

Title II

Higher Education Act

SUBMIT REPORTS

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Longwood University
 Traditional Program
 2009-10

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Name of Institution: Longwood University
Institution/Program Type: Traditional
Academic Year: 2009-10
State: Virginia

Address: 201 High St.

Farmville, VA, 23909

Contact Name: Dr. Wayne White

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Email: whitewk@longwood.edu

Is your institution a member of a Teacher Quality Enhancement (TQE) partnership grant: No

TQE partnership name or grant number, if applicable:

Section I.a Program Admission

For each element listed below, check if it is required for admission into any of your initial teacher certification program(s) at either the undergraduate or postgraduate level.

Element	Undergraduate	Postgraduate
Application	Yes	Yes
Fee/Payment	No	Yes
Transcript	Yes	Yes
Fingerprint check	No	No

Background check	No	No
Experience in a classroom or working with children	No	No
Minimum number of courses/credits/semester hours completed	Yes	Yes
Minimum high school GPA	No	No
Minimum undergraduate GPA	Yes	Yes
Minimum GPA in content area coursework	No	No
Minimum GPA in professional education coursework	Yes	Yes
Minimum ACT score	No	No
Minimum SAT score	Yes	Yes
Minimum GRE score	No	No
Minimum basic skills test score	Yes	Yes
Subject area/academic content test or other subject matter verification	No	No
Minimum Miller Analogies test score	No	No
Recommendation(s)	Yes	Yes
Essay or personal statement	Yes	Yes
Interview	No	No
Resume	No	No
Bechelor's degree or higher	No	Yes
Job offer from school/district	No	No
Personality test (e.g.,Myers-Briggs Assessment)	No	No
Other (specify:)	No	No

Provide a link to your website where additional information about admissions requirements can be found:

<http://www.longwood.edu/professionalservices/index.html>

Indicate when students are formally admitted into your initial teacher certification program:

Other anytime from the initial year forward

Does your initial teacher certification program conditionally admit students? No

Please provide any additional about or exceptions to the admissions information provided above:

Section I.b Program Enrollment

Provide the number of students in the teacher preparation program in the following categories. Note that you must report on the number of students by ethnicity and race separately. Individuals who are non-Hispanic/Latino will be reported in one of the race categories. Also note that individuals can belong to one or more racial groups, so the sum of the members of each racial category may not necessarily add up to the total number of students enrolled.

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Total number of students enrolled in 2009-10:	1317
Unduplicated number of males enrolled in 2009-10:	180
Unduplicated number of females enrolled in 2009-10:	1137

2009-10	Number enrolled
<i>Ethnicity</i>	
Hispanic/Latino of any race:	25
<i>Race</i>	
American Indian or Alaska Native:	7
Asian:	7
Black or African American:	67
Native Hawaiian or Other Pacific Islander:	0
White:	1179
Two or more races:	32

Section I.c Supervised Experience

Provide the following information about supervised clinical experience in 2009-10.

Average number of clock hours required prior to student teaching	120
Average number of clock hours required for student teaching	525
Number of full-time equivalent faculty in supervised clinical experience during this academic year	4
Number of full-time equivalent adjunct faculty in supervised clinical experience during this academic year (IHE and PreK-12 staff)	14
Number of students in supervised clinical experience during this academic year	520

Please provide any additional information about or descriptions of the supervised clinical experiences:

Longwood utilized a total of 371 cooperating teachers during the 09-10 academic period. Longwood also had and additional 163 candidates that qualified for masters' degrees that involved clinical practice and lead to endorsement but not initial licensure.

Section I.d Teachers Prepared

Provide the number of teachers prepared, by academic major and subject area prepared to teach in 2009-10. (§205(b)(1)(H))

Academic major	Number prepared
Art	7
Biology	2

English	9
Liberal Studies	139
Mathematics	2
Music	4
Physical Education and Health	5
Social Studies	10
Theatre	1
TOTAL	179

Subject area	Number prepared
Art	7
Biobly	2
Elementary Education	116
English	8
History	10
Mathematics	2
Middle School	26
Music	4
Physical Education and Health	6
Spedical Education	28
Theatre	1
TOTAL	210

Section I.e Program Completers

Provide the total number of initial teacher certification preparation program completers in each of the following academic years:

2009-10: 200

2008-09: 194

2007-08: 160

Section II. Annual Goals

Each institution of higher education (IHE) that conducts a traditional teacher preparation program (including programs that offer any ongoing professional development programs) or alternative routes to state certification or licensure program, and that enrolls students receiving Federal assistance under this Act, shall set annual quantifiable goals for increasing the number of prospective teachers trained in teacher shortage areas designated by the Secretary or by the state educational agency, including

mathematics, science, special education, and instruction of limited English proficient students. IHEs that do not have a teacher preparation program in one or more of the areas listed below can enter NA for the area(s) in which the IHE does not have that program.

Teacher shortage area	Goal for increasing prospective teachers trained
Mathematics	<p>Academic year: 2009-10</p> <p>Goal: Create a master's program</p> <p>Goal met? Yes</p> <p>Description of strategies used to achieve goal:</p> <p>The mathematics program moved to create a master's program to give certified teacher's an Algebra I endorsement. In 2007, the Virginia Department of Education requested that a new set of courses be designed to better prepare teachers to teach Algebra I. College of William and Mary, George Mason University, Longwood University, Mary Washington University, and Virginia Commonwealth University began working with University of Virginia to create these courses. Longwood University offered MATH 671, MATH 677, and MATH 679 through a Mathematics and Science Partnership (MSP) grant before the master's program was created. Longwood continued to offer MATH 672 and MATH 675 in the summer of 2010 after the master's program was created.</p> <p>Description of steps to improve performance in meeting goal or lessons learned in meeting goal:</p> <p>Longwood has altered many of the courses original designed through the grant to incorporate more technology. Specifically, we have concentrated on technology readily available in a middle school classroom and in an Algebra I classroom. We have found this necessary because many of the teachers in the courses have not felt as comfortable with the mathematics technology as they are with the other technology such as Microsoft Power Point.</p>
Science	<p>Academic year: 2009-10</p> <p>Goal: Goal: Increase visibility</p> <p>Goal met? Yes</p> <p>Description of strategies used to achieve goal:</p> <p>1) Revised secondary science requirements by reducing and streamlining Education coursework hours. Previously, science majors seeking secondary endorsement seldom completed the program; those that did typically required 5 years or more to complete all requirements. This revision received approval at all university levels and was implemented in Fall 2010.</p> <p>2) Investigated new program models for attracting and retaining students in the secondary science endorsement areas. New models investigated include the NMSI-sponsored U-Teach Program and a 5-year Masters Program. Development of new program model is on-going.</p>

	<p>3) Increased visibility and stature of the current secondary science program within the Departments of Chemistry and Physics and Biological and Environmental Sciences through informational emails, student interest meetings, consolidation of academic advising for secondary students, and a secondary science information board.</p> <p>4) Employment of tenure-track faculty position in Science Education to beginning in July 2010.</p> <p>5) Applied for NOYCE grant to improve enrollment and provide secondary science concentrators with financial support throughout the course of their program at Longwood.</p> <p>6) Applied for support from the PHYStec coalition to support secondary science concentrators in physics</p> <p>7) Plans to revitalize the Lonwood chapter of the National Science Teachers Association (NSTA) are ongoing.</p> <p>Description of steps to improve performance in meeting goal or lessons learned in meeting goal:</p> <p>Steps contemplated to increase enrollment include making contact with new students early in their first semester, continue the development of a new science education program (5-year or U-Teach), and continue our outreach effort by re-establishing our student chapter of National Science Teachers Association.</p>
<p>Special education</p>	<p>Academic year: 2009-10</p> <p>Goal: Increase enrollment</p> <p>Goal met? Yes</p> <p>Description of strategies used to achieve goal:</p> <p>From 2007-08 to 2008-09, we increased enrollment in our three SPED pathways by 3 students. In addition, we implemented our Autism Certificate Program and marketed the program through local school superintendents. As a result of these efforts, 6 candidates not in any other SPED pathway are currently enrolled in the ASD program, and 2 additional candidates are in the application for admission process. Moreover, 2 candidates completed the ASD certificate this year, one of whom was not also in one of our other SPED pathways. We also advertised our Curriculum and Instruction Specialist in Special Education General Curriculum K-12 master's to students completing the undergraduate SPED 489, Survey of Exceptional Students class for elementary and middle school teacher candidates. As a result of this action, we obtained two additional SPED candidates admitted to begin the program fall 2010. In 2009-10 the program produce 28 completers ready to teach. The program has enlisted it special education student ambassadors to do follow-ups with prospective candidates in the recruiting process. The faculty continues to counsel potential candates in EDUC 489.</p> <p>Description of steps to improve performance in meeting goal or lessons learned in meeting goal:</p> <p>We plan to continue our regular attendance at Open Houses and Showcases to high school students. We are also discussing the possibility of beginning a paraprofessional program for teacher aides in our local area, which may lead to motivating them to continue their studies to obtain licensure in special</p>

