

School of Education

PROFESSORS **McLaughlin** (Dean and Chancellor Professor), **Beers, Blouet** (Fred Huby Professor of Geography and International Education), **Bracken, Cross** (Jody and Layton Smith Professor of Psychology and Education), **DiPaola, deFur, Foster, Harris** (Robert D. & Patricia Lee Pavey Chair in Educational Technology), **Johnson** (University Professor for Teaching Excellence), **Korinek** (University Professor for Teaching Excellence), **Lavach, Mason, McEachron, Stronge** (Heritage Professor), **Tschannen-Moran, S. Ward, T. Ward** (Associate Dean), and **Williams**. ASSOCIATE PROFESSORS **Bass, Finnegan, Gareis** (Associate Dean), **Gressard, Hofer, Kim, Matkins, McAdams, Moore, Stoddard Theadore, Tieso, and Whalon**. ASSISTANT PROFESSORS **Barber, Fritschmann, Shillingford, and Trice-Black**.

Mission of the School of Education

The mission of the School of Education at the College of William and Mary is the pursuit of excellence in the education of diverse learners across the life-span. The School of Education fulfills this mission through its three-fold commitment to teaching, research and service:

- As the recognized organizational unit within the College with responsibility for initial and advanced preparation of professional educators, the School of Education prepares teachers, specialists and administrators to be leaders in their respective roles committed to culturally responsive, reflective practice and to working in partnership with others to improve educational programs.
- The School of Education engages in scholarship and research addressing critical problems in education to generate and disseminate ideas that inform and advance educational discourse, policy and practice to benefit all learners.
- Through a variety of outreach activities, the School of Education provides model programs in direct service to children, adolescents and their families, as well as technical assistance and professional development opportunities for educators in preK-12, higher education and agency settings.

Within the framework of general College regulations, faculty in the School of Education formulate and implement policies and procedures related to initial licensure programs, including instructional goals, requirements, admissions criteria and curricula for these programs. The Associate Dean of Teacher Education and Professional Services of the School of Education is the Certification Officer for The College of William and Mary recognized by the Virginia Department of Education.

A Teacher Education Advisory Council (TEAC) advises the Dean and Faculty of the School of Education on the effective preparation of elementary, secondary and preK-12 teachers in direct support of the mission of K-12 schools. Members of the committee include administrators and instructional staff from the School of Education and departments in the Faculty of Arts and Sciences, and representatives from area public schools. Its charge includes ensuring ongoing collaboration in future implementation, evaluation and refinement of teacher education programs; formally and informally advocating teaching as a profession and the College's teacher preparation programs; and consideration of specific needs in teacher education related to children in special populations, including minority groups and children with special needs and exceptionalities.

Programs in the School of Education are accredited by the National Council for the Accreditation of Teacher Education (NCATE), and through consultation with advisors in the School of Education, students can plan programs of study leading to professional licensure by the Virginia Department of Education. By means of the Interstate Certification Compact, graduates who qualify for licensure in Virginia may qualify for certification in many other states.

The Conceptual Framework

The Conceptual Framework of the School of Education at the College of William and Mary incorporates a shared view of how to best prepare our graduates to deliver services to children, schools, families, and communities in a manner that will promote educationally and psychologically healthy environments in a pluralistic society. This framework embodies the essential elements for our programs, courses, teaching, student and faculty scholarship, and student performance. As an integrative whole, the framework is comprised of the four main strands of the Content Expert, the Reflective Practitioner, the Educational Leader, and the Effective Collaborator, which we believe constitute a highly qualified professional who will positively and productively contribute to the lives of students, clients, community, and the profession.

1. Content Expert

We believe fundamentally that professionals must have specific knowledge to learn in context and problem solve throughout a career. A profound understanding of disciplinary subject matter is vital. Content knowledge must be accompanied by pedagogical content knowledge for educational practitioners to be able to interpret, communicate, and construct knowledge that promotes learning (Shulman, 1987; Abell, Rogers, Park, Hauscin, Lee, & Gagnon, 2009) and to understand the role of identity in knowledge construction (Tatum, 1999). The value of our long-standing commitment to intellectualism by our faculty is confirmed by recent research conducted by Hill, Rowen and Ball (2005), Krauss, Brunner, Kunter, et al., (2008), Goldhaber and Anthony (2003), and Griffen, Jitendra, and League (2009) that validates the need for intellectual rigor in subject matter. The role of our programs is to provide opportunities and a local, national, and international context for students to build and evaluate knowledge that equips them to work in a diverse global society (Banks, 2008). To accomplish this goal, we encourage students to master content appropriate to their disciplinary foci, consider diverse perspectives, participate in engaged learning, reflect on their actions, and generate responses based on research and best practice. The organization and transfer of knowledge and skills across these experiences results in deeper learning for our students and those whom they will serve.

2. Reflective Practitioner

Our beliefs and preparation programs emanate from the continuing scholarship on reflective practice by Dewey (1901, 1933), Schon (1983, 1987), Kolb (1984), Johns (1994), Zeicher and Liston (1996), Newman (1999), Sherwood (2005), and others. We believe that ideal professional preparation produces an educator who can "reflect-in-action" and "reflect-on-action." According to research-based principles of reflective practice, learning does not occur through direct transmission of knowledge from instructor to student. Instead, instruction provides students in all fields of education with multiple opportunities to articulate their own ideas, experiment with these ideas, construct new knowledge, and make connections between their professional studies and the world in which they live and work. To this end, the School of Education cultivates a style of reflective practice that embraces the role of data, active inquiry, careful analysis, and thoughtful decision-making that leads to effective and culturally responsive pedagogy (Gay, 2000; Ladson-Billings, 1994). This reflective practice begins with self-examination of one's own identity and the myriad ways that identity and life experiences influence one's view of the world. We believe that teaching is a cognitive process that involves decision making (Sergiovanni & Starratt, 1993), and we hold that our responsibility is, in large part, to educate our students to reason soundly and to perform skillfully. Although students in our programs prepare for specialized roles, we focus overall on the development of analytic and creative practices through which they can approach new issues and problems in a proactive way throughout their educational careers.

3. Educational Leader

Given the strengths of our students and preparation programs, we expect that our graduates will assume leadership roles in a variety of educational and societal settings. We broadly define educational leadership to include traditional positions such as preK-12 and university administrative assignments, as well as emerging and expansive roles such as leaders in research and scholarly positions, teacher-leaders, and leaders in the counseling and school psychology professions. To prepare our graduates for these varied roles within their respective specializations and career settings, we aspire to equip them with the essential skills and dispositions requisite for successfully supporting innovation and excellence across the field of education (Fullan, 2005; Fullan, Bertani, & Quinn, 2004; Hattie, 2009). Among the important abilities that will inform the leadership practices of our graduates are research-based technical skills, conceptually sound decision making, thoughtful and informed problem solving, and clear and inclusive communication. We expect our students to embrace and model ethical principles in all aspects of their work. As reflected in these ideals, we hope our graduates develop a personal sense of competence and confidence in leadership roles that encourages resilience in coping with and promoting desired change within the context of a globally connected environment (Zhou, 2009). Further, we expect our graduates to conduct and apply research for the public good through their schools, clinics, and community and state organizations (Anyon, 2005; Ladson-Billings & Tate, 2006). Ultimately, we believe that our graduates will contribute significantly to the educational organizations in which they work and thereby improve the quality of life of the students and other individuals they serve (Hallinger & Heck, 1996; Leithwood, Louis, Anderson, & Wahlstrom, 2004; Marzano, Waters, & McNulty, 2005).

