## CURRICULUM AND INSTRUCTION (EDCI)

### 300 Level Courses

**EDCI 370: Young Adult Literature in Multicultural Settings.** 3 credits.  
Examines literary works written for and about young adults, introduces critical issues surrounding teaching of young adult literature in multicultural texts, and explores strategies for teaching young adult literature. Offers students an opportunity to participate in discussions and debates surrounding these topics.  
*Grading: This course is graded on the Undergraduate Regular scale. ([Link](http://catalog.gmu.edu/policies/academic/grading/))  
*Recommended Corequisite: EDCI 422  
*Registration Restrictions: Enrollment is limited to students with a major, minor, or concentration in Secondary Ed - English 6-12.  
*Schedule Type: Lecture

**EDCI 372: Teaching Mathematics in the Secondary School.** 3 credits.  
Covers curricula, current issues, and research literature in secondary school mathematics. Emphasis is on developing different styles of teaching. Field experience is required for those seeking initial teacher licensure. Offered by School of Education ([Link](http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/)). Limited to three attempts. Equivalent to SEED 372.  
*Recommended Corequisite: EDCI 422  
*Registration Restrictions: Enrollment is limited to students with a major, minor, or concentration in Secondary Ed - Mathematic 6-12.  
*Schedule Type: Lecture

### 400 Level Courses

**EDCI 423: Methods for Teaching PK-6 English Learners in Inclusive Classrooms.** 3 credits.  
Examines current research, theory, and policy as applied to teaching and learning with K-6 English learners (ELs). Explores research-based methods, instructional frameworks, and culturally and linguistically responsive strategies for teaching ELs effectively in K-6 inclusive classrooms. This course requires 15 hours of field observation. Offered by School of Education ([Link](http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/)). Limited to two attempts.  
*Recommended Prerequisite: Admission to Elementary Education licensure program; ELED course sequence as approved by advisor.  
*Schedule Type: Lecture

**EDCI 469: Teaching English in Secondary School.** 3 credits.  
Provides study of advanced methods, materials, content, and organization of English programs in secondary school. Offered by School of Education ([Link](http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/)). Limited to three attempts. Equivalent to SEED 469.  
*Recommended Prerequisite: EDCI 422. Concurrent enrollment is also permitted.  
*Registration Restrictions: Enrollment is limited to students with a major, minor, or concentration in Secondary Ed - English 6-12.  
*Schedule Type: Lecture

Focuses on learning processes for mathematics. Introduces national and state standards regarding content and methodologies for teaching mathematics. Examines instructional methods and materials in relation to secondary mathematical content, curriculum, and assessment. Offered by School of Education ([Link](http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/)). Limited to three attempts. Equivalent to SEED 472.  
*Recommended Prerequisite: EDCI 372, EDCI 422.  
*Registration Restrictions: Enrollment is limited to students with a major, minor, or concentration in Secondary Ed - Mathematic 6-12.  
*Schedule Type: Lecture

**EDCI 473: Teaching Science in the Secondary School.** 3 credits.  
Builds fundamental knowledge of science teaching and learning including standards-based curriculum design and research-based teaching strategies. Notes: School-based field experience required for those seeking initial teacher licensure. Offered by School of Education ([Link](http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/)). Limited to three attempts.  
*Recommended Prerequisite: Admission to the Secondary Education Program.  
*Registration Restrictions: Enrollment is limited to students with a major, minor, or concentration in Secondary Ed - Biology 6-12, Secondary Ed - Chemistry 6-12, Secondary Ed - Physics 6-12 or Secnd Ed - Earth Science 6-12.  
*Schedule Type: Lecture

**EDCI 475: Teaching Social Studies in the Secondary School.** 3 credits.  
Examines pedagogical knowledge and instructional practices for teaching social studies in secondary school. Focuses on developing students' understanding of historical, political, and social issues. Offered by School of Education ([Link](http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/)). Limited to three attempts.  
*Recommended Prerequisite: Admission to the Secondary Education Program.  
*Registration Restrictions: Enrollment is limited to students with a major, minor, or concentration in Secondary Ed - History 6-12, Secondary Ed - Geography 6-12, Secondary Ed - Sociology 6-12.  
*Schedule Type: Lecture

**EDCI 480: Integrating Technology in the Content Areas.** 3 credits.  
Examines the integration of technology into the content areas. Focuses on the use of technology for teaching and learning in secondary school. Offered by School of Education ([Link](http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/)). Limited to three attempts.  
*Recommended Prerequisite: Admission to the Secondary Education Program.  
*Registration Restrictions: Enrollment is limited to students with a major, minor, or concentration in Secondary Ed - History 6-12, Secondary Ed - Geography 6-12, Secondary Ed - Sociology 6-12.  
*Schedule Type: Lecture