	<p>education through one of our existing pathways. We are exploring the possibility of adding early childhood special education to our program offerings.</p>
<p>Instruction of limited English proficient students</p>	<p>Academic year: 2009-10</p> <p>Goal: Establish and enroll stud</p> <p>Goal met? Yes</p> <p>Description of strategies used to achieve goal:</p> <p>Designed graduate and undergrad licensure program for ESL; sought and received approval at all university levels and State Dept. of Education. Publicized program and began to enroll students. 1 graduate student has graduated and received licensure; currently there are 5 undergraduate students enrolled and 1 graduate student.</p> <p>Description of steps to improve performance in meeting goal or lessons learned in meeting goal:</p> <p>Steps we contemplate to increase enrollment include more publicity, contacts with secondary schools and guidance counselors.</p>
<p>All teacher preparation programs</p>	<p>Academic year: 2009-10</p> <p>Goal: Increase numbe of candida</p> <p>Goal met? Yes</p> <p>Description of strategies used to achieve goal:</p> <p>Longwood adopted a teacher preparation admittance policy that allowed potential candidates to utilize VCLA as well as Praxis I scores to meet testing requirements.</p> <p>Description of steps to improve performance in meeting goal or lessons learned in meeting goal:</p> <p>The Office of Professional Services advertised the above option to all potential candidates thus increasing the total number of persons in the candidate pool.</p>

Provide any additional comments, exceptions and explanations below:

Section II. Assurances

Please indicate whether your institution is in compliance with the following assurances.

Training provided to prospective teachers responds to the identified needs of the local educational agencies or States where the institution's graduates are likely to teach, based on past hiring and recruitment trends.

Yes

Training provided to prospective teachers is closely linked with the needs of schools and the instructional

decisions new teachers face in the classroom.

Yes

Prospective special education teachers receive coursework in core academic subjects and receive training in providing instruction in core academic subjects.

Yes

General education teachers receive training in providing instruction to children with disabilities.

Yes

General education teachers receive training in providing instruction to limited English proficient students.

Yes

General education teachers receive training in providing instruction to children from low-income families.

Yes

Prospective teachers receive training on how to effectively teach in urban and rural schools, as applicable.

Yes

Describe your institution's most successful strategies in meeting the assurances listed above:

Assessment practices allow the Longwood teacher preparation program to access information upon entry into teacher preparation through the first three initial years of practice. This information has allowed the teacher preparation program to adjust to the needs of the candidates and their employers.

Section III. Assessment Rates

Assessment code - Assessment name Test Company Group	Number taking tests	Avg. scaled score	Number passing tests	Pass rate (%)	State Average pass rate (%)	State Average scaled score
0133 -ART: CONTENT KNOWLEDGE Educational Testing Service (ETS) Other enrolled students	2				98	175
0133 -ART: CONTENT KNOWLEDGE Educational Testing Service (ETS) All program completers, 2009-10	6				100	173
0133 -ART: CONTENT KNOWLEDGE Educational Testing Service (ETS) All program completers, 2008-09	3				100	174
0133 -ART: CONTENT KNOWLEDGE Educational Testing Service (ETS) All program completers, 2007-08	7				99	174
0235 -BIOLOGY: CONTENT KNOWLEDGE	2				100	172

Educational Testing Service (ETS) All program completers, 2009-10						
0235 -BIOLOGY: CONTENT KNOWLEDGE Educational Testing Service (ETS) All program completers, 2007-08	1				100	169
0014 -ELEMENTARY EDUCATION: CONTENT KNOWLEDGE Educational Testing Service (ETS) Other enrolled students	52	168	52	100	99	173
0014 -ELEMENTARY EDUCATION: CONTENT KNOWLEDGE Educational Testing Service (ETS) All program completers, 2009-10	112	170	112	100	100	172
0014 -ELEMENTARY EDUCATION: CONTENT KNOWLEDGE Educational Testing Service (ETS) All program completers, 2008-09	120	171	120	100	100	172
0014 -ELEMENTARY EDUCATION: CONTENT KNOWLEDGE Educational Testing Service (ETS) All program completers, 2007-08	70	167	70	100	100	171
0041 -ENGLISH LANGUAGE: LITERATURE AND COMPOSITION Educational Testing Service (ETS) Other enrolled students	3				79	182
0041 -ENGLISH LANGUAGE: LITERATURE AND COMPOSITION Educational Testing Service (ETS) All program completers, 2009-10	8				100	186
0041 -ENGLISH LANGUAGE: LITERATURE AND COMPOSITION Educational Testing Service (ETS) All program completers, 2008-09	10	182	10	100	100	186
0041 -ENGLISH LANGUAGE: LITERATURE AND COMPOSITION Educational Testing Service (ETS) All program completers, 2007-08	7				99	185
0173 -FRENCH: CONTENT KNOWLEDGE Educational Testing Service (ETS) All program completers, 2008-09	1				100	185
0173 -FRENCH: CONTENT KNOWLEDGE Educational Testing Service (ETS) All program completers, 2007-08	2				100	183
0856 -HEALTH AND PHYSICAL EDUCATION: CONTENT KNOWLEDGE	2				91	167

Educational Testing Service (ETS) Other enrolled students						
0856 -HEALTH AND PHYSICAL EDUCATION: CONTENT KNOWLEDGE Educational Testing Service (ETS) All program completers, 2009-10	5				100	165
0856 -HEALTH AND PHYSICAL EDUCATION: CONTENT KNOWLEDGE Educational Testing Service (ETS) All program completers, 2008-09	9				100	166
0856 -HEALTH AND PHYSICAL EDUCATION: CONTENT KNOWLEDGE Educational Testing Service (ETS) All program completers, 2007-08	10	168	10	100	100	168
0061 -MATHEMATICS: CONTENT KNOWLEDGE Educational Testing Service (ETS) Other enrolled students	10	151	6	60	68	154
0061 -MATHEMATICS: CONTENT KNOWLEDGE Educational Testing Service (ETS) All program completers, 2009-10	2				99	162
0061 -MATHEMATICS: CONTENT KNOWLEDGE Educational Testing Service (ETS) All program completers, 2008-09	2				100	163
0049 -MIDDLE SCHOOL ENGLISH LANGUAGE ARTS Educational Testing Service (ETS) Other enrolled students	2					
0049 -MIDDLE SCHOOL ENGLISH LANGUAGE ARTS Educational Testing Service (ETS) All program completers, 2009-10	5				100	177
0049 -MIDDLE SCHOOL ENGLISH LANGUAGE ARTS Educational Testing Service (ETS) All program completers, 2008-09	3				100	181
0049 -MIDDLE SCHOOL ENGLISH LANGUAGE ARTS Educational Testing Service (ETS) All program completers, 2007-08	5				96	179
0069 -MIDDLE SCHOOL MATHEMATICS Educational Testing Service (ETS) Other enrolled students	4				76	175
0069 -MIDDLE SCHOOL MATHEMATICS Educational Testing Service (ETS) All program completers, 2009-10	6				100	177
0069 -MIDDLE SCHOOL MATHEMATICS Educational Testing Service (ETS) All program completers, 2008-09	8				100	179