4. Effective Collaborator

Finally, we promote and develop the use of a collaborative style for working effectively and cooperatively in professional communities, no matter how broadly or narrowly defined. As Glaser (2005) states, a collaborative style empowers individuals and groups to make changes necessary for improvement. We find the evidence compelling that partnerships among professionals, as well as between academic and non-academic realms, are critical for the successful education of all students, as such collaboration allows students to take full advantage of their schools' academic opportunities (Baker et al, 2009). Collaboration aids in the interpretation of data, the development of goals and interventions, and the measurement of progress (Camizzi, Clark, Yacco, & Goodman, 2009; INTASC, 2007), which are all integral to understanding students and meeting their individual needs. In addition to professional partnerships, it is vital for educators to build positive and effective relationships with the racially, culturally, economically, and linguistically diverse families and communities we serve (Delpit, 1995; Sleeter, 2008). We believe that programs that prepare individuals who will assume roles of teaching, service, and leadership must expect graduates not only to demonstrate effective collaborative skills but also to model these skills for their students (INTASC, 2007).

A Dynamic and Core Framework

The Conceptual Framework of the School of Education must be adaptable to the experience and background of the candidates within programs, the relative importance of the four strands within program areas, and to the external forces of our society. The dynamic nature of the framework is most clearly demonstrated by the relative emphasis placed on the four strands by each program. While all of our graduates embody the core qualities of the Content Expert, Reflective Practitioner, Educational Leader, and Effective Collaborator, we recognize and account for the valid and important degrees of emphasis, distinction, and definition that these core concepts take not only in a program area, but also with regard to the unique strengths and weaknesses of each student and over the duration of the professional life of a graduate and beyond.

Ultimately, the Conceptual Framework reflects the core elements of a graduate of the School of Education and, as such, it provides a structure for our programs and a process for generating and responding to new knowledge. The framework guides the experiences we require of students in their programs. The framework also provides the basis for the expectations and the evaluation of candidates and their programs. Through the process of candidate and program evaluation, we expect that our programs will produce highly qualified professionals and continuously evolve in response to our students' experiences within the program and our graduates' contributions to the profession as practitioners.

Education Program Requirements

Program Objectives for Students

Students who complete one of the Education programs are expected to develop and demonstrate a variety of knowledge, skills and attitudes considered by the faculty to be essential characteristics of an effective liberally educated school teacher. For instance, students are expected to develop and demonstrate knowledge of the disciplines and subject matter related to school curriculum; the developmental characteristics of children; cultural and individual differences among children; principles of learning; principles of curriculum and instructional theory; principles of measurement and evaluation; principles of classroom management and discipline; the use of media and computers in education; the role of the school in society; federal, state and local policies and procedures; and support services, professional organizations and resources relevant to education. With respect to skills, students are expected to develop and demonstrate their ability to communicate effectively; to assess the characteristics and learning of students; to develop and implement an instructional plan appropriate for K-12 children; to organize and manage a classroom; and to interact effectively with students, parents and other professionals. Lastly, as they progress through the program, students are expected to develop and demonstrate respect for individual differences; respect for principles of fairness and justice; commitment to teaching and professional growth as evidenced by responsibility and enthusiasm; a positive self-concept; willingness and ability to collaborate professionally; and willingness and ability to consider alternatives judiciously.

Admissions Criteria and Procedures

Admission to baccalaureate study at The College of William and Mary does not automatically include admission to programs in the School of Education. Rather, students apply for admission to a program during the second semester of the sophomore year or first semester of the junior by completing an application form that can be obtained on the web at <http://education.wm.edu/documents/admissions/Undergradapp.pdf>. Admission to the undergraduate education program requires an overall grade point average of at least 2.0 in course work completed to date. After the application forms are submitted, the Office of Academic Programs verifies the applicants' prior course work and grade point average. The applicants' admission folders are then reviewed. Questions pertaining to the admissions process should be directed to The Office of Academic Programs in the School of Education or by calling 221-2317.

Student Advisement

Students are urged to take full advantage of the advisement services in the School of Education. During their freshman and sophomore years, they are encouraged to talk with faculty in the School about potential careers in teaching. Upon admission to an education program, individual students are assigned academic advisors who are faculty members in the program. Before registering for education courses, students should meet with their advisors to discuss academic, personal and professional goals; to review both the academic regulations of the College and the specific course requirements for teacher licensure; and to plan a program of studies in education. Advisors work with the students throughout their junior and senior years.

Student Teaching Semester

To be eligible to student teach, students must meet the Praxis I requirement and successfully complete all education program courses with passing grades. Earning an F or I in any of these courses will prevent students from participating in student teaching.

Exit Criteria and Procedures

To complete a program in education, students must successfully complete all of the designated licensure assessments, general studies or subject area content requirements, an Arts and Sciences major, and the education courses described below, including student teaching. The students' university supervisor and cooperating teacher are each required to verify and evaluate the students' performance during a full-time student teaching experience of at least 400 contact hours with pupils in a state-accredited K-12 school. After verification by the Associate Dean for Teacher Education and Professional Services that the students have successfully completed all course and program requirements, the Office of Teacher Education and Professional Services helps the students to obtain the appropriate teaching license in Virginia or other state of their choice.

Second Major in Elementary Education (PK-6)

The program in Elementary Education leading to endorsement to teach pre-school through grade 6 requires a dual major. Students are required to select a departmental or interdisciplinary major in the Arts and Sciences as a primary major. They are also required to declare a second major of 35 semester hours in Elementary Education. Students majoring in Elementary Education may apply no more than 35 credits in education toward the 120 academic credits required for graduation.

Program Requirements in the Elementary Education Program (preK-6)

Program requirements in the undergraduate program in Elementary Education include (1) general studies courses, (2) an Arts and Sciences major, and (3) professional studies in Elementary Education that constitute a second major. Courses in Elementary Education are listed on a Program of Study used for advisement purposes. The comprehensive listings that follow include all course work necessary to satisfy general studies and professional studies requirements for the Elementary Education (preK-6) Teaching Specialty. Courses in the Arts and Sciences major should be selected to meet simultaneously the state's general studies requirements for licensure and the College's General Education Requirements and major requirements for the degree. Specific requirements related to teacher licensure are listed below.

Students seeking licensure in Virginia are required to achieve passing scores on professional teacher's assessments prescribed by the Board of Education. Four tests are required for licensure and program completion: Praxis I, Praxis II, the Virginia Communication and Literacy Assessment (VCLA) and the Reading for Virginia Educators (RVE). Complete information about assessments can be found on the Department of Education web site at http://www.doe.virginia.gov/teaching/licensure/prof_teacher_assessment.pdf.

- Praxis I is an academic skills assessment of mathematics, reading and writing. There are three alternate means by which a teacher candidate may meet the Praxis I requirement in lieu of taking the full battery of Praxis I subtests (i.e., reading, writing, and math). Registration information for the Praxis I exam is available on the ETS web site (<http://www.ets.org/praxis/register>).

1) **SAT Qualifying Score Option:** A composite score of 1100 on the SAT, taken after April 1, 1995, with at least a 530 on the verbal and a 530 on the mathematics tests *or* a score of 1000 on the SAT, taken prior to April 1, 1995, with at least a 450 on the verbal and a 510 on the mathematics tests may be used as a substitute for Praxis I.

2) **ACT Qualifying Score Option:** A composite score of 24

on the ACT may be substituted for Praxis I if taken after April 1, 1995, with the ACT mathematics score no less than 22 and the ACT English plus Reading scores no less than 46, *or* a composite score of 21 may be substituted, if taken prior to April 1, 1995, with the ACT mathematics score no less than 21 and the ACT English plus Reading scores no less than 37.