**EDCI 482: Advanced Methods for Teaching Writing in the Secondary School.** 3 credits.  
Focuses on the development of advanced methods for teaching writing in secondary school. Examines instructional methods and materials for teaching writing, including the use of technology. Offered by School of Education ([Link](http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/)). Limited to three attempts. Equivalent to SEED 482.  
*Recommended Prerequisite: EDCI 422. Concurrent enrollment is also permitted.  
*Registration Restrictions: Enrollment is limited to students with a major, minor, or concentration in Secondary Ed - English 6-12.  
*Schedule Type: Lecture
EDCI 479: Advanced Methods of Teaching English in the Secondary School. 3 credits.
Recommended Prerequisite: EDCI 469.
Registration Restrictions:
Enrollment is limited to students with a major, minor, or concentration in Secondary Ed - English 6-12.
Schedule Type: Lecture
Grading:
This course is graded on the Undergraduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)
EDCI 483: Advanced Methods of Teaching Science in Secondary School. 3 credits.
Provides advanced study of teaching and curriculum development based on research and current issues. Emphasizes integrating science and technology, adapting instruction to needs of diverse learners, and promoting safety. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). Limited to three attempts. Equivalent to SEED 483.
Recommended Prerequisite: EDCI 473.
Registration Restrictions:
Enrollment is limited to students with a major, minor, or concentration in Secondary Ed - Biology 6-12, Secondary Ed - Chemistry 6-12, Secondary Ed - Physics 6-12 or Secnd Ed - Earth Science 6-12.
Schedule Type: Lecture
Grading:
This course is graded on the Undergraduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)
EDCI 490: Student Teaching in Education. 6 credits.
Provides intensive, supervised clinical experience in approved school for fall or spring semester. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). Limited to three attempts. Equivalent to SEED 492, SEED 493, SEED 494.
Recommended Prerequisite: Completion of licensure and all endorsement course work.
Registration Restrictions:
Enrollment is limited to students with a major, minor, or concentration in Secondary Ed - Biology 6-12, Secondary Ed - Chemistry 6-12, Secondary Ed - Mathemetic 6-12, Secondary Ed - English 6-12, Secondary Ed - Physics 6-12 or Secnd Ed - Earth Science 6-12.
Schedule Type: Internship
EDCI 491: Internship Seminar in Secondary Training. 2 credits.
Focuses on critical reflection regarding effects of teacher actions others; develops skills as reflective practitioner; presents research. based rationales for instructional decision-making. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). Limited to three attempts.
Recommended Prerequisite: Admission to the professional semester.
Recommended Corequisite: EDCI 490.
Registration Restrictions:
Enrollment is limited to students with a major, minor, or concentration in Secondary Ed - Biology 6-12, Secondary Ed - Chemistry 6-12, Secondary Ed - Mathemetic 6-12, Secondary Ed - English 6-12, Secondary Ed - Physics 6-12 or Secnd Ed - Earth Science 6-12.
Schedule Type: Seminar
500 Level Courses
EDCI 510: Linguistics for PreK-12 ESOL Teachers. 3 credits.
Examines language as a system, with particular focus on teaching culturally and linguistically diverse students in grades PreK-12. Considers teaching implications of phonology, morphology, syntax, semantics, and pragmatics. Fieldwork hours are required. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.
Registration Restrictions:
Required Prerequisites: EDRD 515B, EDUC 511B and 537B.
B- Requires minimum grade of B-.
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.
Enrollment is limited to students with a major in English as a Second Language or Curriculum and Instruction.
Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.
Students in a Non-Degree Undergraduate degree may not enroll.
Schedule Type: Lecture
EDCI 516: Bilingualism and Language Acquisition Research. 3 credits.
Examines first and second language acquisition theories past and present. Explores how PK-12 bilingual and multilingual learners' cultures and languages are valuable assets in classrooms and addresses implications for instruction and assessment. Develops understanding of research around instructional environments that promote bilingualism and biliteracy. Fieldwork hours are required. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.
Registration Restrictions:
Required Prerequisites: EDRD 515B, EDUC 511B and 537B.
B- Requires minimum grade of B-.
May be taken concurrently.
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.
Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.
Students in a Non-Degree Undergraduate degree may not enroll.
Schedule Type: Lecture
Grading:
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 519: Methods of Teaching Culturally and Linguistically Diverse Learners. 3 credits.
Examines approaches, methods, and techniques for teaching culturally and linguistically diverse learners in bilingual and ESL classrooms, as well as resources available in the field. Critically analyzes and demonstrates teaching approaches based on second language acquisition research, including teaching language through content. Fieldwork hours are required. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

Registration Restrictions:
Required Prerequisites: EDCI 510*B* and 516*B*.
* May be taken concurrently.
B* Requires minimum grade of B-.
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.
Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.
Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Lecture
Grading:
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 520: Assessment of Language Learners. 3 credits.
Examines innovative approaches to assessing language learners. Topics include identification, placement, monitoring of student progress, development of authentic performance-based measures, design of portfolios, application of measurement concepts, analysis of assessment instruments, and linking assessments to instruction. Fieldwork hours are required. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

Registration Restrictions:
Required Prerequisites: EDCI 519*B* or 560*B*.
* May be taken concurrently.
B* Requires minimum grade of B-.
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.
Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.
Students in a Non-Degree Undergraduate degree may not enroll.

EDCI 544: Curriculum and Methods of Teaching in Elementary Education. 3 credits.
Introduction to general methods of teaching in elementary schools focusing on planning, teaching strategies, management, assessment, and differentiation. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit. Equivalent to ELED 544.

Recommended Prerequisite: Admission to the Elementary Education graduate program; must be taken in programmatic sequence.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.
Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.
Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Lecture
Grading:
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 545: Assessment and Differentiation. 3 credits.
Provides a research-based introduction to differentiated instruction for children in grades PK-6. Emphasis on the assessment of learners and differentiation of instruction to meet the needs of all learners. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit. Equivalent to ELED 545.