0069 -MIDDLE SCHOOL MATHEMATICS Educational Testing Service (ETS) All program completers, 2007-08	6				97	180
0439 -MIDDLE SCHOOL SCIENCE Educational Testing Service (ETS) Other enrolled students	3					
0439 -MIDDLE SCHOOL SCIENCE Educational Testing Service (ETS) All program completers, 2009-10	2				100	174
0439 -MIDDLE SCHOOL SCIENCE Educational Testing Service (ETS) All program completers, 2008-09	7				79	167
0439 -MIDDLE SCHOOL SCIENCE Educational Testing Service (ETS) All program completers, 2007-08	2					
0089 -MIDDLE SCHOOL SOCIAL STUDIES Educational Testing Service (ETS) Other enrolled students	2				80	180
0089 -MIDDLE SCHOOL SOCIAL STUDIES Educational Testing Service (ETS) All program completers, 2009-10	2				100	176
0089 -MIDDLE SCHOOL SOCIAL STUDIES Educational Testing Service (ETS) All program completers, 2008-09	4				87	171
0089 -MIDDLE SCHOOL SOCIAL STUDIES Educational Testing Service (ETS) All program completers, 2007-08	6				100	176
0113 -MUSIC: CONTENT KNOWLEDGE Educational Testing Service (ETS) Other enrolled students	6				79	168
0113 -MUSIC: CONTENT KNOWLEDGE Educational Testing Service (ETS) All program completers, 2009-10	3				100	170
0113 -MUSIC: CONTENT KNOWLEDGE Educational Testing Service (ETS) All program completers, 2008-09	2				100	171
0113 -MUSIC: CONTENT KNOWLEDGE Educational Testing Service (ETS) All program completers, 2007-08	2				91	170
0081 -SOCIAL STUDIES: CONTENT KNOWLEDGE Educational Testing Service (ETS) Other enrolled students	5				85	174
0081 -SOCIAL STUDIES: CONTENT KNOWLEDGE Educational Testing Service (ETS)	10	171	10	100	100	176

All program completers, 2009-10						
0081 -SOCIAL STUDIES: CONTENT KNOWLEDGE Educational Testing Service (ETS) All program completers, 2008-09	8				100	177
0081 -SOCIAL STUDIES: CONTENT KNOWLEDGE Educational Testing Service (ETS) All program completers, 2007-08	4				98	176
0191 -SPANISH: CONTENT KNOWLEDGE Educational Testing Service (ETS) All program completers, 2007-08	1				100	180
099 -VCLA Evaluation Systems group of Pearson Other enrolled students	101	540	101	100	100	545
099 -VCLA Evaluation Systems group of Pearson All program completers, 2009-10	170	538	170	100	100	544
099 -VCLA Evaluation Systems group of Pearson All program completers, 2008-09	186	536	186	100	100	543
099 -VCLA Evaluation Systems group of Pearson All program completers, 2007-08	155	535	155	100	100	543
001 -VRA - ELEMENTARY/SPECIAL ED. TEACHERS Evaluation Systems group of Pearson Other enrolled students	42	255	37	88	91	256
001 -VRA - ELEMENTARY/SPECIAL ED. TEACHERS Evaluation Systems group of Pearson All program completers, 2009-10	118	254	118	100	100	258
001 -VRA - ELEMENTARY/SPECIAL ED. TEACHERS Evaluation Systems group of Pearson All program completers, 2008-09	143	254	143	100	100	258
001 -VRA - ELEMENTARY/SPECIAL ED. TEACHERS Evaluation Systems group of Pearson All program completers, 2007-08	91	251	90	99	100	258
002 -VRA - READING SPECIALISTS Evaluation Systems group of Pearson Other enrolled students	4				58	255
002 -VRA - READING SPECIALISTS Evaluation Systems group of Pearson All program completers, 2009-10	20	273	20	100	100	272
002 -VRA - READING SPECIALISTS Evaluation Systems group of Pearson All program completers, 2008-09	2				100	270
002 -VRA - READING SPECIALISTS	1				100	267

Evaluation Systems group of Pearson All program completers, 2007-08							
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Section III. Summary Rates

Group	Number taking tests	Number passing tests	Pass rate (%)	State Average pass rate (%)
All program completers, 2009-10	197	197	100	100
All program completers, 2008-09	194	194	100	100
All program completers, 2007-08	160	155	97	99

Section IV. Low-Performing

Provide the following information about the approval or accreditation of your teacher preparation program.

Is your teacher preparation program currently approved or accredited?

Yes

If yes, please specify the organization(s) that approved or accredited your program:

State

NCATE

Is your teacher preparation program currently under a designation as "low-performing" by the state (as per section 207(a) of the HEA of 2008)?

No

Section V. Technology

Does your program prepare teachers to:

- **integrate technology effectively into curricula and instruction**
Yes
- **use technology effectively to collect data to improve teaching and learning**
Yes
- **use technology effectively to manage data to improve teaching and learning**
Yes
- **use technology effectively to analyze data to improve teaching and learning**
Yes

Provide a description of how your program prepares teachers to integrate technology effectively into curricula and instruction, and to use technology effectively to collect, manage, and analyze data in order to improve teaching and learning for the purpose of increasing student academic achievement. Include a

description of how your program prepares teachers to use the principles of universal design for learning, as applicable. Include planning activities and a timeline if any of the four elements listed above are not currently in place.

Each undergraduate student is required to buy a laptop computer upon enrolling for his/her first semester. Candidates use their computers in classes, laboratories, and their dormitory rooms, which are wired for high-speed Internet access. There are a number of computer laboratories on campus, including a state-of-the-art laboratory in Hull Hall, which houses the College of Education and Human Services. All candidates have access to the laboratories and technology support at all times.

The Longwood University campus is now covered by a wireless umbrella, which allows access to the Internet and administrative functions from any outdoor location on campus. Students, faculty, and staff are able to use the wireless technology anywhere outside within the Longwood perimeter. Using this technology, faculty may now offer course experience in outdoor settings, where candidates can participate in online course activities.

Faculty and staff have ongoing opportunities to participate in the College of Education and IT staff development workshops. Faculty members use Blackboard and other web-based instructional support system, as part of their instructional delivery. The effects of such technological support will continue to play an important role in Longwood University's mission to develop reflective citizen leaders.

The unit supports the University's mission and five-year goals by:

- Infusing the existing technology within the content area teaching in order to seamlessly demonstrate the power of technology on student learning
- Implementing a system through which pre-service educators will construct and disseminate virtual portfolios that highlight their collective academic work
- Requiring students to utilize the high bandwidth networks across curricula in order to develop and refine various effective and efficient lesson plans
- Encouraging all faculty to model positive technology usage by seamlessly infusing the tools into their lessons
- Conducting research on the effectiveness of technology integrated into teaching through the Institute for Teaching Through Technology and Innovative Practice

The interconnectedness between the University's technology goals and the pragmatic application, evaluation, and development of those skills in the Professional Education Unit is apparent. Reflective thought has been used as the vehicle to determine the College of Education and Human Service's action plan in support of the five-year mission goals. This reflection will continue to evolve and expand to address the ever-changing technological advancements.

Section VI. Teacher Training

Does your program prepare general education teachers to:

- **teach students with disabilities effectively**
Yes
- **participate as a member of individualized education program teams**
Yes

- **teach students who are limited English proficient effectively**

Yes

Provide a description of how your program prepares general education teachers to teach students with disabilities effectively, including training related to participation as a member of individualized education program teams, as defined in section 614(d)(1)(B) of the *Individuals with Disabilities Education Act*, and to effectively teach students who are limited English proficient. Include planning activities and a timeline if any of the three elements listed above are not currently in place.

The elements are included in Longwood University programs for completers to provide general education teachers the information and training necessary to work with students with disabilities effectively. The PROGRAM STATUS MATRIX for PREK-12 ENDORSEMENTS, SPECIAL EDUCATION, and SECONDARY GRADES 6-12 ENDORSEMENTS at Longwood University include both the endorsement competencies, and the courses and experiences necessary.

Professional studies requirements for preK-12 endorsements, special education, secondary grades 6-12 endorsements, and adult education included:

1. Human growth and development (birth through adolescence). Skills in this area shall contribute to an understanding of the physical, social, emotional, [speech and language,] and intellectual development of children and the ability to use this understanding in guiding learning experiences. The interaction of children with individual differences – economic, social, racial, ethnic, religious, physical, and mental – should be incorporated to include skills contributing to an understanding of developmental disabilities and developmental issues related to but not limited to attention deficit disorders, gifted education including the use of multiple criteria to identify gifted students, substance abuse, child abuse, and family disruptions.

EDUC 245. Human Growth and Development. A survey of physical, cognitive, and social-emotional development of human beings. Heredity and environmental influences will be stressed in the life-span study with specific emphasis upon prenatal through adolescent development.