3) **VCLA Qualifying Score combined with a Qualifying Score on the Mathematics Subtest of Praxis I or SAT or ACT:** A composite score of 470 on the VCLA with subtest scores of at least 235 on writing and 235 on reading may be combined with a qualifying score on the mathematics portion of the Praxis I mathematics subtest (minimum 178) *or* the SAT mathematics subtest (530 after April 1, 1995, or 510 prior to that date) *or* the ACT mathematics subtest (22 after April 1, 1995, or 21 prior to that date). Registration information is available on the NES web site (<http://www.va.nesinc.com>).

The Praxis I exam must be passed or substitution made the semester before student teaching.

- Praxis II is a general content knowledge exam for elementary teachers. Students are responsible for providing copies of Praxis II results to the Office of Teacher Education and Professional Services. The Praxis II exam must be passed prior to program completion.
- The Reading for Virginia Educators: Elementary and Special Education (RVE) is a test of student's knowledge of reading instruction. This test is required for individuals seeking licensure in elementary education and program completion. Registration information for the RVE is available on the ETS web site (<http://www.ets.org/praxis/register>). Students are responsible for providing copies of RVE results to the Office of Teacher Education and Professional Services. The Reading for Virginia Educators must be passed prior to program completion.
- The Virginia Communication and Literacy Assessment (VCLA) is a test of communication, reading, and writing skills. This test is required for individuals seeking an initial Virginia teaching license and program completion. Current information is available on the web at www.va.nesinc.com. Students are responsible for providing copies of VCLA results to the Office of Teacher Education and Professional Services. The Virginia Communication and Literacy Assessment must be passed prior to program completion.
- Information about test registration is available on the web at <http://education.wm.edu/academics/oteps/index.php>
- Some school divisions may require a criminal or FBI background check prior to engaging in clinical experiences in the schools. In addition some school divisions may require a TB exam or screening.
- Students seeking licensure in Virginia must complete training in Child Abuse Recognition and Reporting. For students who take and pass EDUC 310, this requirement is met. If a student is exempted from EDUC 310 for any reason, then he or she must contact the Office of Teacher Education and Professional Services in order to complete a training module in these competencies.

Additional policies and procedures that govern students in the teacher preparation programs during their field experiences are included in the Handbook for Practica and Student Teaching Experiences, which is available in the Office of Teacher Education and Professional Services or on the web site, http://education.wm.edu/academics/oteps/documents//HDBK_PracticaStudTeach.pdf

Elementary General Education Course Requirements

Elementary Education students must include course work specified below, as part of, or in addition to, the College's General Education Requirements for the baccalaureate degree. Transfer credit may be used to satisfy these requirements.

Students must take at least one three-credit course in each of the following:

1. Study of the English language (ENGL 220/ANTH 204, listed under GER 3, is recommended) LCST 201 or ENGL 303 are also acceptable.)
2. Literature (LCST 201, listed under GER 5, is recommended; or any 200-level or above English literature course is acceptable)
3. American History or American Government
4. Geography (either Geology 110 or Government 381 is recommended; any course identified under Geography in the undergraduate catalog is acceptable)

Sequence of Course Requirements in Professional Studies in Elementary Education

This three semester sequence begins in the spring semester of the junior year.

I. Spring of Junior Year (13 credit hours)

- *EDUC 301 Educational Psychology 3
- *EDUC 310 Social & Philosophical Foundations of American Education 2
- EDUC 330 Designs for Technology-Enhanced Learning -- Elementary 2
- EDUC 406 Elementary Science Curriculum & Instruction 2
- EDUC 407 Elementary Mathematics Curriculum & Instruction 2
- EDUC 476 Elementary Science Curriculum & Instruction – Practicum 1
- EDUC 477 Elementary Mathematics Curriculum & Instruction Practicum 1

II. Fall of Senior Year (9 credit hours)

- EDUC 405 Elementary Social Studies Curriculum and Instruction 2
- EDUC 410 Elementary Reading & Language Arts Curriculum & Instruction 5
- EDUC 412 Reading & Language Arts Curriculum & Instruction Practicum 1
- EDUC 475 Elementary Social Studies Curriculum & Instruction Practicum 1

III. Spring of Senior Year (13 credit hours)

- EDUC 302 Characteristics of Exceptional Student Populations (Elementary Education) 1
- EDUC 303 Introduction to Classroom Organization, Management and Discipline 1
- EDUC 340 Assessment of Learning 1
- EDUC 345 Differentiating and Managing in Diverse Classrooms Practicum: Elementary 1
- EDUC 411 Classroom Adaptations for Exceptional Student Populations (Elem Educ) 1
- EDUC 414 Student Teaching Seminar (Elementary Education) 1
- EDUC 415 Student Teaching in Elementary Education 7

Total Credits: 35

* These courses can be taken in the Fall semester if students apply to begin in Fall.

Elementary Major Writing Requirement

In order to satisfy the Elementary Education Major Writing Requirement, students must earn overall averages of C- or better in the following courses: Education 301, 310.

Preparation Programs in Secondary Education (6-12)

Students who plan to teach at the secondary school level must declare a major in the subject area or areas that they expect to teach, and they additionally complete 30 semester credits of professional education courses required for one of the following endorsement areas of Secondary Education: English, Foreign Language (K-12) (French, German, Spanish, Latin, Chinese), Mathematics, Science (Biology, Chemistry, Earth Science, Physics), and Social Studies. Students who complete a licensure program in Secondary Education may apply no more than 30 semester hours in education toward the 120 academic credits required for graduation.

Program Requirements in Licensure Programs in Secondary Education (6-12)

Program requirements in the licensure programs in Secondary Education include courses subject area requirements, professional studies courses and a major in one or more subject area teaching specialties. The comprehensive listings that follow include all course work necessary to satisfy subject area requirements and professional studies requirements for the Secondary Education (6-12) program.

Students seeking licensure in secondary education in Virginia are required to achieve passing scores on professional teacher assessments prescribed by the Board of Education. Three tests are required for licensure - Praxis I, Praxis II, and the Virginia Communication and Literacy Assessment (VCLA). Complete information about assessments can be found on the Department of Education web site at http://www.doe.virginia.gov/teaching/licensure/prof_teacher_assessment.pdf

- **Praxis I** is an academic skills assessment of mathematics, reading and writing. There are three alternate means by which a teacher candidate may meet the Praxis I requirement in lieu of taking the full battery of Praxis I subtests (i.e., reading, writing, and math). Registration information for the Praxis I exam is available on the ETS web site (<http://www.ets.org/praxis/register>).

- 1) **SAT Qualifying Score Option:** A composite score of 1100 on the SAT, taken after April 1, 1995, with at least a 530 on the verbal and a 530 on the mathematics tests *or* a score of 1000 on the SAT, taken prior to April 1, 1995, with at least a 450 on the verbal and a 510 on the mathematics tests may be used as a substitute for Praxis I.
- 2) **ACT Qualifying Score Option:** A composite score of 24 on the ACT may be substituted for Praxis I if taken after April 1, 1995, with the ACT mathematics score no less than 22 and the ACT English plus Reading scores no less than 46, *or* a composite score of 21 may be substituted, if taken prior to April 1, 1995, with the ACT mathematics score no less than 21 and the ACT English plus Reading scores no less than 37.
- 3) **VLCA Qualifying Score combined with a Qualifying Score on the Mathematics Subtest of Praxis I or SAT or ACT:** A composite score of 470 on the VCLA with subtest scores of at least 235 on writing and 235 on reading may be combined with a qualifying score on the mathematics portion of the Praxis I mathematics subtest (minimum 178) *or* the SAT mathematics subtest (530 after April 1, 1995, or 510 prior to that date) *or* the ACT mathematics subtest (22 after April 1, 1995, or 21 prior to that date). Registration information for the Praxis I exam is available on the ETS web site (<http://www.ets.org/praxis/register>).