Recommended Prerequisite: Admission into the Elementary Education graduate program, must be taken in programmatic sequence.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.
Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.
Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Lecture
Grading:
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 546: Integrating Technology in Elementary Classrooms: Literacy. 1 credit.
Studies the development and integration of technology in the elementary education literacy curriculum. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

Recommended Prerequisite: Admission to Elementary Education graduate
Recommended Corequisite: program. EDCI 556.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Lecture

Grading: This course is graded on the Graduate Special scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 553: Science Methods for the Elementary Classroom. 1-3 credits. Develops skills and abilities in science teaching methods, applications of technology, safety practices, and creation of integrated science curricula. Examines science teaching based on contemporary theory, practice, and standards. Notes: Requires field experience in public schools. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May be repeated within the degree for a maximum 3 credits. Equivalent to ELED 553.

Recommended Prerequisite: Admission to the Elementary Education licensure program.

Registration Restrictions: Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

Enrollment is limited to students with a major in Curriculum and Instruction.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Lecture

Grading: This course is graded on the Graduate Special scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 554: Methods of Teaching Social Studies and Integrating Fine Arts in the Elementary Classroom. 3 credits. Focuses on the design and delivery of standards-based integrated curriculum centered on the social sciences. Includes integration of fine arts and examines the central role of the arts in learning. Notes: School-based field experience required. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May be repeated within the degree for a maximum 3 credits. Equivalent to ELED 554.

Recommended Prerequisite: Admission into Elementary Education program; must be taken in programmatic sequence.

Registration Restrictions: Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

Enrollment is limited to students with a major in Curriculum and Instruction.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Lecture

Grading: This course is graded on the Graduate Special scale. (http://catalog.gmu.edu/policies/academic/grading/)


Recommended Prerequisite: Admission into Elementary Education graduate

Recommended Corequisite: program. EDCI 552.

Registration Restrictions: Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Lecture

Grading: This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 552: Mathematics Methods for the Elementary Classroom. 1-3 credits. Introduces methods for teaching all children topics in arithmetic, geometry, algebra, probability, and statistics in elementary grades. Focuses on using manipulatives and technologies to explore mathematics and solve problems. Notes: Requires field experience in public schools. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May be repeated within the degree for a maximum 3 credits. Equivalent to ELED 552.

Recommended Prerequisite: Admission to the Elementary Education licensure program.

Registration Restrictions: Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

Enrollment is limited to students with a major in Curriculum and Instruction.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.
**EDCI 555: Literacy Teaching and Learning in Diverse Elementary Classrooms I.** 3 credits.
Provides research-based introduction to literacy teaching and learning for younger children. Emphasizes language development; reading and writing processes; emergent literacy; culture, families, and literacy; and literacy integration in the curriculum. Notes: School-based field experience required. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit. Equivalent to ELED 555.

**Recommended Prerequisite:** Admission to the Elementary Education licensure program.

**Registration Restrictions:**
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

**Schedule Type:** Lecture

**Grading:**
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

**EDCI 556: Literacy Teaching and Learning in Diverse Elementary Classrooms II.** 1-3 credits.
Provides research-based introduction to literacy teaching and learning for older children. Emphasizes language development; reading and writing processes and development; connections among cultures, families, and literacy; and literacy integration in the curriculum. Notes: School-based field experience required. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May be repeated within the degree for a maximum 3 credits. Equivalent to ELED 556.

**Recommended Prerequisite:** Admission to the Elementary Education Licensure program.

**Registration Restrictions:**
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

Enrollment is limited to students with a major in Curriculum and Instruction.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

**Schedule Type:** Lecture

**Grading:**
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

**EDCI 559: Research and Assessment in Elementary Education.** 3 credits.
Provides teacher candidates an understanding of research paradigms utilizing systematic evidence to improve practice and further skills in assessment of learning outcomes. Emphasizes linking research and practice, making instructional decisions based on systematically collected data. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit. Equivalent to ELED 559.

**Recommended Prerequisite:** Admission into Elementary Education graduate program; capstone course for degree must be taken last in programmatic sequence.

**Registration Restrictions:**
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

**Schedule Type:** Lecture

**Grading:**
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

**EDCI 560: Methods of Teaching in Foreign/World Languages.** 3 credits.
Covers approaches, theories, and methods of teaching foreign and second languages, with practical application to classroom. Students demonstrate teaching strategies, develop lesson and unit-planning skills, and evaluate curricula and materials. Notes: Requires field experience in schools. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

**Registration Restrictions:**
May be taken concurrently.

**Required Prerequisites:** EDCI 516* or SPAN 502B.

*May be taken concurrently.

B- Requires minimum grade of B-.
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may **not** enroll.

**Schedule Type:** Lecture

**Grading:**
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

**EDCI 567:** Teaching Social Studies in the Secondary School. 3 credits.
Provides teacher candidates an introduction to methods, frameworks, and practices of teaching social studies in secondary schools. Notes: Requires 15 hours of school-based field experience. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit. Equivalent to SEED 567.

**Recommended Prerequisite:** EDUC 522. Concurrent enrollment is also permitted.

**Registration Restrictions:**
Enrollment limited to students with a class of Advanced to Candidacy, Graduation Deadline Extended, Graduate, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may **not** enroll.

**Schedule Type:** Lecture

**EDCI 569:** Teaching English in the Secondary School. 3 credits.
Provides study of advanced methods, materials, content, and organization of English programs in secondary school. Notes: 15 hours school-based field experience required. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit. Equivalent to SEED 569.

