learner-centered practices. (Formerly IST 5323. Credit cannot be earned for both LDT 5323 and IST 5323.) Course Fees: DL01 \$75; GH01 \$90; LRH1 \$20; STSH \$30.

LDT 5343. Instructional Design. (3-0) 3 Credit Hours.

This course is an investigation of theories, principles, and processes of instructional and digital learning design including their application to instructional artifacts and curriculum development. (Formerly IST 5343. Credit cannot be earned for both LDT 5343 and IST 5343.) Course Fees: DL01 \$75; GH01 \$90; LRH1 \$20; STSH \$30.

LDT 5363. Distance Learning and Teaching. (3-0) 3 Credit Hours.

This course offers an in-depth exploration of tools, resources, and strategies to design, develop, and support online learning. Students create a learning space through a real-world and project-based approach. (Formerly IST 5363. Credit cannot be earned for both LDT 5363 and IST 5363.) Course Fees: DL01 \$75; GH01 \$90; LRH1 \$20; STSH \$30.

LDT 5383. Technology for Training and Professional Development. (3-0) 3 Credit Hours.

The dynamic nature of technology development and innovation requires strategies to ensure that professional populations are well prepared. Activities in this course include a review of models of training and professional development in adult educational settings, design and development of technology-supported training and professional development using industry-standard tools, and evaluation. (Formerly IST 5383. Credit cannot be earned for both LDT 5383 and IST 5383.) Course Fees: DL01 \$75; GH01 \$90; LRH1 \$20; STSH \$30.

LDT 5703. Technology and Learning Cultures. (3-0) 3 Credit Hours.

This course is an examination of technology-delivered and technology-mediated learning as it interacts with the learners' views of the world and themselves. This course provides opportunities to explore the implications of culture and community on the design, development, implementation, and evaluation of teaching and learning. (Formerly IST 5703. Credit cannot be earned for both LDT 5703 and IST 5703.) Course Fees: DL01 \$75; GH01 \$90; LRH1 \$20; STSH \$30.

LDT 5883. Digital Storytelling and Learning. (3-0) 3 Credit Hours.

Digital storytelling is a multimodal narrative practice through which people create and share cultural artifacts by combining textual and audiovisual components. It offers opportunities for documentation, self-reflection, expression, communication, and case-based reasoning. This course explores approaches, tools, and techniques to effectively integrate it in learning settings. (Formerly C&I 5883 and IST 5883. Credit cannot be earned for both LDT 5883 and IST 5883 or C&I 5883.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

LDT 6003. Research in Learning, Design, and Technology. (3-0) 3 Credit Hours.

This course provides an overview of research designs and methods used in the field of learning, design, and technology. (Formerly IST 6003. Credit cannot be earned for both LDT 6003 and IST 6003.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

LDT 6103. Learning in Virtual Worlds. (3-0) 3 Credit Hours.

Virtual and augmented reality learning environments provide additional opportunities for learning through active participation in designed settings. This course explores learning in virtual and augmented spaces across formal and informal learning contexts. (Formerly IST 6103. Credit cannot be earned for both LDT 6103 and IST 6103.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

LDT 6223. Interest-Driven Learning. (3-0) 3 Credit Hours.

This course explores constructs like curiosity, attention, and interest, and their role in formal and informal learning. The course also considers the different facets of personal interests and their relationship to learning, self-expression, and creativity. Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

LDT 6353. Multimedia Design and Development. (3-0) 3 Credit Hours.

This course explores the design and development of multi-modal materials and resources in learning settings by investigating issues related to interactivity, usability, and aesthetics. (Formerly IST 6353. Credit cannot be earned for both LDT 6353 and IST 6353.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

LDT 6373. Games and Learning. (3-0) 3 Credit Hours.