The Praxis I must be passed or substitution made no later than the semester before student teaching.

- **Praxis II** is a subject-specific content knowledge exam for secondary teachers. Students are responsible for providing

copies of Praxis II results to the Office of Teacher Education and Professional Services. The Praxis II exam must be passed prior to program completion.

- The Virginia Communication and Literacy Assessment (VCLA) is a test of communication, reading, and writing skills. This test is required for individuals seeking an initial Virginia teaching license and program completion. Current information is available on the web at www.va.nesinc.com. Students are responsible for providing copies of VCLA results to the Office of Teacher Education and Professional Services. The Virginia Communication and Literacy Assessment must be passed prior to program completion.
- Information about test registration is available on the web at <http://education.wm.edu/academics/oteps/index.php>
- Some school divisions may require a criminal or FBI background check prior to engaging in clinical experiences in the schools. In addition some school divisions may require a TB exam or screening.
- Students seeking licensure in Virginia must complete training in Child Abuse Recognition and Reporting. For students who take and pass EDUC 310, this requirement is met. If a student is exempted from EDUC 310 for any reason, then he or she must contact the Office of Teacher Education and Professional Services in order to complete a training module in these competencies.

Additional policies and procedures that govern students in the teacher preparation programs during their field experiences are included in the Handbook for Practica and Student Teaching Experiences, which is available in the Office of Teacher Education and Professional Services or on the web at, http://education.wm.edu/academics/oteps/documents/HDBK_PracticaStudTeach.pdf.

Sequence of Course Requirements in Professional Studies in Secondary Education

This three semester sequence begins in the spring semester of the junior year.

I. Spring of Junior Year (8 credit hours)

- *EDUC 301 Educational Psychology 3
- *EDUC 310 Social & Philosophical Foundations of American Education 2
- EDUC 460 Content Reading & Writing 2
- EDUC 461 Content Reading & Writing Practicum 1

II. Fall of Senior Year (10 credit hours)

- EDUC 305 Designs for Technology-Enhanced Learning (Secondary) 2
- EDUC 309 Classroom Adaptations for Exceptional Student (Secondary) 1
- EDUC 311 Classroom Organization, Management And Discipline (Secondary) 1
- EDUC 312 Characteristics of Exceptional Student Populations (Secondary) 1
- EDUC 315 Differentiating and Managing Diverse Classrooms Practicum (Secondary) 1
- Choose one of the following: 3*
- EDUC 440 Curriculum & Instruction Methods: Social Studies
- EDUC 441 Curriculum & Instruction Methods: English
- EDUC 442 Curriculum & Instruction Methods: Foreign Language
- EDUC 443 Curriculum & Instruction Methods: Mathematics
- EDUC 444 Curriculum & Instruction Methods: Science

Choose one of the following: 1

- EDUC 420 Secondary English Curriculum & Instruction Practicum
- EDUC 429 Secondary Mathematics Curriculum & Instruction Practicum
- EDUC 434 Secondary Foreign Language Curriculum & Instruction Practicum
- EDUC 436 Secondary Science Curriculum & Instruction Practicum
- EDUC 437 Secondary Social Studies Curriculum & Instruction Practicum

III. Spring of Senior Year (12 credit hours)

EDUC 340 Assessment of Learning 1

Choose one of the following: 2

- EDUC 438 Instructional Planning in Secondary English
- EDUC 439 Instructional Planning in Secondary Mathematics
- EDUC 445 Instructional Planning in Secondary Foreign Language
- EDUC 446 Instructional Planning in Secondary Science
- EDUC 447 Instructional Planning in Secondary Social Studies

Choose one of the following: 1

- EDUC 438P Instructional Planning in Secondary English – Practicum
- EDUC 439P Instructional Planning in Secondary Mathematics – Practicum
- EDUC 445P Instructional Planning in Secondary Modern Foreign Languages – Practicum
- EDUC 446P Instructional Planning in Secondary Science – Practicum
- EDUC 447P Instructional Planning in Secondary Social Studies – Practicum

Choose one of the following: 1

- EDUC 449 Secondary Curriculum & Instruction Seminar: English
- EDUC 450 Secondary Curriculum & Instruction Seminar: Mathematics
- EDUC 451 Secondary Curriculum & Instruction Seminar: Foreign Language
- EDUC 452 Secondary Curriculum & Instruction Seminar: Science
- EDUC 454 Secondary Curriculum & Instruction Seminar: Social Studies

Choose one of the following: 7

- EDUC 494 Internship in Supervised Teaching: Social Studies
- EDUC 495 Internship in Supervised Teaching: English
- EDUC 496 Internship in Supervised Teaching: Foreign Language
- EDUC 497 Internship in Supervised Teaching: Mathematics
- EDUC 498 Internship in Supervised Teaching: Science

Total Credits 30

*** These courses can be taken in the Fall semester if students apply to begin in Fall.**

Subject Area Requirements for Specific Secondary School Teaching Endorsements

For students pursuing licensure in Secondary Education, the following courses or their approved equivalents, must be part of their program of studies in the major.

ENGLISH-DR. JOHN NOELL MOORE (Telephone: 221-2333, jnmoor@wm.edu).

William and Mary English majors should select the Literature Option within the English major in order to meet the course requirements for teaching English. In addition to the major in English Language and Literature, (a minimum of 36 semester hours) 27 of these hours must be above the 300 level and distributed as follows:

1. 6 hours in British literature: English 203 and 204 required. It is recommended that students also include English 352 in the major.
2. 6 hours in American literature representing a broad spectrum of American literary history, chosen from English 361, 362, 363, and 364.
3. 3 hours in Shakespeare, chosen from English 421 and 422.
4. 3 hours in the study of a genre, chosen from English 311, 325, 333, 343, 344, 355, 356, 357, 358, 359, 430, and 455.
5. 3 hours in an upper level creative writing or advanced writing course, chosen from 367, 368, and 369.
6. 6 hours in linguistics: English 220 and 303 required.
7. 3 hours in world literature (defined as not Anglo-American), chosen from English 310, 344, and 417A or from CLCV 205 or 410. This requirement may also be fulfilled by presenting documented evidence (course names and numbers, authors and texts) of world literatures studied in multiple courses.
8. 3 hours in Literature for Adolescents (English 465/CRIN S77).
9. 3 hours in a course that heavily emphasizes the work of women writers, chosen from English 414A or an appropriate 455, 465, or 475; or documented evidence (course names and numbers, authors and texts) of women writers studied in multiple courses.

FOREIGN LANGUAGE (preK-12)—MARK HOFER (Telephone: 221-1713, mjhofe@wm.edu).

Students who major in French, German, Hispanic Studies, Chinese or Classical Studies/Latin concentration may become certified to teach in preK-12 schools. Students are encouraged to qualify for endorsements in two languages by majoring in one and taking at least an additional 24 hours in a second.

As stated in the description of this catalog for each foreign language major, students may be required to take prerequisite courses. Although these courses may not be specified as major requirements, they may satisfy endorsement regulations for the State of Virginia. The program shall include courses in advanced grammar and composition, conversation, culture and civilization, linguistics and literature. Listed below are the subject area content requirements.