2. Curriculum and instructional procedures. Skills in this area shall contribute to an understanding of the principles of learning; the application of skills in discipline-specific methodology; communication processes; selection and use of materials, including media and computers; evaluation of pupil performance; and the relationships among assessment, instruction, and monitoring student progress to include student performance measures in grading practices, the ability to construct and interpret valid assessments using a variety of formats in order to measure student attainment of essential skills in a standards-based environment, and the ability to analyze assessment data to make decisions about how to improve instruction and student performance. Teaching methods appropriate for limited English proficient students; exceptional students, including gifted and talented and those with disabling conditions, and appropriate for the level of endorsement sought shall be included. Teaching methods shall be tailored to promote student academic progress and effective preparation for the Standards of Learning assessments. Methods of improving communication between schools and families and ways of increasing family involvement in student learning at EDUC 455. Principles of Secondary Education. Principles and methods of curriculum and instruction in the secondary school with an emphasis on Virginia SOL's. Required of all majors seeking licensure at the secondary level. EDUC 473 Inquiry Into the Classroom Community. This course combines a schedule of class meetings in addition to supervised field placement, examining the principles of content planning (curriculum), effective methods for teaching content that reflects best practices (instruction), and alignment of curriculum with assessment. Research that informs best practices will also be examined.

Methodology - 3 credits: Also see curriculum and instructional procedures under each specific program area. SPED 322. Mathematics, Science, and Social Studies Adaptations for Students with LD, E/BD, and MR. Emphasis on strategies, accommodations, modifications, and collaboration for content areas such as mathematics, social studies, in home and in school and the Standards of Learning shall be included. Demonstrated proficiency in the use of educational technology for

instruction also shall be included. Persons seeking initial licensure as teachers and persons seeking licensure renewal as teachers for the first time shall complete study in child abuse recognition and intervention in accordance with curriculum guidelines developed by the Board of Education in consultation with the Department of Social Services that are relevant to the specific teacher licensure routes. Curriculum and instructional procedures for secondary grades 6-12 endorsements shall include middle and secondary education. Pre-student teaching experiences (field experiences) should be evident within these skills. For preK-12, field experiences shall be at the elementary, middle, and secondary levels.

3. Classroom [and behavior] management: Skills in this area shall contribute to an understanding and application of classroom [and behavior] management techniques and individual interventions, including techniques that promote emotional well-being and teach and maintain behavioral conduct and skills consistent with norms, standards, and rules of the educational environment. This area shall address diverse approaches based upon behavioral, cognitive, affective, social and ecological theory and practice. EDUC 487. Classroom Management and System Issues. An examination of classroom management techniques and the development of skills necessary to foster a supportive learning environment as well as examination of system problems and solutions within traditional education settings N, K-12.

4. Foundations of education: Skills in this area shall be designed to develop an understanding of the historical, philosophical, and sociological foundations underlying the role, development and organization of public education in the United States. Attention must be given to the legal status of teachers and students, including federal and state laws and regulations, school as an organization/culture, and contemporary issues in education. The historical, philosophical, and sociological foundations of the instructional design based on assessment data (the relationships among assessment, instruction, and monitoring student progress to include student performance measures in grading practices, the ability to construct and interpret valid assessments using a variety of formats in order to measure

EDUC 260. Introduction to the Teaching Profession. An overview of teaching and schooling that addresses the foundations of education and the professional aspects of teaching. Emphasis on the history and philosophy of education; school organization; governance; legal and financial issues; teacher preparation; professional development; practicum preparation; and lesson planning. EDUC 455. Principles of Secondary Education. Principles and methods of curriculum and instruction in the secondary school with an emphasis on Virginia SOL's. Required of all majors seeking licensure at the secondary level.

The program addresses student attainment of essential skills in a standards-based environment, and the ability to analyze assessment data to make decisions about how to improve instruction and student performance.

5. Reading.

a. Adult education, preK-12, and secondary grades 6-12 – reading in the content area. Skills in this area shall be designed to impart an understanding of comprehension skills in all content areas, including a repertoire of questioning strategies, summarizing and retelling skills, and strategies in literal, interpretive, critical, and evaluative comprehension, as well as the ability to foster appreciation of a variety of literature and independent reading.

b. Special education – Language acquisition and reading. Skills listed for these endorsement areas represent the minimum competencies that a beginning teacher shall be able to demonstrate. These skills are not intended to limit the scope of a beginning teacher's program. Additional knowledge and skills that add to a beginning teacher's competencies to deliver instruction and improve student achievement should be included as part of a quality learning experience.

Skills in this area shall be designed to impart a thorough understanding of the complex nature of language acquisition and reading, to include: phonemic awareness, concept of print, phonics, fluency, vocabulary development, and comprehension strategies. Additional skills shall include proficiency in writing strategies, as well as the ability to foster appreciation of a variety of literature and independent reading. EDUC 432. Content Area Literacy. This course provides secondary education students an overview of the skills and strategies required to support literacy in the content areas. It includes an emphasis on supporting comprehension, vocabulary, and writing at the high school level across all subject areas.

6. Supervised classroom experience. The student teaching experience should provide for the prospective teacher to be in classrooms full time for a minimum of [300] clock hours (including pre- and post-clinical experiences) with at least [150] clock hours spent supervised in direct teaching activities (providing direct instruction) in the endorsement area sought. If a preK-12 endorsement is sought, teaching activities shall be at the elementary and middle or secondary levels. Individuals seeking the endorsement in library media shall complete the

EDUC 402. Directed Teaching in the Secondary School. Required of all students seeking licensure to teach elementary school (grades PK-6). EDUC 403. Directed Elementary/Secondary Teaching for k-12. Required of all students seeking licensure to teach k-12.

EDUC 473 Inquiry Into the Classroom Community. This course combines a schedule of class meetings in addition to supervised field placement, examining the principles of content planning (curriculum), effective methods for teaching content that reflects best practices (instruction), and alignment of curriculum with assessment. Research that informs best practices will also be examined.

The program in elementary education preK-6 and middle school education (6-8) may require that the candidate has completed an undergraduate major in interdisciplinary studies (focusing on the areas of English, mathematics, history and social sciences, and science) or in Virginia's core academic areas of English, mathematics, history and social sciences (i.e., history, government, geography and economics), or science and demonstrated the following competencies:

1. Methods.

a. Understanding the needed knowledge, skills, and processes to support learners in achievement of the Virginia Standards of Learning in English, mathematics,

history, and social science, and computer/technology;

English 380. Children's Literature. A survey of poetry, prose, and other media appropriate for elementary students. Primarily for those preparing for careers in elementary education and library science. Prerequisite: completion of General Education Goal 3.

English 381. Literature for Young Adults. A survey of young adult literature from 1967 to the present. Selection and evaluation of books, poetry, short stories, and other media. Instruction in and practice with response theory using written assignments and oral presentations. Prerequisite: completion of General Education Goal 3.

English 483. Writing: Theory and Practice for the Elementary Classroom. A study of theory and practice relating to writers at emergent, early, and developing stages. Includes discussion of the complex factors involved in literacy acquisition at the elementary level, along with exploration of effective ways to address these factors through writing instruction. Also includes extensive experience with writing: processes, strategies, and evaluation. Prerequisite: ENGL 382.

Mathematics 309. Numeration Systems. A study of different numeration systems. The development and characteristics of ancient numeration systems, base numeration systems and the real number system will be studied. Problem solving is emphasized.

Mathematics 310. Functions, Probability and Statistics. Examines functions, probability and statistics in the context of real life situations and will include student investigations and hands on activities. Prerequisite: MATH 309 and proficiency in computer spreadsheets, or permission of instructor.

Mathematics 313. Geometry and Reasoning. A basic study of polygons, polyhedral, measurement, transformational geometry, coordinate geometry, descriptive statistics, graphical methods and empirical and theoretical probabilities and their uses.

Sociology 320. Sociology of Education. Sociology of Education examines the structure and process of education in contemporary society. The primary focus is on U.S. public education. Topics include the contribution of sociology to understanding education and teaching; the relationship of education to other institutions such as the family, government, religion, and the economy; demographic changes that effect education; the effect of social class on student achievement and teaching; formal and informal positions, roles and processes in schools; and consideration of current issues such as school funding, compensatory and special education programs, race and gender issues, and educational reform movements. Open to Juniors and Seniors only.

History 221. United States History. A survey of American life from the Colonial Era to 1877, with emphasis upon the political, cultural, diplomatic, and societal forces which have shaped its development.

History 222. United States History. A survey of American life from 1877 to modern times, with emphasis upon the political, cultural, diplomatic, and societal forces which have shaped its development.

Political Science 150. American Government and Politics. An introduction to the American political system, with an emphasis upon the national political institutions, processes, groups, public behavior, and issues that shape contemporary society.