**Recommended Prerequisite:** EDUC 522. Concurrent enrollment is also permitted.

**Registration Restrictions:**
Enrollment limited to students who have completed EDUC 522.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may **not** enroll.

**Schedule Type:** Lecture

**EDCI 570:** Teaching Young Adult Literacy in a Multicultural Setting. 3 credits.
Examines literary works written for and about young adults. Introduces critical issues surrounding teaching young adult literature in multiculturally diverse public schools and requires reading and reviewing young adult literature from several genres. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit. Equivalent to SEED 502.

**Registration Restrictions:**
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may **not** enroll.

**Schedule Type:** Lecture

**Grading:**
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

**EDCI 572:** Teaching Mathematics in the Secondary School. 3 credits.
Emphasizes developing different styles of teaching. Notes: 15 hours school-based field experience required. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit. Equivalent to SEED 572.

**Recommended Prerequisite:** EDUC 522. Concurrent enrollment is also permitted.

**Registration Restrictions:**
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may **not** enroll.

**Schedule Type:** Lecture

**EDCI 573:** Teaching Science in the Secondary School. 3 credits.
Provides study of methods, materials, content, and organization of science programs. Emphasizes curriculum planning, current methodologies, safety, and trends in secondary schools. Notes: 15 hours school-based field experience required. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

**Specialized Designation:** Green Leaf Related Course

**Recommended Prerequisite:** EDUC 522. Concurrent enrollment is also permitted.

**Registration Restrictions:**
Enrollment limited to students who have completed EDUC 522.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may **not** enroll.

**Schedule Type:** Lecture

**EDCI 580:** Human Development and Learning. 3 credits.
Examines overarching principles and theories of human growth and development. Explores the various domains of development – physical,
cognitive, language, social/emotional, and moral – through the major
theories of educational psychology. Explores how students learn and are
motivated to learn. Offered by Graduate School of Education. May not be
repeated for credit.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy,
Graduate, Non-Degree or Senior Plus.

Enrollment is limited to students with a concentration in TESOL PK-Adult
Non-Licensure.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level
students.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Lecture

Grading:
This course is graded on the Graduate Regular scale. (http://
catalog.gmu.edu/policies/academic/grading/)

EDCI 581: Understanding Culturally and Linguistically Diverse Learners. 3
credits.
Examines the ways that race, ethnicity, language, religion, socioeconomic
status, gender, sexual orientation, and ability intersect to affect
educational experiences for culturally and linguistically diverse (CLD)
learners of all ages. Invites educators to deepen understanding of
culture and explore their own cultural identities with implications for
equitable pedagogical practices with CLD learners. Offered by School of
Education (http://catalog.gmu.edu/colleges-schools/education-human-
development/school-education/). May not be repeated for credit.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy,
Graduate, Non-Degree or Senior Plus.

Enrollment is limited to students with a concentration in TESOL PK-Adult
Non-Licensure.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level
students.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Lecture

Grading:
This course is graded on the Graduate Regular scale. (http://
catalog.gmu.edu/policies/academic/grading/)

EDCI 582: Foundations in Language and Literacy. 3 credits.
Focuses on the relationship of language to reading and the connection
between language structure and learning to read in English. Examines
theories of language acquisition and the complexity of language
development and the reading process for ESL/EFL/EAL students.
Explores key factors that influence and enhance English language
learning and development. Introduces literacy instruction and literacy
assessment for ESL/EFL/EAL learners, and explores sociocultural
perspectives on literacy. Offered by School of Education (http://
catalog.gmu.edu/colleges-schools/education-human-development/
school-education/). May not be repeated for credit.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy,
Graduate, Non-Degree or Senior Plus.

Enrollment is limited to students with a concentration in TESOL PK-Adult
Non-Licensure.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level
students.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Lecture

Grading:
This course is graded on the Graduate Regular scale. (http://
catalog.gmu.edu/policies/academic/grading/)

EDCI 583: Research and Practice with Bi-Multilingual Learners. 3 credits.
Examines first and second language acquisition theories and
sociopolitical contexts of research around the development of bi-
multilingualism past and present. Studies bilingual/multilingual learners’
cultures and languages through asset-based perspectives and addresses
implications for pedagogical practices that promote bi-multilingualism
and biliteracy. Offered by School of Education (http://catalog.gmu.edu/
colleges-schools/education-human-development/school-education/).
May not be repeated for credit.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy,
Graduate, Non-Degree or Senior Plus.

Enrollment is limited to students with a concentration in TESOL PK-Adult
Non-Licensure.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level
students.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Lecture

Grading:
This course is graded on the Graduate Regular scale. (http://
catalog.gmu.edu/policies/academic/grading/)

EDCI 584: Linguistics for TESOL Professionals. 3 credits.
Examines language as a system, with particular focus on teaching
culturally and linguistically diverse students across all levels. Considers
teaching implications of phonology, morphology, syntax, semantics, and
pragmatics. Offered by School of Education (http://catalog.gmu.edu/
colleges-schools/education-human-development/school-education/).
May not be repeated for credit.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy,
Graduate, Non-Degree or Senior Plus.