French

1. A major in French with a minimum of 33 semester hours above the intermediate-202 level.
2. As a part of or in addition to the major requirements, the program shall include courses in advanced grammar and composition, conversation, culture and civilization, linguistics and literature.

German

1. A major in German with a minimum of 27 semester hours above the intermediate-202 level.
2. As a part of or in addition to the major requirements, the program shall include courses in advanced grammar and composition, conversation, culture and civilization, linguistics and literature.

Hispanic Spanish

1. A major in Hispanic Studies with a minimum of 33 semester hours above the intermediate-202 level.
2. As a part of or in addition to the major requirements the program shall include courses in advanced grammar and composition, conversation, culture and civilization, linguistics and literature.

Chinese

1. A major in Chinese with a minimum of 30 semester hours above the intermediate-202 level.
2. As a part of or in addition to the major requirements, the program shall include courses in advanced grammar and composition, conversation, culture and civilization, linguistics and literature.

Latin

1. A major in Classical Studies with a concentration in Latin.
2. At least one course in linguistics.

MATHEMATICS—DR. MARGIE MASON (Telephone: 221-2327; mm-maso@wm.edu).

Those students preparing to teach mathematics must fulfill the major requirements in the mathematics department. Within the 38 semester hours required for the major, students should include the following mathematics courses:

- Calculus I (111) or Calculus I for Life Sciences (131)
- Calculus II (112) or Calculus II for Life Sciences (132)
- Linear Algebra (211)
- Intro to Multivariable Calculus (212) or
- Multivariable Calculus for Science & Math (213)
- Foundations of Mathematics (214)
- Ordinary Differential Equations (302)
- Abstract Algebra (307)
- Operations Research - Deterministic Models (323)
- Applied Statistics (351)
- Introduction to Number Theory (412)
- Topics in Geometry (416)
- Seminar (490)
- Introduction to Computer Science (CSCI 141)

SCIENCE—DR. JUANITA JO MATKINS (Telephone: 221-2332; jjmath@wm.edu).

Students who wish to teach (1) Biology, (2) Chemistry, (3) Earth Science (Geology), or (4) Physics must complete the teaching specialty requirements listed below.

Biology

1. A major in Biology (a minimum of 37 hours as defined by the Biology Department). In meeting the major requirements, students must minimally include instruction in botany, zoology, ecology, physiology, evolution, genetics, cell biology, microbiology, biochemistry, and human biology.
2. One inorganic chemistry course with a lab (4); one organic chemistry course with a lab (4); and a course in physics (4).
3. At least one calculus course.

Chemistry

1. A major in Chemistry (a minimum of 38 semester hours as defined by the Chemistry Department, but must include Chemistry 307). In meeting major requirements students must minimally include instruction in inorganic, organic, analytical, and physical chemistry and biochemistry.
2. A minimum of 16 hours in non-chemistry sciences, including at least one biology and one physics course.
3. At least one course in calculus.

1. A major in Geology (a minimum of 36 semester hours as defined by the Geology Department). A student must minimally include instruction in astronomy (e.g., Physics 176), meteorology, oceanography (e.g., Geology 306) and natural resources.
2. A minimum of 16 hours in non-geology sciences including at least one biology, one chemistry and one physics course.

Physics

1. A major in Physics (a minimum of 32 semester hours as defined by the Physics Department). In fulfilling the physics major requirements, students must include the study of classical mechanics, electricity and magnetism, heat and thermodynamics, waves, optics, atomic and nuclear physics, radioactivity, relativity, and quantum mechanics.

2. A minimum of 16 hours in non-physics sciences, including at least a course in biology and a course in chemistry.
3. At least one course in calculus and introductory differential equations.

Students completing the requirements for an endorsement in biology, chemistry, earth science or physics may be endorsed in a second area of science by completing a minimum of 18 semester hours in the second endorsement area in addition to the specific coursework for that area as specified above.

SOCIAL STUDIES—DR. JEREMY STODDARD (Telephone: 221-2348; jdstod@wm.edu).

The Social Studies program prepares students to teach History, Political Science (Government) and other subjects in the field of Secondary Social Studies. The following are the subject area requirements:

1. A major in History or Government (or equivalent of 33 semester hours)
 - a. 12 hours in Government (needed for a History major)
Coursework should include at least 3 hours in American Government - GOVT 201 is recommended.
 - b. 18 hours in History (needed for a Government major)
Coursework should include at least 6 hours in American or US History - HIST 121 & 122 are recommended.
2. 3 hours in Economics (micro or macro)
3. 3 hours in Human Geography
4. 3 hours in non-Western History/Culture
5. 3 hours in Sociology
6. 3 hours in Anthropology

Five-Year Bachelor's-to-Master's Degree Option

In Elementary, Secondary, and Special Education

The intent of this program is to attract well-qualified W&M undergraduate students into teaching. The five-year program is leads to licensure in elementary, secondary, or special education. This option is intended for W&M undergraduates who cannot complete the currently available undergraduate programs but who wish to become licensed to teach. Primary applicants to this option would include W&M undergraduates who (1) have fewer than three semesters remaining in their programs at the time of application, and (2) who demonstrate that they cannot complete the undergraduate licensure course requirements in the number of semesters remaining in their program because of other requirements in their major or study abroad.

Qualifications: Applicants must have a W&M undergraduate GPA of 3.0, be pursuing an undergraduate major that qualifies them for a teaching license in Virginia, and complete the Five-Year Program Application, which is available on line at education.wm.edu.

Admission: Admission to the program is dependent on space availability. Applications will be accepted as early as April 1 of the junior year and are due no later than August 1, prior to the fall semester of the senior year.

Continuation: Students admitted to the program option must maintain a 3.0 undergraduate GPA, be in good standing with the College, and take the required professional education courses listed below as part of their undergraduate study:

- EDUC 301 Educational Psychology
 - EDUC 310 Social and Philosophical Foundations of American Education
 - EDUC F65 Research Methods in Education (or an approved equivalent)
- Additionally, prospective students in the graduate program in Special Education may take:
- EDUC 425 Current Trends and Legal Issues in Special Education

Elevation to Master's Level: In order to elevate to the Master's level students must (1) earn a 3.0 GPA in the professional education courses completed as an undergraduate, (2) graduate with their Bachelor's degree from W&M and (3) submit scores from the GRE (Graduate Record Examination) that meet the admissions guidelines for the SOE. The MAT (Miller Analogies Test) may be substituted for admission to the special education program only. GRE or MAT scores must be submitted no later than to January 15th of the senior year; however, applicants are strongly encouraged to submit scores as early as the spring of their junior year.

Continuation in the Master's Program: Once elevated to the Master's portion of the program, students will enroll as full-time students and follow the continuation and program rules of the Master of Arts in Education (M.A.Ed.) in Curriculum & Instruction. Students will complete the regular sequence of courses, *excluding* EDUC F11, EDUC F12 and EDUC F65. These courses or their accepted equivalents will have been satisfied in the undergraduate portion of the program.

For more information regarding the Five-Year program, please contact the Office of Academic Programs at 757-221-2317.

English as a Second Language (ESL) Dual Endorsement

Schools need teachers prepared to educate linguistically diverse students. Enhance your initial licensure program by completing a dual endorsement with the English as a Second Language (ESL) program. Students enrolled in initial licensure programs in the School of Education may also pursue the ESL endorsement, which will result a dual endorsement.

The ESL endorsement is not a stand-alone degree program, nor is it open to non-degree seeking students. However, the ESL option is open to School of Education students and Modern Languages and Literature students who plan to apply to the 5-Year Bachelor's to Master's Degree option in Education or the graduate program in Curriculum and Instruction at William and Mary.