Playing, creating, sharing, discussing, and analyzing games can prompt rich cultural and learning experiences in both formal and informal settings. This course promotes a scholarly understanding of contemporary theories and research on game-based learning. (Formerly IST 6373. Credit cannot be earned for both LDT 6373 and IST 6373.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

LDT 6513. Makerspaces and Educational Robotics. (3-0) 3 Credit Hours.

This course explores the world of makerspaces and educational robotics, and how they support STEM education and 21st century learning, particularly in the areas of innovation, creativity, collaboration, critical thinking, and problem solving. This course places students in the roles of active makers of creative and innovative products. (Formerly IST 6513. Credit cannot be earned for both LDT 6513 and IST 6513.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

LDT 6623. New Literacies and Youth Cultures. (3-0) 3 Credit Hours.

New literacies involve new ways of being, doing, and participating through practices such as multimodality, transmedia, and remixing. Youth cultures are personal and social domains in which people express, reinterpret, and share their interests, often through the use of digital tools. This course provides an overview of new literacies and youth cultures, and their relationships, offering theoretical and practical approaches to leverage them in learning settings. (Formerly IST 6623. Credit cannot be earned for both LDT 6623 and IST 6623.) Course Fees: DL01 \$75; GH01 \$90; LRH1 \$20; STSH \$30.

LDT 6943. Internship. (0-0) 3 Credit Hours.

Prerequisites: Consent of instructor and Graduate Advisor of Record. This internship is an individually supervised field experience that involves the design, development, implementation, or evaluation of technology-mediated learning experiences. (Formerly IST 6943. Credit cannot be earned for both LDT 6943 and IST 6943 or other internships.) Course Fees: GH01 \$90; INT1 \$150; LRH1 \$20; STSH \$30.

LDT 6951. Independent Study. (0-0) 1 Credit Hour.

Prerequisites: Approval of the instructor and the Graduate Advisor of Record. Designed for students needing specialized work not normally or not often available as part of the regular course offerings, this experience entails independent reading, research, discussion and/or writing under the direction of a faculty member. May be repeated for credit, but no more than 6 hours, regardless of discipline, will apply to the degree. (Formerly IST 6951. Credit cannot be earned for both LDT 6951 and IST 6951.) Course Fees: GH01 \$30; STSH \$10.

LDT 6953. Independent Study. (0-0) 3 Credit Hours.

Prerequisites: Approval of the instructor and the Graduate Advisor of Record. Designed for students needing specialized work not normally or not often available as part of the regular course offerings, this experience entails independent reading, research, discussion and/or writing under the direction of a faculty member. May be repeated for credit, but no more than 6 hours, regardless of discipline, will apply to the degree. (Formerly IST 6953. Credit cannot be earned for both LDT 6953 and IST 6953.) Course Fees: GH01 \$90; STSH \$30.

LDT 6973. Special Problems. (3-0) 3 Credit Hours.

Prerequisite: Consent of instructor. This course offers graduate students the opportunity to engage in specialized study not normally or not often available as part of the program's regular course offerings. Special Problems courses may be repeated for credit when topics vary, but no more than 6 hours, regardless of discipline, will apply to the degree. (Formerly IST 6973. Credit cannot be earned for both LDT 6973 and IST 6973.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

LDT 6983. Master's Thesis. (0-0) 3 Credit Hours.

Prerequisites: Permission of the Graduate Advisor of Record and thesis director. Thesis research and preparation. May be repeated for credit, but not more than 6 hours will apply to the Master's degree. Credit will be awarded upon completion of the thesis. Enrollment is required each term in which the thesis is in progress. Course Fees: GH01 \$90; STSH \$30.

LDT 7013. Field Research in Learning, Design, and Technology. (3-0) 3 Credit Hours.

This course is designed to support students in doing field research in learning, design, and technology, including observations, interviews, and analysis. Students will undertake their own research study and discuss relevant literature. (Formerly IST 7013. Credit cannot be earned for both LDT 7013 and IST 7013.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

LDT 7023. Design and Development of Learning Environments. (3-0) 3 Credit Hours.