Geography 342 (Biology 342, Earth Science 342). Terrestrial Biogeography. Investigates the past and present geographic distribution of organisms on land. This broad, interdisciplinary course will combine insights from biology, ecology, geography, and geology to examine changes in species distribution over space and time. The course will address topics including: 1) biological patterns across the globe, 2) underlying physical factors controlling these patterns, 3) the role of earth's history in developing these patterns, 4) and implications for the conservation of plants and animals. 2 lecture periods and 1 two hour lab period.

Biology 114. Fundamentals of Life Science. An inquiry into the common features of life at the molecular, cellular, and organismic levels. Emphasis on classification, life cycles, metabolic processes, genetics, ecology, evolution, and importance in society. For Liberal Studies majors or students seeking licensure. Does not meet the requirements for a biology major or minor. 3 lecture and one 2-hour lab periods. 4 credits.

Chemistry 100. Chemistry for Educators. This half semester course is designed for students seeking a K-8 teaching endorsement and does not fulfill requirements for any science major. This course presents basic concepts in chemistry including the structure of the atom, classification of matter, physical/chemical properties, and discussion of different types of chemical reactions. 3 lecture and one 2-hour lab period.

Physics 100. Physics for Educators. This half semester course is designed for students seeking a K-8 teaching endorsement and does not fulfill requirements for any science major. Major physics concepts presented include motion, forces, energy, electricity & magnetism, light, and sound.

Education 310. Foundations of Literacy Instruction. This course will provide an introduction to literacy learning and instruction. The nature and functions of literacy and the development of language use within and across different social and cultural contexts will be discussed. Attention will be given to early literacy development, appropriate teaching techniques and materials, differentiation, and instructional design. Diagnostic tools for the assessment of literacy development in diverse populations will be introduced. Interpretations and application of data from these assessments will be discussed. Prerequisite: Students must be admitted to teacher prep; this course should be taken immediately prior to the Partnership term.

Education 450. Principles of Instruction. (PK-8). Methods of instruction in the elementary and middle school. The class will focus on generic teaching strategies, technologies, time utilization, teaching effectiveness research, and professional responsibilities. Required for those seeking licensure to teach at the elementary and/or middle school levels.

Education 451. Curriculum in the Elementary School (PK-6). This course will focus on mathematics, science, and social studies. Interdisciplinary units and content appropriate pedagogical approaches will be utilized to meet the Virginia standards of learning in grades PK-6. Required for those seeking a teaching license with an endorsement to teach at the elementary level.

Education 441. Elementary School Literacy Instruction (PreK-6). This course will focus on teaching literacy in the elementary school, PreK-6 including reading, writing, speaking, listening, and viewing. PreK-6 concepts introduced in EDUC 310 will be applied in the elementary partnership setting during this course. Attention will be given to encoding and decoding to communicate meaningfully, motivation, materials, technologies, teaching strategies and using assessment to inform instruction. This course must be taken concurrently with EDUC 440.

The ability to integrate language and literacy, mathematics, science, health, social studies, art, music, drama, movement, and technology in learning experiences; Education 450. Principles of Instruction. (PK-8). Methods of instruction in the elementary and middle school. The class will focus on generic teaching strategies, technologies, time utilization, teaching effectiveness research, and professional responsibilities. Required for those seeking licensure to teach at the elementary and/or middle school levels.

Education 451. Curriculum in the Elementary School (PK-6). This course will focus on mathematics, science, and social studies. Interdisciplinary units and content appropriate pedagogical approaches will be utilized to meet the Virginia standards of learning in grades PK-6. Required for those seeking a teaching license with an endorsement to teach at the elementary level.

Art 448/548. Integrated Arts/Visual Arts. A study of the value and practical application of integrating the arts across all content areas of the curriculum with a focus on the plastic arts. Students will gain an understanding of the role of the creative process in the classroom and will investigate the various means of expressing ideas, emotions and images through the use of visual arts, music, drama, movement, and theatre. Theatre 448. Integrated Arts/Theatre. A study of the value and practical application of integrating the arts across all content areas of the elementary curriculum with a focus on theatre arts. Students will gain an understanding of the role of the creative process in the classroom and will investigate the various means of expressing ideas, emotions, and images through the use of creative dramatics, music and visual arts.

Music 448. Integrated Arts/Music. A study of the value and practical application of integrating the arts across all content areas of the curriculum with a focus on the musical arts. Students will gain an understanding of the role of the creative process in the classroom and will investigate the various means of expressing ideas, emotions and images through the use of music, drama, movement, puppetry, visual arts and theater.

Kinesiology 389. Methods of Teaching Health and Physical Education for Elementary Classroom Teachers. This course is designed to acquaint liberal studies majors with content information, organizational skills, and the methods of instruction needed to teach health education and physical education in the K-6 school.

Education 310. Foundations of Literacy Instruction. This course will provide an introduction to literacy learning and instruction. The nature and functions of literacy and the development of language use within and across different social and cultural contexts will be discussed. Attention will be given to early literacy development, appropriate teaching techniques and materials, differentiation, and instructional design. Diagnostic tools for the assessment of literacy development in diverse populations will be introduced. Interpretations and application of data from these assessments will be discussed. Prerequisite: Students must be admitted to teacher prep; this course should be taken immediately prior to the Partnership term.

Education 441. Elementary School Literacy Instruction (PreK-6). This course will focus on teaching literacy in the elementary school, PreK-6 including reading, writing, speaking, listening, and viewing. PreK-6 concepts introduced in EDUC 310 will be applied in the elementary partnership setting during this course. Attention will be given to encoding and decoding to communicate meaningfully, motivation, materials, technologies, teaching strategies and using assessment to

inform instruction. This course must be taken concurrently with EDUC 440.

c. The use of differentiated instruction and flexible groupings to meet the needs of learners at different stages of development, abilities, and achievement; Education 310. Foundations of Literacy Instruction. This course will provide an introduction to literacy learning and instruction. The nature and functions of literacy and the development of language use within and across different social and cultural contexts will be discussed. Attention will be given to early literacy development, appropriate teaching techniques and materials, differentiation, and instructional design. Diagnostic tools for the assessment of literacy development in diverse populations will be introduced. Interpretations and application of data from these assessments will be discussed. Prerequisite: Students must be admitted to teacher prep; this course should be taken immediately prior to the Partnership term.

Education 441. Elementary School Literacy Instruction (PreK-6). This course will focus on teaching literacy in the elementary school, PreK-6 including reading, writing, speaking, listening, and viewing. PreK-6 concepts introduced in EDUC 310 will be applied in the elementary partnership setting during this course. Attention will be given to encoding and decoding to communicate meaningfully, motivation, materials, technologies, teaching strategies and using assessment to inform instruction.

Education 450. Principles of Instruction. (PK-8). Methods of instruction in the elementary and middle school. The class will focus on generic teaching strategies, technologies, time utilization, teaching effectiveness research, and professional responsibilities. Required for those seeking licensure to teach at the elementary and/or middle school levels.

Education 451. Curriculum in the Elementary School (PK-6). This course will focus on mathematics, science, and social studies. Interdisciplinary units and content appropriate pedagogical approaches will be utilized to meet the Virginia standards of learning in grades PK-6. Required for those seeking a teaching license with an endorsement to teach at the elementary level.

d. The use of appropriate methods [, including those in visual and performing arts,] to help learners develop knowledge and basic skills, sustain intellectual curiosity, and problem solve;

Education 450. Principles of Instruction. (PK-8). Methods of instruction in the elementary and middle school. The class will focus on generic teaching strategies, technologies, time utilization, teaching effectiveness research, and professional responsibilities. Required for those seeking licensure to teach at the elementary and/or middle school levels..

Education 451. Curriculum in the Elementary School (PK-6). This course will focus on mathematics, science, and social studies. Interdisciplinary units and content appropriate pedagogical approaches will be utilized to meet the Virginia standards of learning in grades PK-6. Required for those seeking a teaching license with an endorsement to teach at the elementary level.

Art 448/548. Integrated Arts/Visual Arts. A study of the value and practical application of integrating the arts across all content areas of the curriculum with a focus on the plastic arts. Students will gain an understanding of the role of the creative process in the classroom and will investigate the various means of expressing ideas, emotions and images through the use of visual arts, music, drama, movement, and theatre.

Theatre 448. Integrated Arts/Theatre. A study of the value and practical application of integrating the arts across all content areas of the elementary curriculum with a focus on theatre arts. Students will gain an understanding of the role of the creative process in the classroom and will investigate the various means of expressing ideas, emotions, and images through the use of creative dramatics, music and visual arts.