Enrollment is limited to students with a concentration in TESOL PK-Adult
Non-Licensure.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level
students.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Lecture
Grading:
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 585: TESOL Methodology. 3 credits.
Examines approaches, methods, and techniques for teaching culturally and linguistically diverse ESL/EFL/EAL learners, as well as resources available in the field. Demonstrates and critically analyzes teaching approaches based on second language acquisition research, including teaching language through content. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

Enrollment is limited to students with a concentration in TESOL PK-Adult Non-Licensure.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Lecture

Grading:
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 586: Assessment in English Language Teaching. 3 credits.
Examines innovative approaches to assessing ESL/EFL/EAL learners. Focuses on topics such as identification, placement, monitoring of student progress, development of authentic performance-based measures, design of portfolios, application of measurement concepts, analysis of assessment instruments, and linking assessment to instruction. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

Enrollment is limited to students with a concentration in TESOL PK-Adult Non-Licensure.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Lecture

Grading:
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 587: Content Literacy in English Language Teaching. 3 credits.
Focuses on research-based instructional strategies for integrating development of ESL/EFL/EAL learners’ academic language and literacy skills with learning of content concepts across grade levels and disciplinary areas. Emphasizes sociocultural practices that leverage ESL/EFL/EAL learners’ social, cultural, linguistic, and knowledge capitals to strengthen academic achievement in content classrooms and discipline-specific fields. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

Enrollment is limited to students with a concentration in TESOL PK-Adult Non-Licensure.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Seminar

Grading:
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 588: Consultation and Collaboration in Educational Settings. 3 credits.
Focuses on ways in which education professionals can collaborate in serving EAL/EFL/ESL students. Explores methods for co-planning and co-teaching as well as ways for sharing responsibilities for instruction and assessment. Examines ways for managing difficult professional interactions and how to implement collaborative and inclusive models of education. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

Enrollment is limited to students with a concentration in TESOL PK-Adult Non-Licensure.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Seminar

Grading:
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 589: Cultural and Linguistic Inquiry in TESOL. 3 credits.
Provides culminating experience that emphasizes TESOL professional as change agent through critical inquiry into cultural and linguistic influences on learning environments and language/literacy learning experiences. Provides opportunity to research key aspects of critical inquiry and apply to practice across TESOL settings through master’s capstone project. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.
Enrollment is limited to students with a concentration in TESOL PK-Adult Non-Licensure.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

**Schedule Type:** Lecture

**Grading:**
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

**EDCI 597:** Special Topics in Education. 1-6 credits.
Provides advanced study on selected topic or emerging issue in American or international education. Notes: May be repeated for credit with GSE permission. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May be repeated within the degree.

**Specialized Designation:** Topic Varies

**Recommended Prerequisite:** Admission to program in GSE.

**Registration Restrictions:**
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

Enrollment is limited to students with a major in ASTL-Alternative Education, ASTL-Early Childhood Educ, Gifted Child Education, ASTL - History, ASTL-Instructional Technology, ASTL - Literacy/Reading, ASTL - Mathematics, ASTL-NBPTS Preparation Core, ASTL - Science or Curriculum and Instruction.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

**EDCI 617:** Using Digital and Popular-Culture Media with Grades 4-12. 3 credits.
Exposes students to recent knowledge on how middle and high school teachers can use digital media and popular culture texts to engage students in subject area learning or literacy development. Focus is on grades 4-12. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

**Recommended Prerequisite:** Admission to a GSE licensure, Master's, or doctoral program and at least one year of PK-12 teaching experience, completion of EDCI 569, EDCI 567, EDCI 572, EDCI 573, or EDCI 544, or permission of instructor.

**Registration Restrictions:**
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

Enrollment is limited to students with a major in Curriculum and Instruction.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

**Schedule Type:** Lecture

**Grading:**
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

**EDCI 621:** Introduction to Gifted and Talented Learners. 3 credits.
Examines nature and needs of gifted and talented learners. Participants become knowledgeable about characteristics of gifted and talented students, and examine role of culture in manifestation of gifts and talents as well as gifted behaviors in special populations. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

**Recommended Prerequisite:** Admission to a GSE licensure, Master’s, or doctoral program and at least one year of PK-12 teaching experience, completion of EDCI 569, EDCI 567, EDCI 572, EDCI 573, or EDCI 544, or permission of instructor.

**Registration Restrictions:**
Enrollment limited to students with a major in Curriculum and Instruction.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

**Schedule Type:** Lecture

**Grading:**
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

**EDCI 622:** Curriculum Differentiation for Diverse Learners. 3 credits.
Develops personal and professional rationale for differentiating instruction in mixed-ability classrooms, as well as skills and knowledge of strategies to utilize pre-assessment data and plan for and implement differentiated instruction. Offered by School of Education (http://
EDCI 621: Models and Strategies for Teaching Gifted Learners. 3 credits. Provides framework to examine and apply curriculum models and instructional strategies advocated for use with gifted students according to national and state standards that reflect best practices in gifted education. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

**Registration Restrictions:**
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

Enrollment is limited to students with a major in ASTL-Alternative Education, ASTL-Early Childhood Educ, Gifted Child Education, ASTL - History, ASTL-Instructional Technology, ASTL - Literacy/Reading, ASTL - Mathematics, ASTL-NBPTS Preparation Core, ASTL - Science or Curriculum and Instruction.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may **not** enroll.

**Schedule Type:** Lecture

**Grading:**
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)


**Registration Restrictions:**
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

EDCI 623: Contemporary Issues and Trends in Gifted Education. 3 credits. Focuses on research, trends, issues, legislation, and litigation concerning gifted and talented children. Provides professionals in gifted education and related fields with knowledge and skills to serve as advocates for gifted-child education. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

**Registration Restrictions:**

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may **not** enroll.