Students will design, develop, pilot, and evaluate a learning environment using the theories and practices of learning, design, and technology. (Formerly IST 7023. Credit cannot be earned for both LDT 7023 and IST 7023.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

LDT 7043. Technology and Global Learning. (3-0) 3 Credit Hours.

This course is a structured exploration of the conditions, platforms, and implications of technology-supported learning in culturally and linguistically diverse contexts. (Formerly IST 7043. Credit cannot be earned for both LDT 7043 and IST 7043.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

LDT 7771. Independent Study. (0-0) 1 Credit Hour.

Prerequisites: Doctoral standing and permission from the student's academic advisor and the Graduate Advisor of Record. Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work as part of the regular course offerings. May be repeated for credit, but no more than 6 hours will apply to the doctoral degree. (Formerly IST 7771. Credit cannot be earned for both LDT 7771 and IST 7771.) Course Fees: GH01 \$30; STSH \$10.

LDT 7773. Independent Study. (0-0) 3 Credit Hours.

Prerequisites: Doctoral standing and permission in writing (form available) from the instructor and the student's Graduate Advisor of Record. Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work as part of the regular course offerings. May be repeated for credit, but no more than 6 hour will apply to the Doctoral degree. Course Fees: GH01 \$90; STSH \$30.

LDT 7893. Directed Doctoral Research. (0-0) 3 Credit Hours.

Supervised research on a topic in learning, design, and technology. May be repeated for credit, but no more than 6 hours may be applied to the Doctoral degree. (Formerly IST 7893. Credit cannot be earned for both LDT 7893 and IST 7893.) Course Fees: GH01 \$90; STSH \$30.

Literacy Education (LTED) Courses

LTED 5723. Integrating Reading and the Language Arts. (3-0) 3 Credit Hours.

Study of reading processes and instructional practices and examination of ways reading can be related to writing, speaking, and listening. Emphasizes development of integrated language arts curriculum and instruction from primary through secondary school. (Formerly C&I 5723. Credit cannot be earned for both C&I 5723 and LTED 5723.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

LTED 5743. Secondary Literacy Development. (3-0) 3 Credit Hours.

Principles and techniques for teaching higher-level reading and comprehension skills to adolescents. Attention to developing reading programs and to literacy learning in various academic subjects in middle and high schools. Emphasizes strategies for meeting the needs of the wide range of ability levels found in secondary schools. Course contains a field experience. (Formerly C&I 5743. Credit cannot be earned for both C&I 5743 and LTED 5743.) Course Fees: GH01 \$90; LRH1 \$20; STF1 \$57; STSH \$30.

LTED 5753. Literature for Children. (3-0) 3 Credit Hours.

This course focuses on diverse genres and formats of children's literature and examines current issues, practices, and perspectives in the field. (Formerly C&I 5753. Credit cannot be earned for both C&I 5753 and LTED 5753.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

LTED 5793. Literacy Coaching. (3-0) 3 Credit Hours.

Study of coaching as a means of professional development for teachers of literacy. Critically reviews traditional models of professional development and more recent, innovative ways of interacting with teachers from a cultural, historical, and political perspective. Course contains a field experience in working with beginning teachers. (Formerly C&I 5793. Credit cannot be earned for both C&I 5793 and LTED 5793.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

LTED 5823. Early Language and Literacy Development. (3-0) 3 Credit Hours.

Study of the language and literacy development of young children from birth to the acquisition of conventional reading and writing. Examines young children's emergent literacy concepts and interactions with text and considers ways that early childhood educators can develop appropriate approaches to teaching reading and writing in classroom settings. Course contains a field experience. (Formerly C&I 5823. Credit cannot be earned for both C&I 5823 and LTED 5823.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

LTED 5843. Young Adult Literature. (3-0) 3 Credit Hours.