Music 448. Integrated Arts/Music. A study of the value and practical application of integrating the arts across all content areas of the curriculum with a focus on the musical arts. Students will gain an understanding of the role of the creative process in the classroom and will investigate the various means of expressing ideas, emotions and images through the use

of music, drama, movement, puppetry, visual arts and theater.

Education 310. Foundations of Literacy Instruction. This course will provide an introduction to literacy learning and instruction. The nature and functions of literacy and the development of language use within and across different social and cultural contexts will be discussed. Attention will be given to early literacy development, appropriate teaching techniques and materials, differentiation, and instructional design. Diagnostic tools for the assessment of literacy development in diverse populations will be introduced. Interpretations and application of data from these assessments will be discussed.

Education 441. Elementary School Literacy Instruction (PreK-6). This course will focus on teaching literacy in the elementary school, PreK-6 including reading, writing, speaking, listening, and viewing. PreK-6 concepts introduced in EDUC 310 will be applied in the elementary partnership setting during this course. Attention will be given to encoding and decoding to communicate meaningfully, motivation, materials, technologies, teaching strategies and using assessment to inform instruction. This course must be taken concurrently with EDUC 440.

e. The ability to utilize effective classroom management skills through methods that will build responsibility and self-discipline and a maintain positive learning environment; Education 487. Classroom Management and System Issues. An examination of classroom management techniques and the development of skills necessary to foster a supportive learning environment as well as examination of system problems and solutions within traditional education settings N, K-12.

Education 450. Principles of Instruction. (PK-8). Methods of instruction in the elementary and middle school. The class will focus on generic teaching strategies, technologies, time utilization, teaching effectiveness research, and professional responsibilities. Required for those seeking licensure to teach at the elementary and/or middle school levels.

Education 451. Curriculum in the Elementary School (PK-6). This course will focus on mathematics, science, and social studies. Interdisciplinary units and content appropriate pedagogical approaches will be utilized to meet the Virginia standards of learning in grades PK-6. Required for those seeking a teaching license with an endorsement to teach at the elementary level.

f. The ability to modify and manage learning environments and experiences to meet the individual needs of children, including children with disabilities, gifted children, and children with limited proficiency in English, and children with diverse cultural needs; Special Education 489. Survey of Exceptional Children. An introduction to all disabilities in special education. Characteristics and needs of students with disabilities, legislation, litigation, inclusion, and the role of the classroom teacher as a member of the IEP team.

Sociology 320. Sociology of Education. Sociology of Education examines the structure and process of education in contemporary society. The primary focus is on U.S. public education. Topics include the contribution of sociology to understanding education and teaching; the relationship of education to other institutions such as the family, government, religion, and the economy; demographic changes that effect education; the effect of social class on student achievement and teaching; formal and informal positions, roles and processes in schools; and consideration of current issues such as school funding, compensatory and special education programs, race and gender issues, and educational reform movements.

Education 310. Foundations of Literacy Instruction. This course will provide an introduction to literacy learning and instruction. The nature and functions of literacy and the development of language use within and across different social and cultural contexts will be discussed. Attention will be given to early literacy development, appropriate teaching techniques and materials, differentiation, and instructional design. Diagnostic tools for the assessment of literacy development in diverse populations will be introduced. Interpretations and application of data from these assessments will be discussed.

Education 441. Elementary School Literacy Instruction (PreK-6). This course will focus on teaching literacy in the

elementary school, PreK-6 including reading, writing, speaking, listening, and viewing. PreK-6 concepts introduced in EDUC 310 will be applied in the elementary partnership setting during this course. Attention will be given to encoding and decoding to communicate meaningfully, motivation, materials, technologies, teaching strategies and using assessment to inform instruction.

g. The ability to use formal and informal assessments to diagnose needs, plan and modify instruction, and record student progress; Education 380. Classroom Assessment. Theory and practice in construction of teacher-made evaluation instruments with heavy emphasis upon test construction, technologies, and alternative assessment. Includes study of standardized testing and an in-depth study of the Virginia Assessment program.

Education 310. Foundations of Literacy Instruction. This course will provide an introduction to literacy learning and instruction. The nature and functions of literacy and the development of language use within and across different social and cultural contexts will be discussed. Attention will be given to early literacy development, appropriate teaching techniques and materials, differentiation, and instructional design. Diagnostic tools for the assessment of literacy development in diverse populations will be introduced. Interpretations and application of data from these assessments will be discussed.

Education 441. Elementary School Literacy Instruction (PreK-6). This course will focus on teaching literacy in the elementary school, PreK-6 including reading, writing, speaking, listening, and viewing. PreK-6 concepts introduced in EDUC 310 will be applied in the elementary partnership setting during this course. Attention will be given to encoding and decoding to communicate meaningfully, motivation, materials, technologies, teaching strategies and using assessment to inform instruction. This course must be taken concurrently with EDUC 440.

Education 450. Principles of Instruction. (PK-8). Methods of instruction in the elementary and middle school. The class will focus on generic teaching strategies, technologies, time utilization, teaching effectiveness research, and professional responsibilities. Required for those seeking licensure to teach at the elementary and/or middle school levels.

Education 451. Curriculum in the Elementary School (PK-6). This course will focus on mathematics, science, and social studies. Interdisciplinary units and content appropriate pedagogical approaches will be utilized to meet the Virginia standards of learning in grades PK-6. Required for those seeking a teaching license with an endorsement to teach at the elementary level.

h. A commitment to professional growth and development through reflection, collaboration, and continuous learning; Education 450. Principles of Instruction. (PK-8). Methods of instruction in the elementary and middle school. The class will focus on generic teaching strategies, technologies, time utilization, teaching effectiveness research, and professional responsibilities. Required for those seeking licensure to teach at the elementary and/or middle school levels. Prerequisite: EDUC 299, EDUC 380. 2 credits.

Education 310. Foundations of Literacy Instruction. This course will provide an introduction to literacy learning and instruction. The nature and functions of literacy and the development of language use within and across different social and cultural contexts will be discussed. Attention will be given to early literacy development, appropriate teaching techniques and materials, differentiation, and instructional design. Diagnostic tools for the assessment of literacy development in diverse populations will be introduced. Interpretations and application of data from these assessments will be discussed. Prerequisite: Students must be admitted to teacher prep; this course should be taken immediately prior to the Partnership term.

Education 441. Elementary School Literacy Instruction (PreK-6). This course will focus on teaching literacy in the elementary school, PreK-6 including reading, writing, speaking, listening, and viewing. PreK-6 concepts introduced in EDUC 310 will be applied in the elementary partnership setting during this course. Attention will be given to encoding and decoding to communicate meaningfully, motivation, materials, technologies, teaching strategies and using assessment to inform instruction. This course must be taken concurrently with EDUC 440.

i. The ability to analyze, evaluate, apply, and conduct qualitative and quantitative research; and

Education 380. Classroom Assessment. Theory and practice in construction of teacher-made evaluation instruments with heavy emphasis upon test construction, technologies, and alternative assessment. Includes study of standardized testing and an in-depth study of the Virginia Assessment program.

Education 310. Foundations of Literacy Instruction. This course will provide an introduction to literacy learning and instruction. The nature and functions of literacy and the development of language use within and across different social and cultural contexts will be discussed. Attention will be given to early literacy development, appropriate teaching techniques and materials, differentiation, and instructional design. Diagnostic tools for the assessment of literacy development in diverse populations will be introduced. Interpretations and application of data from these assessments will be discussed.

Education 441. Elementary School Literacy Instruction (PreK-6). This course will focus on teaching literacy in the elementary school, PreK-6 including reading, writing, speaking, listening, and viewing. PreK-6 concepts introduced in EDUC 310 will be applied in the elementary partnership setting during this course. Attention will be given to encoding and decoding to communicate meaningfully, motivation, materials, technologies, teaching strategies and using assessment to inform instruction. This course must be taken concurrently with EDUC 440.

j. The ability to use technology as a tool for teaching, learning, research, and communication.

Education 310. Foundations of Literacy Instruction. This course will provide an introduction to literacy learning and instruction. The nature and functions of literacy and the development of language use within and across different social and cultural contexts will be discussed. Attention will be given to early literacy development, appropriate teaching techniques and materials, differentiation, and instructional design. Diagnostic tools for the assessment of literacy development in diverse populations will be introduced. Interpretations and application of data from these assessments will be discussed. Prerequisite: Students must be admitted to teacher prep; this course should be taken immediately prior to the Partnership term.