**Schedule Type:** Lecture

**Grading:**
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 624: Action Research in Gifted Education. 3 credits. Opportunity to identify and investigate school-based problem and apply inquiry, writing, and research skills to relevant issue or concern in gifted education. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

**Registration Restrictions:**
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

Enrollment is limited to students with a major in ASTL-Alternative Education, ASTL-Early Childhood Educ, Gifted Child Education, ASTL - History, ASTL-Instructional Technology, ASTL - Literacy/Reading, ASTL - Mathematics, ASTL-NBPTS Preparation Core, ASTL - Science or Curriculum and Instruction.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may **not** enroll.

**Recommended Prerequisite:** Admission to the MEd in Education Leadership, Mathematics Education Leadership concentration

**Registration Restrictions:**
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

Enrollment is limited to students with a major in Curriculum and Instruction or Education Leadership.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

**Schedule Type:** Lecture

**Grading:**
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 645: Mathematics Education Leadership for School Change. 3 credits. Surveys current literature and large-scale studies in mathematics education. Engages students in research, study, and discussion of factors that affect teaching and learning of mathematics in school settings. Offered by School of Education. (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

**Recommended Prerequisite:** Admission to the Mathematics Education Leadership Masters Degree Program or permission of the instructor.

**Registration Restrictions:**
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

Enrollment is limited to students with a major in Curriculum and Instruction or Education Leadership.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

**Schedule Type:** Lecture

**Grading:**
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 646: Mathematics Education Leadership for School Change. 3 credits. Surveys current literature and large-scale studies in mathematics education. Engages students in research, study, and discussion of factors that affect teaching and learning of mathematics in school settings. Offered by School of Education. (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

**Recommended Prerequisite:** Admission to the Mathematics Education Leadership Masters Degree Program or permission of the instructor.

**Registration Restrictions:**
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

**Schedule Type:** Lecture

**Grading:**
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 627: Advanced Practicum in Gifted Education. 3 credits. Intensive supervised clinical experiences for one semester in accredited elementary or secondary school. Students supervised in setting that includes scheduled observations and seminar experiences. Offered by School of Education. (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

**Recommended Prerequisite:** EDCI 621, 622, 623, and 624.

**Registration Restrictions:**
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.


Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

**Schedule Type:** Internship

**Grading:**
This course is graded on the Graduate Special scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 630: Supporting English Learners in PK-12 Schools. 3 credits. Provides new knowledge for classroom teachers who wish to know more about second language acquisition and how to effectively serve English Learners in their classrooms and schools. Examines research in first and second language acquisition, bilingualism, and includes teachers' application of new knowledge for culturally responsive curriculum development and student assessment. Offered by School of Education. (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

**Registration Restrictions:**
Enrollment limited to students with a class of Advanced to Candidacy or Graduate.

Students in a Non-Degree Undergraduate degree may not enroll.

**Schedule Type:** Lecture

**Grading:**
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 664: Mathematics Education Leadership for School Change. 3 credits. Surveys current literature and large-scale studies in mathematics education. Encourages students in research, study, and discussion of factors that affect teaching and learning of mathematics in school settings. Offered by School of Education. (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

**Recommended Prerequisite:** Admission to the Mathematics Education Leadership Masters Degree Program or permission of the instructor.

**Registration Restrictions:**
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

Enrollment is limited to students with a major in Curriculum and Instruction or Education Leadership.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

**Schedule Type:** Lecture

**Grading:**
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 665: Curriculum Development in Mathematics Education. 3 credits. Analysis, design, and evaluation of school mathematics curriculum. Offered by School of Education. (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

**Recommended Prerequisite:** Admission to the Mathematics Education Leadership Masters Degree Program or permission of the instructor.

**Registration Restrictions:**
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

Enrollment is limited to students with a major in Curriculum and Instruction or Education Leadership.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

**Schedule Type:** Lecture

**Grading:**
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 667: Advanced Practicum in Gifted Education. 3 credits. Intensive supervised clinical experiences for one semester in accredited elementary or secondary school. Students supervised in setting that includes scheduled observations and seminar experiences. Offered by School of Education. (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

**Recommended Prerequisite:** Admission to the MEd in Education Leadership, Mathematics Education Leadership concentration

**Registration Restrictions:**
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

Enrollment is limited to students with a major in Curriculum and Instruction or Education Leadership.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

**Schedule Type:** Lecture

**Grading:**
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 668: Mathematics Education Leadership for School Change. 3 credits. Surveys current literature and large-scale studies in mathematics education. Engages students in research, study, and discussion of factors that affect teaching and learning of mathematics in school settings. Offered by School of Education. (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

**Recommended Prerequisite:** Admission to the Mathematics Education Leadership Masters Degree Program or permission of the instructor.