This course is designed to provide opportunities for students to become familiar with young adult literature and to examine current issues, practices, and perspectives about this field of study. (Formerly C&I 5843. Credit cannot be earned for both C&I 5843 and LTED 5843.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

LTED 6023. Picture Books and the Practice of Literacy. (3-0) 3 Credit Hours.

This course focuses on the picture book. The course will investigate the formal properties of picture books, the potential of picture books for enabling literacy development, and how children and young adults interact with them. The course will include aesthetic theory, theories of text-picture relationships, theories of literacy and literary understanding, and will attempt to forge connections among these theories. Research on children's engagement with (and responses to) picture books will also be included. (Formerly C&I 5833. Credit cannot be earned for both C&I 5833 and LTED 6023.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

LTED 6033. Survey of Literacy Research. (3-0) 3 Credit Hours.

A review of past and current research concerning literacy, curricula, instructional practices, and the politics and paradigms that have driven them. Uses a cross-discipline perspective from cognitive psychology, sociolinguistics, anthropology, and cultural approaches. Provides an opportunity for students to acquire critical analytic skills in evaluating research. (Formerly C&I 6033. Credit cannot be earned for both C&I 6033 and LTED 6033.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

LTED 6043. Survey of Writing Research. (3-0) 3 Credit Hours.

This course is designed to review theory, research, and school practices on the writing process and assessment of writing. Theory and research across the fields of the history of, and human development in, writing, rhetoric and written communication, genre studies, author-audience relations, and creative expression will be considered. The course examines relationships between inside of school and outside of school writing, and the transition from oral to written communication. Approaches for analyzing and helping students overcome writing difficulties across the disciplines will be examined. (Formerly C&I 6043. Credit cannot be earned for both C&I 6043 and LTED 6043.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

LTED 6073. New Literacies Using Critical Perspectives. (3-0) 3 Credit Hours.

In our globalized world, literacy has taken on many meanings and has moved beyond linguistic forms to all representations of language. In this course, we will explore research-based and pedagogical definitions and applications of new literacies (literacies that fall outside of the ever-shrinking "mainstream") through a critical lens, including the new understanding of what it means to be literate in present day, referred to as the "ethos stuff," as well as the new hardware and software of communication, referred to as the "technical stuff." (Formerly titled "Multiple Literacies Using Critical Perspectives." Formerly C&I 6073. Credit cannot be earned for both C&I 6073 and LTED 6073.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

LTED 6763. Re-mediating Literacy. (3-0) 3 Credit Hours.

A sociohistorical-political critique of traditional notions of the remediation of reading difficulties. Special attention to ways of re-mediating reading instruction through the use of alternative views of reading development and culturally responsive models of reading instruction with individual children through a guided field-based practicum. (Formerly C&I 5763. Credit cannot be earned for both C&I 5763 and LTED 6763.) Course Fees: GH01 \$90; LRH1 \$20; STF1 \$57; STSH \$30.

LTED 6803. San Antonio Writing Project Leadership Institute. (3-0) 3 Credit Hours.

Corequisite: LTED 6813. This course is designed to provide opportunities for teachers and teacher leaders to engage in personal and professional writing, research on writing and writing instruction, and the role of writing in social change. Students will explore their own writing, and critically examine writing pedagogies of writing across all content areas from pre-K through university level academics. (Formerly C&I 6803. Credit cannot be earned for both C&I 6803 and LTED 6803.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

LTED 6813. San Antonio Writing Project Leadership Institute Advanced. (3-0) 3 Credit Hours.

Corequisite: LTED 6803. This course provides opportunities for professional growth and study of writing theory. Students will research, develop, critically evaluate and present mini-lessons that demonstrate their understanding of writing for social change. Upon successful completion of class, students will be invited to apply to serve as Teacher Leaders with the San Antonio Writing Project. (Formerly C&I 6813. Credit cannot be earned for both C&I 6813 and LTED 6813.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

LTED 6833. Theoretical Foundations of Literacy Education. (3-0) 3 Credit Hours.