Students must complete and have approved an ESL Program of Studies in the School of Education and must complete 150 clock hours of field experiences with ESL students. Field experiences are fulfilled as part of formal practica and student teaching experiences in elementary, secondary, or special education or through other experiences in settings approved by ESL program faculty.

Support Services, Facilities and Programs

Office of Academic Programs

This office serves as the point of contact for School of Education undergraduate admissions; course scheduling and other curriculum and programmatic offerings; and advisor assignments. Although the Office of the University Registrar processes registration and any subsequent changes in registration, this office works closely with the registrar's office to insure close and effective coordination of all course registration and any changes which might emanate from registration. Further, although specific advisors are assigned to admitted undergraduate students, professionals in this office are prepared to respond to questions regarding undergraduate curricular programs and academic policies and practice. You may reach this office by calling 221-2317.

Clinical Experiences

In collaboration with faculty, the Associate Dean for Teacher Education and Professional Services and the Director of Clinical Placements and Licensure are responsible for arranging and coordinating all clinical educational experiences, including early field experiences, clinical experiences within courses and student teaching. These clinical experiences are closely coordinated in an effort to reduce duplication for students, faculty and public school personnel.

Learning Resource Center

The School of Education maintains a Learning Resource Center (LRC). This center supplements the resources of Swem Library and supports the particular needs of the School of Education with curriculum materials, teaching aids, periodicals, psycho-educational tests and Virginia Department of Education adopted textbooks. The center houses a growing collection of curriculum software and videodisc products. Also included in the LRC are a debit card operated photocopier, three videotaping labs and a variety of audiovisual equipment. Use of these facilities by students in the School of Education may be scheduled by contacting the LRC staff at 221-2311.

Swem Library

Books and periodicals that support the various teacher education programs in the School of Education are ordered on a continuing basis by faculty in the School of Education for the collection in Swem Library.

Teaching Licensure

The Associate Dean for Teacher Education and Professional Services processes all applications for teaching licenses in Virginia and in other states. Completed applications and all required fees should be filed with the Director of Clinical Placements and Licensure two weeks prior to graduation.

Office of Career Services

The Office of Career Services assists both current students who plan to teach and graduates who wish to change their employment. No registration fee is charged, and all students and graduates of the School of Education are urged to avail themselves of this service by filing and maintaining complete and current placement records with the office. Undergraduates are urged to begin developing their placement files as early as the first semester of their junior year.

Kappa Delta Pi Alpha Xi Chapter

Kappa Delta Pi, an international honor society in education, was first organized in 1911, and the Alpha Xi Chapter at the College of William and Mary was chartered in 1927. The purpose of Kappa Delta Pi is to encourage high professional, intellectual and personal standards and to recognize graduates of the College for their outstanding contributions to education. To this end, the organization invites to membership persons who exhibit commendable personal qualities, worthy educational ideals and sound scholarship. The organization endeavors to maintain a high degree of professional fellowship among its members and to quicken professional growth by honoring achievement in educational work. Both men and women are eligible for membership. Invitation to the honor society is based on completion of at least 12 semester credit hours in education and a minimum cumulative grade point average of 3.25.

The Alpha Xi Chapter of Kappa Delta Pi annually sponsors grants and initiates service projects to benefit members of the School of Education. Inquiries about this scholarship and the organization should be forwarded to the Chapter's counselor, Dr. Kelly Whalon (221-2063; kjwhal@wm.edu) or to the Associate Counselor, Carlane Pittman (221-2296; carlane.pittman@mason.wm.edu.)

Study Abroad

Study abroad opportunities are available for education students in Bath, England, through the Advanced Studies in England (ASE) Program. Normally, students may earn six hours of education elective credit for the ASE experience beyond the 35 elementary credits or 30 secondary credits by individually petitioning the Committee on Degrees for transfer credit for EDUC 400. The total hours for a degree will still be 120. For program information, please contact Global Education in the Reves Center. Specific information pertaining to transfer credit should be directed to the Associate Dean for Academic Programs. Other opportunities are available and questions may be directed to Dr. Brian Blouet in the School of Education at 221-2350.

Graduate Study

Graduate study in education is available to all who have completed with merit an undergraduate degree program at an accredited institution. The School of Education awards a Master of Arts in Education in Curriculum and Instruction with majors in Elementary Education, Secondary Education; Reading, Language, and Literacy, Gifted Education and Special Education (initial licensure and advanced specialization in collaborative teaching); a Master of Education in the fields of Counseling, Educational Leadership (with majors in Education [preK-12] Administration and Supervision, Gifted Education Administration and Supervision, and Higher Education Administration), and School Psychology, and both an Educational Specialist (39 semester hours beyond the Masters degree in School Psychology) and a Doctor of Education/Doctor of Philosophy in the fields of Counselor Education and Educational Policy, Planning & Leadership (with majors in General [K-12] Administration, Gifted Education Administration, Higher Education, Special Education Administration, Curriculum Leadership, and Curriculum & Educational Technology). For detailed information about these graduate programs, interested persons are advised to consult the School of Education Graduate Program Catalog or contact the Office of Academic Programs in the School of Education (221-2317). Information is also provided online at <http://education.wm.edu>.

Description of Courses

301. Educational Psychology.

Fall and Spring (3) Bass. Limited to students pursuing elementary or secondary teaching licensure.

A course that examines psychological theories and research findings dealing with human development and learning. Special emphasis is placed upon the ways in which theoretical and empirical findings in educational and developmental psychology have been translated into educational practice for both elementary and secondary age students.

302. Characteristics of Exceptional Student Populations (Elementary Education).

Spring (1) deFur. Corequisites: EDUC 303, 340, 345, 411, 414, 415. Open only to elementary education majors.

This course introduces the elementary education major to the characteristics of exceptional elementary age children (e.g., students who have disabilities, are at-risk, are gifted/talented, come from culturally & linguistically diverse backgrounds) and prepares them with the knowledge, skills, and abilities to identify and use applicable educational policies and services.

303. Introduction to Classroom Organization, Management and Discipline.

Spring (1) Staff. Corequisites: EDUC 302, 340, 345, 411, 414, 415.

A course designed to help prospective teachers promote positive student behavior. Emphasis is placed on the selection of strategies, procedures and possible actions that enhance classroom organization and management and reduce and/or prevent misbehavior.

305. Instructional Technology and Design (Secondary Education).

Fall (2) Hofer, Harris. Corequisites: EDUC 309, 311, 312, 315. Restricted to students in the secondary teacher education program.

An introduction to computer-based and networked educational technologies, emphasizing instructional designs for their curriculum-based uses in teaching and learning.

309. Classroom Adaptations for Exceptional Students (Secondary Education).

Fall (1) deFur. Corequisites: EDUC 305, 311, 312, 315.

A course designed to address academic and social learning needs of exceptional student populations (e.g., students with disabilities, at-risk, gifted, culturally diverse) in secondary level classrooms and appropriate interventions to meet these needs.

310. Social and Philosophical Foundations of American Education.

Fall and Spring (2). Restricted to students in the teacher education program. An introduction to historical, sociological/anthropological, legal and

philosophical perspectives on education. Topics include the roles, organization and curriculum of schools viewed as social systems.

311. Classroom Management and Discipline (Secondary Education).

Fall (1) Staff. Corequisites: EDUC 305, 309, 312, 315.

A course designed to emphasize problem solving, reflection and decision-making to develop positive behavioral support plans to meet the needs of students in secondary general education classes.

312. Characteristics of Exceptional Student Populations (Secondary).

Fall (1) deFur. Corequisites: EDUC 305, 309, 311, 315.