**Registration Restrictions:**
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

Enrollment is limited to students with a major in Curriculum and Instruction or Education Leadership.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

**Schedule Type:** Lecture

**Grading:**
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)
Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Lecture

Grading:
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 660: Integrated STEM Teaching. 3 credits.
Provides an interdisciplinary approach to integrating science, technology, engineering, and mathematics (STEM) into teaching practice across all disciplines. Explores aspects of STEM education through literature, recent national reports, discussion, and practice. Involves participation in problem-based and project-based learning activities, inquiry learning, while using technology to gain and display information. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy or Graduate.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Lecture

Grading:
This course is graded on the Graduate Special scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 663: Research in Science Teaching. 3 credits.
Investigates the research and methodology involved in teaching and learning biological, chemical, physical, and earth sciences from K-12. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

Recommended Prerequisite: Course in teaching science in elementary or secondary school, or permission of instructor.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

Enrollment is limited to students with a major in ASTL-Alternative Education, ASTL-Early Childhood Educ, Gifted Child Education, ASTL - History, ASTL-Instructional Technology, ASTL - Literacy/Reading, ASTL - Mathematics, ASTL-NBPTS Preparation Core, ASTL - Science, Curriculum and Instruction or Education Leadership.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Lecture

EDCI 666: Research in Mathematics Teaching. 3 credits.
Explores curricula, current issues, and research literature in elementary school mathematics. Emphasizes development of different styles of teaching. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Lecture

EDCI 667: Advanced Methods of Teaching Social Sciences in the Secondary School. 3 credits.
Emphasizes interdisciplinary curriculum and instruction, implementing national state standards, authentic assessment, and adaptations for diverse populations. Notes: School-based field experience required. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

Recommended Prerequisite: EDCI 567 and EDUC 522.

Recommended Corequisite: EDRD 619.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Lecture

EDCI 669: Advanced Methods of Teaching English in the Secondary School. 3 credits.
Continuation course in methods (See EDCI 569). Guides students in working effectively with national and local standards for teaching secondary English. School-based field experience required. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit. Equivalent to EDCI 479.

Recommended Prerequisite: EDCI 569 and EDUC 522.

Recommended Corequisite: EDRD 619.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Lecture

EDCI 670: Advanced Methods in Science Teaching. 3 credits.
Application of major principles of education and psychology for the improvements of science teaching in secondary schools. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/
EDCI 672: Innovations in Science Teaching. 3 credits.
Focuses on the development and selection of teaching materials that reflect concepts of technology innovation with an emphasis on middle and secondary school science. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Lecture
Grading:
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 684: Advanced Methods of Teaching Foreign/Second Languages in PK-12 Schools. 3 credits.
Blends theoretical knowledge and practical application. Provides advanced study of second language pedagogy and teaching trends. Topics include multiple learning styles, alternative forms and assessment, and teaching diverse populations. Notes: Requires school-based field experience. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Lecture
Grading:
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 673: Advanced Methods of Teaching Science in the Secondary School. 3 credits.
Provides advanced study of teaching and curriculum development based on research and current issues. Emphasizes integrating science and technology, and adapting instruction to the needs of diverse learners. School-based field experience required. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

Recommended Prerequisite: EDCI 573 and EDUC 522.

Recommended Corequisite: EDRD 619.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Lecture

EDCI 702: Internship in Mathematics Education. 3 credits.
Offers practical experiences and professional challenges for mathematics leaders in authentic educational settings. Activities emphasize school-based and classroom based research and leadership. Develops the skills and abilities of the mathematics leaders to analyze classroom practice, investigate teaching and disseminate information about mathematics education in professional development settings for teachers. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

Registration Restrictions:
Enrollment is limited to students with a major in Curriculum and Instruction or Education Leadership.
Enrollment is limited to Graduate or Non-Degree level students. Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Internship

EDCI 776: Consultation and Collaboration in Diverse K-12 Settings. 3 credits. Focuses on ways in which practicing education professionals collaborate in serving diverse learners and their families. Explores methods for co-planning and co-teaching in the general education classroom and ways for sharing responsibilities for instruction and assessment. Includes ways for dealing with difficult interactions are part of understanding how to implement collaborative and inclusive models of education for diverse learners. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

Recommended Corequisite: Completion of all other program requirements EDCI 777

Registration Restrictions:
Required Prerequisites: EDCI 792, 793 or 794.

EDCI 777: Research to Practice. 3 credits. Provides culminating experience that synthesizes and applies essential elements of teaching culturally & linguistically diverse and exceptional learners in international contexts. Emphasizes teacher as change agent through critical inquiry into practice. Promotes collaboration among teachers and school professionals to advance achievement of diverse learners. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

Recommended Corequisite: Completion of all other program requirements

Recommended Prerequisite: EDCI 776

Registration Restrictions:
Required Prerequisites: EDCI 792, 793 or 794.

EDCI 790: Internship in Education. 1-6 credits. Intensive, supervised clinical experience for full semester in accredited school. Students must register for appropriate section. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May be repeated within the term for a maximum 6 credits. Equivalent to ELED 790, SEED 793, SEED 794, SEED 795.

Recommended Prerequisite: EDUC 522, EDUC 672, two methods classes in content area; passing Praxis II and VCLA, completing all endorsements.

Recommended Corequisite: EDCI 791.

Registration Restrictions:

Enrollment is limited to Graduate level students. Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Internship

EDCI 791: Internship Seminar in Secondary Teaching. 2 credits. Focuses on critical reflection regarding effects of teacher actions on others; develops skills as a reflective practitioner; presents research-based rationales for instructional decision-making. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit. Equivalent to SEED 791.

Recommended Prerequisite: Admission to the professional semester.

Recommended Corequisite: EDCI 790.

Registration Restrictions:

EDCI 792: Internship in Education: PK-6 International Elementary Education. 6 credits. Provides intensive, supervised clinical experience for a full semester in an accredited school. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

Recommended Prerequisite: Completion of all licensure tests and endorsement requirements.

Registration Restrictions:

Required Prerequisites: EDRD 515, EDUC 511, 512, 513, 514, 516 and 520.