A socio-historical examination of theories of literacies and literacy education. Students examine various conceptualizations of literacy and how these conceptualizations have changed over time. Focus is given to critical theories and perspectives that emphasize humanizing and transformative literacy practices. Course Fees: DL01 \$75; GH01 \$90; LRH1 \$20; STSH \$30.

LTED 6843. Practice-Based Literacy Research. (3-0) 3 Credit Hours.

Prerequisite: CI 5003 (formerly C&I 5003), ILT 5003, LTED 6833, and LTED 6033 (or concurrent enrollment). Students must be in the final 12 hours of program to enroll; course contains capstone experience. Ideally taken with final LTED 6941. Course focuses on practice-based research for teachers, teacher leaders, and reading specialists/literacy coaches. Students design, conduct, and disseminate a study that focuses on pedagogy that convokes social change. Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

LTED 6941. Internship in Literacy. (0-0) 1 Credit Hour.

Prerequisite: Consent of student's graduate advisor. Individually supervised field experience in assigned classrooms for one semester (12 weeks) with related applied research activity and seminars. Maybe repeated for credit, but not more than 3 hours may be applied toward the M.A. in Education degree. Course Fees: GH01 \$30; INT1 \$50; STF1 \$57; STSH \$10.

LTED 6943. Internship in Literacy. (0-0) 3 Credit Hours.

Prerequisite: Consent of student's graduate advisor. Individually supervised field experience in assigned classrooms for one semester (12 weeks) with related applied research activity and seminars. Maybe repeated for credit, but not more than 3 hours may be applied toward the M.A. in Education degree. Course Fees: GH01 \$90; INT1 \$150; LRH1 \$20; STF1 \$57; STSH \$30.

LTED 6951. Independent Study. (0-0) 1 Credit Hour.

Prerequisites: Graduate standing and permission in writing (form available) from the instructor and the student's Graduate Advisor of Record. Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work not normally or not often available as part of the regular course offerings. May be repeated for credit, but not more than 6 hours, regardless of discipline, will apply to the M.A. in Education degree. Course Fees: GH01 \$30; STSH \$10.

LTED 6953. Independent Study. (0-0) 3 Credit Hours.

Prerequisites: Graduate standing and permission in writing (form available) from the instructor and the student's Graduate Advisor of Record. Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work not normally or not often available as part of the regular course offerings. May be repeated for credit, but not more than 6 hours, regardless of discipline, will apply to the M.A. in Education degree. Course Fees: GH01 \$90; STSH \$30.

LTED 6973. Special Topics in Literacy. (3-0) 3 Credit Hours.

Prerequisite: Consent of instructor. An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Problems courses may be repeated for credit when topics vary, but not more than 6 hours, regardless of discipline, will apply to the M.A. in Education degree. Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

LTED 6983. Master's Thesis. (0-0) 3 Credit Hours.

Prerequisites: Permission from the Graduate Advisor of Record and thesis director. Thesis research and preparation. May be repeated for credit, but not more than 6 hours will apply to the Master's degree. Credit will be awarded upon completion of the thesis. Enrollment is required each term in which the thesis is in progress. Course Fees: GH01 \$90; STSH \$30.

LTED 7403. Survey of Research in Literature for Children and Young Adults. (3-0) 3 Credit Hours.

This course surveys theory and research on literature for children and young adults and examines research on reader response and related classroom practices. (Formerly C&I 7403. Credit cannot be earned for both C&I 7403 and LTED 7403.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

LTED 7803. A Historical Perspective of American Reading Instruction. (3-0) 3 Credit Hours.

This course explores some of the history(ies) of reading instruction in the United States through a critical lens. The course is designed to provide students with a deeper understanding of the origins of current methods, materials, and perspectives on literacy instruction in the United States as well as support them in learning to conduct historical literacy research of their own. Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

LTED 7853. Knowledge Construction from Texts. (3-0) 3 Credit Hours.