An introductory course designed for students with a concentration in secondary education to acquaint them with the characteristics of exceptional secondary age students (e.g., students who have disabilities, are at-risk, are gifted/talented, come from culturally & linguistically diverse backgrounds) and to identify applicable education policies and services.

315. Differentiating and Managing Diverse Classrooms Practicum: Secondary.

Fall (1) deFur. Corequisites: EDUC 305, 309, 311, 312.

This course is a clinical practicum designed to acquaint students with the school personnel, policies, and instructional/behavioral practices of inclusive classrooms at the secondary level. The practicum provides students with a view to how different theoretical perspectives manifest in actual schools and classroom settings.

330. Designs for Technology-Enhanced Learning – Elementary.

Spring (2) Hofer, Harris. Corequisites: EDUC 406, 407, 476, 477. Restricted to students in the teacher education program.

An introduction to computer-based and networked educational technologies, emphasizing instructional designs for their curriculum-based uses in teaching and learning.

340. Assessment of Learning.

Spring (1) Gareis. Prerequisites: Admission to Teacher Education Program and; Admission to Professional Semester.

A course designed to develop competence in constructing and employing valid and reliable assessments of student achievement at the classroom level.

345. Differentiating and Managing in Diverse Classrooms Practicum: Elementary.

Spring (1) Staff. Corequisites: EDUC 302, 303, 340, 411, 414, 415. Restricted to education majors.

This course is a clinical practicum designed to acquaint students with the school personnel, policies, and instructional/behavioral practices of inclusive classrooms at the elementary level. The practicum provides students with a view to how different theoretical perspectives manifest in actual schools and classroom settings.

400. Problems in Education.

Occasionally. (3)Ward. Prerequisites: Enrollment in School of Education program and consent of the instructor.

A course designed for students who are capable of independent study under the direction of, and in consultation with, staff specialists. Students undertake study and research of educational problems of individual concern resulting from previous study or experience. Course may be repeated if topic varies.

405. Elementary Social Studies Curriculum and Instruction.

Fall (2) McEachron. Prerequisites: EDUC 330. Corequisites: EDUC 410, 412, 475.

An exploration of the objectives, instructional strategies and evaluation of social studies education at the early and middle school levels. Included are experiences in the design of instructional materials for use in the classroom.

406. Elementary Science Curriculum and Instruction.

Spring (2) Matkins. Corequisites: EDUC 330, 407, 476, 477. Open to students admitted to the Teacher Education program.

A course designed to build fundamental knowledge of elementary science teaching and learning including standards-based curriculum design and research-based teaching strategies. The course focuses

upon developing inquiry-based lessons for K-6 students.

407. Elementary Mathematics Curriculum and Instruction.

Spring (2) Mason. Corequisites: EDUC 406, 414, 415, 476, 477.

Assists the beginning teacher to develop appropriate skills and knowledge for teaching mathematics at the early and middle school levels.

410. Elementary Reading/Language Arts Curriculum and Instruction.

Fall (5). Johnson. Corequisites: EDUC 405, 412, 475. Restricted to Education majors.

A course on the fundamentals of developmental and diagnostic reading/language arts instruction in elementary schools. Included is study of the school literacy program from emergent literacy to reading in the content areas. Classroom diagnostic techniques and corrective methods are an integral part of the course.

411. Classroom Adaptations for Exceptional Student Populations (Elementary Education).

Spring (1) deFur. Corequisites: EDUC 302, 303, 340, 345, 411, 414, 415. Restricted to Education majors.

This course prepares elementary education teachers to develop differentiated instruction for the individual learning needs of students in elementary classrooms who have disabilities, who are at-risk for school failure, or who are gifted/talented learners, as well as students who are culturally and linguistically diverse.

412. Reading and Language Arts Curriculum and Instruction (Practicum).

Fall (1) Johnson, Staff. Corequisites: EDUC 405, 410, 411, 475.

This practica experience is designed to provide opportunities for students to observe and participate in reading and language arts instruction in an elementary or middle school classroom.

414. Student Teaching Seminar (Elementary Education).

Spring (1) Staff. Corequisites: EDUC 302, 303, 340, 345, 411, 414, 415.

A seminar designed to provide students with an opportunity to reflectively refine their knowledge, decision-making and skills in coordinating instruction, classroom organization, management and discipline.

415. Supervised Teaching in Elementary Education.

Spring (7) Staff. Prerequisites: Admission to the Professional Semester. Corequisites: EDUC 302, 303, 340, 345, 411, 414.

A field-based experience designed to enable pre-service elementary teachers to become competent at the entry level in the roles, functions and skills of classroom teachers.

420. Secondary English Curriculum and Instruction Practicum.

Fall (1) Moore. Corequisite: EDUC 441.

A course designed to provide the prospective English teacher with structured opportunities to observe, reflect upon, and participate in the community and school culture in which they will be student teaching in the following semester.

421. Children's Literature.

Occasionally (3) Johnson.

This course provides a thorough look at the field of children's literature including the value of children's books, criteria for selecting and evaluating children's books, a survey of the categories of children's literature and discussion of issues involving children's literature.

425. Trends and Legal Issues in Special Education.

Fall, Spring & Summer (3) deFur.

This is an introductory course which examines disabilities included in the Individuals with Disabilities Education Act (IDEA) and emphasizes relevant legislation and litigation which provides a foundation for current delivery of educational services. Course content also provides the opportunity to explore issues related to the education of other groups of exceptional students who might be at-risk for school failure because of special needs; i.e. gifted, limited English proficiency, culturally diverse, and socially maladjusted.

429. Secondary Mathematics Curriculum and Instruction Practicum.

Fall (1) Mason. Corequisite: EDUC 443.

A field and university based course designed to provide students with an opportunity to reflectively apply and refine their skills and knowledge about the teaching of mathematics.

434. Secondary Foreign Language Curriculum and Instruction Practicum. Fall (1) Parker. Corequisite: EDUC 442.

A course designed to provide the prospective secondary teacher with opportunities to experience and reflect on the practices of foreign language education in the school and community setting.

436. Secondary Science Curriculum and Instruction Practicum.

Fall (1) Matkins. Corequisite: EDUC 444.

A field and university based course designed to provide students with a first opportunity to reflectively apply/refine their skills/knowledge about the teaching of science as both a process and a product, as a way of knowing and as a body of knowledge.

437. Secondary Social Studies Curriculum and Instruction Practicum.

Fall (1) Stoddard. Corequisite: EDUC 440.

A course designed to provide the prospective secondary teacher with opportunities to experience and reflect on the practices of social studies education in the school and community setting.

438. Instructional Planning in Secondary English.

Spring (2) Moore. Corequisites: EDUC 340, 438P, 449, 495. Restricted to Education majors.

A five-week intensive campus and field-based course designed to provide students opportunities to apply and refine skills and knowledge about teaching and learning English. Guided by College faculty and a public school mentor, students continue the work begun in the methods course, designing units of instruction for use during their internship in supervised teaching.

438P. Instructional Planning in Secondary English - Practicum.

Spring (1) Field based experience coordinated with EDUC 438.

439. Instructional Planning in Secondary Mathematics.

Spring (2) Mason. Corequisites: EDUC 340, 439P, 450, 497. Restricted to Education majors

A field and university based course designed to provide students with an opportunity to reflectively apply and refine their skills and knowledge about the teaching of mathematics design, teaching and evaluation of their instruction practices.

439P. Instructional Planning in Secondary Mathematics - Practicum.

Spring (1) Field based experience coordinated with EDUC 439.