EDCI 793: Internship in Education: PK-12 ESL/ESOL Education. 6 credits. Provides intensive, supervised clinical experience for full semester in accredited school. Students must register for appropriate section. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

Recommended Prerequisite: Completion of all licensure tests and endorsement requirements.

Registration Restrictions:
Required Prerequisites: EDCI 510B, 516B, 519B, 520B, EDRD 515B, 610B, EDUC 511B and 537B.

B - Requires minimum grade of B.

Enrollment limited to students with a class of Advanced to Candidacy or Graduate.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Internship

Grading:
This course is graded on the Satisfactory/No Credit scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 794: Internship in Education: PK-12 Foreign/World Language Education. 6 credits.
Provides intensive, supervised clinical experience for a full semester in an accredited school. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

Recommended Prerequisite: Completion of all licensure tests and endorsement requirements.

Registration Restrictions:
Required Prerequisites: EDCI 516B, 520B, 560B, 684B, EDRD 620B, EDUC 511B and 537B.
B - Requires minimum grade of B.

Enrollment limited to students with a class of Advanced to Candidacy or Graduate.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Internship

Grading:
This course is graded on the Satisfactory/No Credit scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 797: Advanced Topics in Education. 1-6 credits.
Advanced study of selected topics in education for students preparing for doctoral studies or who have been admitted to the PhD program in education. Notes: May be repeated for credit with CEHD approval. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

Specialized Designation: Topic Varies

Registration Restrictions:
Enrollment is limited to Graduate or Non-Degree level students.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Lecture

Grading:
This course is graded on the Graduate Special scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 813: Focused Science Education Research. 3 credits.
Provides an in-depth examination and analysis of literature and research in science education. Examines historical trends that have taken place in science education. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

Recommended Prerequisite: Permission of instructor.

Recommended Corequisite: EDUC 800.

Registration Restrictions:
Enrollment limited to students with a concentration in Science Education Research.

Enrollment limited to students in the E1-PHD-EDUC program.

Enrollment is limited to Graduate level students.

Schedule Type: Lecture

EDCI 811: Current Trends in Science Education Research. 3 credits.
Provides an in-depth examination and analysis of literature and research in science education. Examines historical trends that have taken place in science education. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

Recommended Prerequisite: EDCI 810.

Recommended Corequisite: EDUC 800.

Registration Restrictions:
Enrollment limited to students in the E1-PHD-EDUC program.

Enrollment is limited to Graduate level students.

Schedule Type: Lecture

Grading:
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 810: Foundations of Science Education Research. 3 credits.
Explores and analyzes the range of research designs currently utilized by science education researchers. Develops an understanding of the assumptions and frameworks of different types of science education inquiry through an examination of ways of knowing. Examines historical trends that have taken place in science education. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

Recommended Prerequisite: Permission of instructor.

Recommended Corequisite: EDUC 800.

Registration Restrictions:
Enrollment limited to students with a concentration in Science Education Research.

Enrollment limited to students in the E1-PHD-EDUC program.

Enrollment is limited to Graduate level students.

Schedule Type: Internship
Grading:
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 855: Mathematics Education Research on Teaching and Learning. 3 credits.
Surveys most current research literature in mathematics education. Engages students in research, study, and discussion of mathematics education research on teaching and learning in school settings. Builds on students' educational and professional experiences to ensure students are well versed in research that has influenced mathematics education. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

Recommended Prerequisite: Admission to the Mathematics Education Leadership Ph.D. program.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy or Graduate.

Schedule Type: Lecture

Grading:
This course is graded on the Graduate Special scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 856: Mathematics Education Curriculum Design and Evaluation. 3 credits.
Engages in research, analysis, design, and evaluation of school mathematics curricula from various methodologies and theoretical approaches. Examines how mathematics education and mathematics curricula is culturally, historically, and politically situated. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

Recommended Prerequisite: Admission to the Mathematics Education Leadership PhD program.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy or Graduate.

Schedule Type: Lecture

Grading:
This course is graded on the Graduate Special scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 857: Preparation and Professional Development of Mathematics Teachers. 3 credits.
Engages students in the study of the attributes of effective professional development in mathematics education. Develops expertise in designing and teaching mathematics methods courses, and creating and providing professional development experiences for practicing teachers. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

Recommended Prerequisite: Admission to the Mathematics Education Leadership PhD program.

Registration Restrictions:
Enrollment is limited to Graduate level students.

Schedule Type: Lecture

Grading:
This course is graded on the Graduate Special scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 858: Mathematics Education Research Design and Evaluation. 3 credits.
Examines methods of research appropriate for mathematics education. Develops knowledge of the scope and evolution of research methodologies from a range of perspectives. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May not be repeated for credit.

Recommended Prerequisite: Admission to the Mathematics Education Leadership PhD program.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy or Graduate.

Schedule Type: Lecture

Grading:
This course is graded on the Graduate Special scale. (http://catalog.gmu.edu/policies/academic/grading/)

EDCI 859: Current Issues in Mathematics and STEM Education Research. 3 credits.
This introduces contemporary topics in mathematics education research. Students learn about current issues in research design and topics of interest in mathematics teaching, learning, policy and practice. They apply this knowledge to develop pilot studies. Offered by School of Education (http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/). May be repeated within the degree for a maximum 6 credits.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy or Graduate.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Seminar

Grading:
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)