Reviews research that examines sociocognitive and social constructivist processes in meaning making and knowledge building during textual interactions. Focuses on comprehension strategies and disciplinary reading practices. (Formerly C&I 5853 and C&I 7853. Credit cannot be earned for more than one of the following: C&I 5853, C&I 7853, and LTED 7853.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

LTED 7863. Russian Contributions to Literacy, Psychology and Learning. (3-0) 3 Credit Hours.

Examines the contributions of Russian psychologists to reading and writing, social and cultural development, and special needs of learners. Focuses on contributions of Lev Vygotsky and application of his thinking to contemporary educational, psychological, and social-bicultural issues. (Formerly C&I 5863 and C&I 7863. Credit cannot be earned for more than one of the following: C&I 5863, C&I 7863, and LTED 7863.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

LTED 7873. Sociopolitical Contexts of Literacy Assessment. (3-0) 3 Credit Hours.

Examination and critique of reading and writing assessment policies and practices and the sociopolitical and historical contexts of data-driven instruction. Considers strengths and weaknesses of assessment tools such as standardized tests, observations, and portfolios, and ways educators may use and critique the results from these approaches to effectively inform instruction. (Formerly C&I 5873. Credit cannot be earned for both C&I 5873 and LTED 7873.) Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

LTED 7893. Directed Doctoral Research. (0-0) 3 Credit Hours.

Supervised research on a topic in Interdisciplinary Learning and Teaching. May be repeated for credit, but no more than 6 hours may be applied to the Doctoral degree. Course Fees: GH01 \$90; STSH \$30.

Special Education (SPE) Courses

SPE 5403. Survey of Special Education. (3-0) 3 Credit Hours.

Prerequisite: Consent of instructor. This course will provide students with the opportunity to acquire knowledge in the field of special education including characteristics, etiology, definition, and prevalence of disabilities. Students will also have the opportunity to study effective strategies for use with individuals with disabilities. Course Fees: DL01 \$75; GH01 \$90; LRH1 \$20; STSH \$30.

SPE 5513. Assessment of Individuals with Disabilities. (3-0) 3 Credit Hours.

Prerequisite: SPE 5403 or consent of instructor. This course will provide the opportunity for students to acquire an understanding of the principles of assessment for students with disabilities or who are at-risk. Students will learn how to evaluate and interpret formal and informal assessments in order to make data-based programming decisions and determine special education eligibility. (Formerly titled "Curriculum and Instructional Applications for Children and Youth in Special Education.") Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

SPE 5613. Legal Issues in Special Education. (3-0) 3 Credit Hours.

Prerequisite: SPE 5403 or consent of instructor. This course will provide students with the opportunity to acquire knowledge related to the historical and legal issues of special education. Through an in-depth study of state and federal laws, students will have the opportunity to engage in activities that examine the ethical implications of special education. Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

SPE 5633. Methods for Teaching Individuals with Mild/Moderate Disabilities. (3-0) 3 Credit Hours.

Prerequisite: SPE 5403 or consent of instructor. This course will provide students with the opportunity to acquire knowledge about evidenced-based instructional practices for teaching individuals with mild/moderate disabilities. Students will have the opportunity to learn to design appropriate instructional interventions, how to apply those interventions, and to make decisions based on student data to inform future instructional practices. Course Fees: DL01 \$75; GH01 \$90; LRH1 \$20; STSH \$30.

SPE 5643. Methods for Teaching Individuals with Moderate/Severe Disabilities. (3-0) 3 Credit Hours.

Prerequisite: SPE 5403 or consent of instructor. This course will provide students with the opportunity to acquire knowledge about evidenced-based instructional practices for teaching individuals with moderate/severe intellectual disabilities. Students will have the opportunity to learn to design appropriate instructional interventions, how to apply those interventions, and make decisions based on student data to inform future instructional practices. Course Fees: DL01 \$75; GH01 \$90; LRH1 \$20; STSH \$30.