Education 441. Elementary School Literacy Instruction (PreK-6). This course will focus on teaching literacy in the elementary school, PreK-6 including reading, writing, speaking, listening, and viewing. PreK-6 concepts introduced in EDUC 310 will be applied in the elementary partnership setting during this course. Attention will be given to encoding and decoding to communicate meaningfully, motivation, materials, technologies, teaching strategies, and using assessment to inform instruction. This course must be taken concurrently with EDUC 440.

Education 450. Principles of Instruction. (PK-8). Methods of instruction in the elementary and middle school. The class will focus on generic teaching strategies, technologies, time utilization, teaching effectiveness research, and professional responsibilities. Required for those seeking licensure to teach at the elementary and/or middle school levels.

Education 451. Curriculum in the Elementary School (PK-6). This course will focus on mathematics, science, and social studies. Interdisciplinary units and content appropriate pedagogical approaches will be utilized to meet the Virginia standards of learning in grades PK-6. Required for those seeking a teaching license with an endorsement to teach at the elementary level.

2. Knowledge and Skills.

a. Reading/English. Understanding of the content, knowledge, skills, and processes for teaching the Virginia Standards of Learning for English including: oral language (speaking and listening), reading, writing, and literature, and how these standards provide the core for teaching English in grades preK-6 (elementary licensure).

English 380. Children's Literature. A survey of poetry, prose, and other media appropriate for elementary students.

Primarily for those preparing for careers in elementary education and library science.

English 381. Literature for Young Adults. A survey of young adult literature from 1967 to the present. Selection and evaluation of books, poetry, short stories, and other media. Instruction in and practice with response theory using written assignments and oral presentations.

English 483. Writing: Theory and Practice for the Elementary Classroom. A study of theory and practice relating to writers at emergent, early, and developing stages. Includes discussion of the complex factors involved in literacy acquisition at the elementary level, along with exploration of effective ways to address these factors through writing instruction. Also includes extensive experience with writing: processes, strategies, and evaluation.

English 445. Studies in Children's Literature. Advanced study featuring a particular aspect of Children's Literature, such as a time period, a genre, or a theoretical perspective. Prerequisites: completion of Goal 3 of the General Education requirements, and either one 300-level course in a literary period, or permission of the instructor.

Education 310. Foundations of Literacy Instruction. This course will provide an introduction to literacy learning and instruction. The nature and functions of literacy and the development of language use within and across different social and cultural contexts will be discussed. Attention will be given to early literacy development, appropriate teaching techniques and materials, differentiation, and instructional design. Diagnostic tools for the assessment of literacy development in diverse populations will be introduced. Interpretations and application of data from these assessments will be discussed. Prerequisite: Students must be admitted to teacher prep; this course should be taken immediately prior to the Partnership term.

Education 441. Elementary School Literacy Instruction (PreK-6). This course will focus on teaching literacy in the elementary school, PreK-6 including reading, writing, speaking, listening, and viewing. PreK-6 concepts introduced in EDUC 310 will be applied in the elementary partnership setting during this course. Attention will be given to encoding and decoding to communicate meaningfully, motivation, materials, technologies, teaching strategies, and using assessment to inform instruction. This course must be taken concurrently with EDUC 440.

(1) Assessment and diagnostic teaching. The individual must:

(a) Be proficient in the use of both formal and informal assessment and screening measures for the components of reading: phoneme awareness, letter recognition, decoding, fluency, vocabulary, reading level, and comprehension; and

Education 310. Foundations of Literacy Instruction. This course will provide an introduction to literacy learning and instruction. The nature and functions of literacy and the development of language use within and across different social and cultural contexts will be discussed. Attention will be given to early literacy development, appropriate teaching techniques and materials, differentiation, and instructional design. Diagnostic tools for the assessment of literacy development in diverse populations will be introduced. Interpretations and application of data from these assessments will be discussed. Prerequisite: Students must be admitted to teacher prep; this course should be taken immediately prior to the Partnership term.

Education 441. Elementary School Literacy Instruction (PreK-6). This course will focus on teaching literacy in the elementary school, PreK-6 including reading, writing, speaking, listening, and viewing. PreK-6 concepts introduced in EDUC 310 will be applied in the elementary partnership setting during this course. Attention will be given to encoding and decoding to communicate meaningfully, motivation, materials, technologies, teaching strategies and using assessment to inform instruction.

(b) Be proficient in the ability to use diagnostic data to tailor instruction, for acceleration, intervention, remediation and flexible skill-level groupings.

Education 380. Classroom Assessment. Theory and practice in construction of teacher-made evaluation instruments with heavy emphasis upon test construction, technologies, and alternative assessment. Includes study of standardized testing and an in-depth study of the Virginia Assessment program.

Education 450. Principles of Instruction. (PK-8). Methods of instruction in the elementary and middle school. The class will focus on generic teaching strategies, technologies, time utilization, teaching effectiveness research, and professional responsibilities. Required for those seeking licensure to teach at the elementary and/or middle school levels.

Education 451. Curriculum in the Elementary School (PK-6). This course will focus on mathematics, science, and social studies. Interdisciplinary units and content appropriate pedagogical approaches will be utilized to meet the Virginia standards of learning in grades PK-6. Required for those seeking a teaching license with an endorsement to teach at the elementary level.

Education 310. Foundations of Literacy Instruction. This course will provide an introduction to literacy learning and instruction. The nature and functions of literacy and the development of language use within and across different social and cultural contexts will be discussed. Attention will be given to early literacy development, appropriate teaching techniques and materials, differentiation, and instructional design. Diagnostic tools for the assessment of literacy development in diverse populations will be introduced. Interpretations and application of data from these assessments will be discussed. Prerequisite: Students must be admitted to teacher prep; this course should be taken immediately prior to the Partnership term.

Education 441. Elementary School Literacy Instruction (PreK-6). This course will focus on teaching literacy in the elementary school, PreK-6 including reading, writing, speaking, listening, and viewing. PreK-6 concepts introduced in EDUC 310 will be applied in the elementary partnership setting during this course. Attention will be given to encoding and decoding to communicate meaningfully, motivation, materials, technologies, teaching strategies, and using assessment to inform instruction. This course must be taken concurrently with EDUC 440. Prerequisite: EDUC 310.

(2) Oral Communication. The individual shall:

(a) Be proficient in the knowledge skills, and processes necessary for teaching oral language (including speaking and listening); Education 310. Foundations of Literacy Instruction. This course will provide an introduction to literacy learning and instruction. The nature and functions of literacy and the development of language use within and across different social and cultural contexts will be discussed. Attention will be given to early literacy development, appropriate teaching techniques and materials, differentiation, and instructional design. Diagnostic tools for the assessment of literacy development in diverse populations will be introduced. Interpretations and application of data from these assessments will be discussed. Prerequisite: Students must be admitted to teacher prep; this course should be taken immediately prior to the Partnership term.

Education 441. Elementary School Literacy Instruction (PreK-6). This course will focus on teaching literacy in the elementary school, PreK-6 including reading, writing, speaking, listening, and viewing. PreK-6 concepts introduced in EDUC 310 will be applied in the elementary partnership setting during this course. Attention will be given to encoding and decoding to communicate meaningfully, motivation, materials, technologies, teaching strategies, and using assessment to inform instruction. This course must be taken concurrently with EDUC 440.

English 483. Writing: Theory and Practice for the Elementary Classroom. A study of theory and practice relating to writers at emergent, early, and developing stages. Includes discussion of the complex factors involved in literacy acquisition at the elementary level, along with exploration of effective ways to address these factors through writing instruction. Also includes extensive experience with writing: processes, strategies, and evaluation.

(b) Be proficient in developing students' phonological awareness skills;

Education 310. Foundations of Literacy Instruction. This course will provide an introduction to literacy learning and instruction. The nature and functions of literacy and the development of language use within and across different social and cultural contexts will be discussed. Attention will be given to early literacy development, appropriate teaching techniques and materials, differentiation, and instructional design. Diagnostic tools for the assessment of literacy development in diverse populations will be introduced. Interpretations and application of data from these assessments will be discussed. Prerequisite: Students must be admitted to teacher prep; this course should be taken immediately prior to the Partnership term.