440. Curriculum and Instructional Methods (Social Studies).

Fall (3) Stoddard. Corequisites: EDUC 309, 311, 312, 315, 437. Restricted to Education majors.

A basic course in instructional methodology and an introduction to secondary social studies teaching methods and materials.

441. Curriculum and Instructional Methods (English).

Fall (3) Moore. Corequisites: EDUC 309, 311, 312, 315, 434. Restricted to Education majors.

A basic course in instructional methodology and an introduction to secondary English teaching methods and materials.

442. Curriculum and Instructional Methods (Foreign Language).

Fall (3) Parker. Corequisites: EDUC 309, 311, 312, 315, 434. Restricted to Education majors.

A basic course in instructional methodology and an introduction to PreK-12 foreign language teaching methods and materials.

443. Curriculum and Instructional Methods (Mathematics).

Fall (3) Mason. Corequisites: EDUC 309, 311, 312, 315, 429. Restricted to Education majors.

A basic course in instructional methodology and an introduction to secondary mathematics teaching methods and materials.

444. Curriculum and Instructional Methods (Science).

Fall (3) Matkins. Corequisites: EDUC 309, 311, 312, 315, 436. Restricted to Education majors.

A basic course in instructional methodology and an introduction to secondary science teaching methods and materials.

445. Instructional Planning in Secondary Foreign Language.

Spring (2) Parker. Corequisites: EDUC 340, 445P, 451, 496.

A five-week intensive campus and field-based course designed to provide students opportunities to apply and refine skills and knowledge about teaching and learning foreign languages. Students continue the work begun in the methods course, designing units of instruction and planning detailed lesson plans.

445P. Instructional Planning in Secondary Foreign Language - Practicum.

Spring (1) Field based experience coordinated with EDUC 445.

446. Instructional Planning in Secondary Science.

Spring (2) Matkins. Corequisites: EDUC 340, 446P, 452, 498.

A field and university based course designed to provide students with an opportunity to reflectively apply their skills, knowledge about the teaching of science as both a process and a product, to instructional design, teaching, reflection and evaluation of their teaching and the revision thereof.

446P. Instructional Planning in Secondary Science- Practicum.

Spring (1) Parker. Field based experience coordinated with EDUC 446.

447. Instructional Planning in Secondary Social Studies.

Spring (2) Stoddard. Corequisites: EDUC 340, 447P, 454, 494.

A field and campus based course designed to provide students with an opportunity to make thoughtful decisions, with the help of College faculty and public school mentor about planning and instruction immediately prior and during the first five weeks of student teaching.

447P. Instructional Planning in Secondary Social Studies - Practicum.

Spring (1) Field based experience coordinated with EDUC 447.

449. Secondary Curriculum and Instruction Seminar (English).

Spring (1) Moore. Corequisites: EDUC 340, 438, 438P, 495.

A course designed to provide secondary English student teachers with opportunities to refine their teaching and learning through analysis, reflection, and discussion of their own behavior as teachers and the behaviors of teachers, students, and other school personnel.

450. Secondary Curriculum and Instruction Seminar (Mathematics).

Spring (1) Mason. Corequisites: EDUC 340, 439, 439P, 497.

A field and university based course designed to provide students with an opportunity to reflectively apply and refine their skills and knowledge about the teaching of mathematics.

451. Secondary Curriculum and Instruction Seminar (Foreign Language).

Spring (1) Parker. Corequisites: EDUC 340, 445, 445P, 496.

A course designed to provide PreK-12 foreign language student teachers with opportunities to refine their teaching and learning through analysis, reflection, and discussion of their own behavior as teachers and the behaviors of teachers, students, and other school personnel

452. Secondary Curriculum and Instruction Seminar (Science).

Spring (1) Matkins. Corequisites: EDUC 340, 446, 446P, 498.

A field and university based course designed to provide students with an opportunity to reflectively refine their skills/knowledge about the teaching of science as both a process and a product, as a way of knowing and as a body of knowledge.

454. Secondary Curriculum and Instruction Seminar (Social Studies).

Spring (1) Stoddard. Corequisites: EDUC 340, 447, 447P, 494.

A course designed to provide student teachers with an opportunity to reflect upon ways they can apply and refine their knowledge and skills about the teaching of social studies.

460. Content Reading and Writing.

Spring (2) Staff. Corequisite: EDUC 461.

This course is designed to develop in prospective teachers an understanding of the role of reading and writing in the content area disciplines. Course topics include developmental reading and writing in the content areas, instructional strategies with content area textbooks, and techniques for improving reading and writing in the content areas.

461. Content Reading and Writing Practicum.

Spring (1) Staff. Corequisite: EDUC 460.

Students in the Secondary Education Teacher Licensure Program will select effective instructional literacy strategies and design and implement instructional lessons to enhance subject matter learning across the curriculum based on appropriate assessment information.

475. Elementary Social Studies Curriculum and Instruction Practicum.

Fall (1) McEachron. Corequisites: EDUC 405, 410, 412.

A course designed to provide the prospective elementary or middle school teacher with opportunities to experience and reflect on practices of social studies education in the school setting.

476. Elementary Science Curriculum and Instruction (Practicum).

Spring (1) Matkins. Corequisites: EDUC 330, 406, 407, 477. Restricted to Education majors.

A course designed to provide students the opportunity to apply their beginning science teaching skills in the K-6 classroom. The course involves students in designing, implementing, and reflecting upon the implementation of science lessons for the purpose of developing concepts and strengthening thinking skills in science.

477. Elementary Mathematics Curriculum and Instruction (Practicum).

Spring (1) Mason, Staff. Corequisites: EDUC 330, 406, 407, 476.

A course designed to provide students with an opportunity to apply, refine and modify their preliminary beliefs about teaching mathematics.

***491. Independent Study in Education.**

Fall and Spring (Var.) Staff.

Hours and credits arranged. Independent study shall not substitute for regular required courses.

494. Internship in Supervised Teaching (Social Studies).

Spring (7) Stoddard. Prerequisites: Admitted to professional semester. Corequisites: EDUC 340, 447, 447P, 454.

A field-experience course designed to enable pre-service secondary teachers to become competent at the entry level in the roles, functions and skills of classroom social studies teachers.

495. Internship in Supervised Teaching (English).

Spring (7) Moore. Prerequisites: Admitted to professional semester. Corequisites: EDUC 340, 438, 438P, 449.

A field-experience course designed to enable pre-service secondary teachers to become competent at the entry level in the roles, functions and skills of classroom English teachers.

496. Internship in Supervised Teaching (Foreign Language).

Spring (7) Parker. Prerequisites: Admitted to professional semester. Corequisites: EDUC 340, 445, 445P, 451.

A field-experience course designed to enable pre-service secondary teachers to become competent at the entry level in the roles, functions and skills of classroom foreign language teachers.

497. Internship in Supervised Teaching (Mathematics).

Spring (7) Mason. Prerequisites: Admitted to professional semester. Corequisites: EDUC 340, 439, 439P, 450.

A field-experience course designed to enable pre-service secondary teachers to become competent at the entry level in the roles, functions and skills of classroom mathematics teachers.

498. Internship in Supervised Teaching (Science).

Spring (7) Matkins. Prerequisites: Admitted to professional semester. Corequisites: EDUC 340, 446, 446P, 452.

A field-experience course designed to enable pre-service secondary teachers to become competent at the entry level in the roles, functions and skills of classroom science teachers.

499. Seminar in Teaching.

Spring (2) Staff.

A course designed to provide student teachers with an opportunity to examine the teaching/learning situation through study of their own behavior as teachers, the behavior of other teachers and of students.