SPE 5653. Behavior and Classroom Management in the Inclusive Classroom. (3-0) 3 Credit Hours.

Prerequisite: SPE 5403 or consent of instructor. This course provides students with a critical examination of evidence-based practices to promote individual, classroom, and school-wide pro-social behavior in the inclusive classroom. Students will use behavioral assessment to inform decisions and creating positive academic environments. Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

SPE 6133. Introduction to Single-Subject Methodology. (3-0) 3 Credit Hours.

Prerequisite: SPE 5403. The content of this course will examine questions appropriate for single-case research, data collection procedures, selection, implementation, analysis of research designs, and manuscript development/structure. (Same as EDP 6223 and ILR 7133. Credit cannot be earned for more than one course.) Course Fees: DL01 \$75; GH01 \$90; LRH1 \$20; STSH \$30.

SPE 6443. Collaboration and Consultation in Educational and Clinical Settings. (3-0) 3 Credit Hours.

Prerequisite: SPE 5503. This course provides students with a strong foundation in professional skills related to collaboration, consultation, staff supervision and management, and training using applied behavior analysis. Special emphasis is placed on applying these skills to support individuals with disabilities and relevant stakeholders in multiple settings. (Formerly titled "Collaboration and Consultation in Special Education.") Course Fees: DL01 \$75; GH01 \$90; LRH1 \$20; STSH \$30.

SPE 6623. Seminar on Current and Critical Issues in Special Education. (3-0) 3 Credit Hours.

Prerequisite: Consent of instructor. This course will provide students with the opportunity to examine critical issues in special education, including a study of research-supported practices, controversial issues, and critical topics in special education. This is a capstone course to be completed in the final semester. Course Fees: GH01 \$90; LRH1 \$20; STSH \$30.

SPE 6863. Technology for Individuals with Disabilities. (3-0) 3 Credit Hours.

Prerequisite: SPE 5403 or consent of instructor. This course will provide students with the opportunity to acquire knowledge related to the use of technology to assist the learning of individuals with disabilities. This course provides in-depth study of the use of assistive technology within the school curriculum. (Formerly SPE 6943. Credit cannot be earned for both SPE 6863 and SPE 6943.) Course Fees: DL01 \$75; GH01 \$90; LRH1 \$20; STSH \$30.

SPE 6951. Independent Study. (0-0) 1 Credit Hour.

Prerequisites: Approval of the instructor and the Graduate Advisor of Record. Independent reading, research, discussion and/or writing under the direction of a faculty member. For students needing specialized work not normally or not often available as part of the regular course offerings. May be repeated for credit, but not more than 6 hours, regardless of discipline, will apply to the degree. Course Fees: GH01 \$30; STSH \$10.

SPE 6953. Independent Study. (0-0) 3 Credit Hours.

Prerequisites: Approval of the instructor and the Graduate Advisor of Record. Independent reading, research, discussion and/or writing under the direction of a faculty member. For students needing specialized work not normally or not often available as part of the regular course offerings. May be repeated for credit, but not more than 6 hours, regardless of discipline, will apply to the degree. Course Fees: GH01 \$90; STSH \$30.

SPE 6983. Master's Thesis. (0-0) 3 Credit Hours.

Prerequisites: Permission from the Graduate Advisor of Record and thesis director. Thesis research and preparation. May be repeated for credit, but not more than 6 hours will apply to the Master's degree. Credit will be awarded upon completion of the thesis. Enrollment is required each term in which the thesis is in progress. Course Fees: GH01 \$90; STSH \$30.

SPE 7893. Directed Doctoral Research. (0-0) 3 Credit Hours.

Supervised research on a topic in Interdisciplinary Learning and Teaching. May be repeated for credit, but no more than 6 hours may be applied to the Doctoral degree. Course Fees: GH01 \$90; STSH \$30.