Education 441. Elementary School Literacy Instruction (PreK-6). This course will focus on teaching literacy in the elementary school, PreK-6 including reading, writing, speaking, listening, and viewing. PreK-6 concepts introduced in EDUC 310 will be applied in the elementary partnership setting during this course. Attention will be given to encoding and decoding to communicate meaningfully, motivation, materials, technologies, teaching strategies, and using assessment to inform instruction. This course must be taken concurrently with EDUC 440.

(c) Demonstrate effective strategies for facilitating the learning of standard English by speakers of other languages and dialects; and

Sociology 320. Sociology of Education. Sociology of Education examines the structure and process of education in contemporary society. The primary focus is on U.S. public education. Topics include the contribution of sociology to understanding education and teaching; the relationship of education to other institutions such as the family, government, religion, and the economy; demographic changes that effect education; the effect of social class on student achievement and teaching; formal and informal positions, roles and processes in schools; and consideration of current issues such as school funding, compensatory and special education programs, race and gender issues, and educational reform movements.

(d) Demonstrate the ability to promote creative thinking and expression, as through storytelling, drama, choral/oral reading, etc.

Art 448/548. Integrated Arts/Visual Arts. A study of the value and practical application of integrating the arts across all content areas of the curriculum with a focus on the plastic arts. Students will gain an understanding of the role of the creative process in the classroom and will investigate the various means of expressing ideas, emotions and images through the use of visual arts, music, drama, movement, and theatre.

Theatre 448. Integrated Arts/Theatre. A study of the value and practical application of integrating the arts across all content areas of the elementary curriculum with a focus on theatre arts. Students will gain an understanding of the role of the creative process in the classroom and will investigate the various means of expressing ideas, emotions, and images through the use of creative dramatics, music and visual arts.

Music 448. Integrated Arts/Music. A study of the value and practical application of integrating the arts across all content areas of the curriculum with a focus on the musical arts. Students will gain an understanding of the role of the creative process in the classroom and will investigate the various means of expressing ideas, emotions and images through the use of music, drama, movement, puppetry, visual arts and theater.

(3) Reading/Literature. The individual shall:

(a) Be proficient in explicit phonics instruction, including an understanding of

Education 310. Foundations of Literacy Instruction. This course will provide an introduction to literacy learning and instruction. The nature and functions of literacy and the development of language use within and across different social and cultural contexts will be discussed. Attention will be given to early literacy development, appropriate teaching techniques and materials, differentiation, and instructional design. Diagnostic tools for the assessment of literacy

development in diverse populations will be introduced. Interpretations and application of data from these assessments will be discussed. Prerequisite: Students must be admitted to teacher prep; this course should be taken immediately prior to the Partnership term.

Education 441. Elementary School Literacy Instruction (PreK-6). This course will focus on teaching literacy in the elementary school, PreK-6 including reading, writing, speaking, listening, and viewing. PreK-6 concepts introduced in EDUC 310 will be applied in the elementary partnership setting during this course. Attention will be given to encoding and decoding to communicate meaningfully, motivation, materials, technologies, teaching strategies, and using assessment to inform instruction. This course must be taken concurrently with EDUC 440.

(b) Be proficient in strategies to increase vocabulary/concept development;

Education 310. Foundations of Literacy Instruction. This course will provide an introduction to literacy learning and instruction. The nature and functions of literacy and the development of language use within and across different social and cultural contexts will be discussed. Attention will be given to early literacy development, appropriate teaching techniques and materials, differentiation, and instructional design. Diagnostic tools for the assessment of literacy development in diverse populations will be introduced. Interpretations and application of data from these assessments will be discussed. Prerequisite: Students must be admitted to teacher prep; this course should be taken immediately prior to the Partnership term.

Education 441. Elementary School Literacy Instruction (PreK-6). This course will focus on teaching literacy in the elementary school, PreK-6 including reading, writing, speaking, listening, and viewing. PreK-6 concepts introduced in EDUC 310 will be applied in the elementary partnership setting during this course. Attention will be given to encoding and decoding to communicate meaningfully, motivation, materials, technologies, teaching strategies, and using assessment to inform instruction. This course must be taken concurrently with EDUC 440.

(c) Be proficient in the structure of the English language, including an understanding of syntax and semantics; Education 310. Foundations of Literacy Instruction. This course will provide an introduction to literacy learning and instruction. The nature and functions of literacy and the development of language use within and across different social and cultural contexts will be discussed. Attention will be given to early literacy development, appropriate teaching techniques and materials, differentiation, and instructional design. Diagnostic tools for the assessment of literacy development in diverse populations will be introduced. Interpretations and application of data from these assessments will be discussed. Prerequisite: Students must be admitted to teacher prep; this course should be taken immediately prior to the Partnership term.

Education 441. Elementary School Literacy Instruction (PreK-6). This course will focus on teaching literacy in the elementary school, PreK-6 including reading, writing, speaking, listening, and viewing. PreK-6 concepts introduced in EDUC 310 will be applied in the elementary partnership setting during this course. Attention will be given to encoding and decoding to communicate meaningfully, motivation, materials, technologies, teaching strategies, and using assessment to inform instruction. This course must be taken concurrently with EDUC 440.

(d) Be proficient in reading comprehension strategies for both fiction and nonfiction text, including questioning, predicting, summarizing, clarifying, and associating the unknown with what is known; Education 310. Foundations of Literacy Instruction. This course will provide an introduction to literacy learning and instruction. The nature and functions of literacy and the development of language use within and across different social and cultural contexts will be discussed. Attention will be given to early literacy development, appropriate teaching techniques and materials, differentiation, and instructional design. Diagnostic tools for the assessment of literacy development in diverse populations will be introduced. Interpretations and application of data from these assessments will be discussed. Prerequisite: Students must be admitted to teacher prep; this course should be taken immediately prior to the Partnership term.

Education 441. Elementary School Literacy Instruction (PreK-6). This course will focus on teaching literacy in the

elementary school, PreK-6 including reading, writing, speaking, listening, and viewing. PreK-6 concepts introduced in EDUC 310 will be applied in the elementary partnership setting during this course. Attention will be given to encoding and decoding to communicate meaningfully, motivation, materials, technologies, teaching strategies, and using assessment to inform instruction. This course must be taken concurrently with EDUC 440.

(e) Demonstrate the ability to develop comprehension skills in all content areas; Education 310. Foundations of Literacy Instruction. This course will provide an introduction to literacy learning and instruction. The nature and functions of literacy and the development of language use within and across different social and cultural contexts will be discussed. Attention will be given to early literacy development, appropriate teaching techniques and materials, differentiation, and instructional design. Diagnostic tools for the assessment of literacy development in diverse populations will be introduced. Interpretations and application of data from these assessments will be discussed. Prerequisite: Students must be admitted to teacher prep; this course should be taken immediately prior to the Partnership term.

Education 441. Elementary School Literacy Instruction (PreK-6). This course will focus on teaching literacy in the elementary school, PreK-6 including reading, writing, speaking, listening, and viewing. PreK-6 concepts introduced in EDUC 310 will be applied in the elementary partnership setting during this course. Attention will be given to encoding and decoding to communicate meaningfully, motivation, materials, technologies, teaching strategies, and using assessment to inform instruction. This course must be taken concurrently with EDUC 440.

(f) Demonstrate the ability to foster appreciation of a variety of literature; and English 445. Studies in Children's Literature. Advanced study featuring a particular aspect of Children's Literature, such as a time period, a genre, or a theoretical perspective.

English 380. Children's Literature. A survey of poetry, prose, and other media appropriate for elementary students. Primarily for those preparing for careers in elementary education and library science. Prerequisite: completion of General Education Goal 3.

English 381. Literature for Young Adults. A survey of young adult literature from 1967 to the present. Selection and evaluation of books, poetry, short stories, and other media. Instruction in and practice with response theory using written assignments and oral presentations.

(g) Understand the importance of promoting independent reading by selecting fiction and nonfiction books, at appropriate reading levels. English 380. Children's Literature. A survey of poetry, prose, and other media appropriate for elementary students. Primarily for those preparing for careers in elementary education and library science.

English 381. Literature for Young Adults. A survey of young adult literature from 1967 to the present. Selection and evaluation of books, poetry, short stories, and other media. Instruction in and practice with response theory using written assignments and oral presentations.

(4) Writing. The individual shall

(a) Be proficient in the knowledge, skills, and processes necessary for teaching writing, including the domains of composing, written expression, and usage and mechanics and the writing process of planning, drafting, revising, editing, and sharing; Education 310. Foundations of Literacy Instruction. This course will provide an introduction to literacy learning and instruction. The nature and functions of literacy and the development of language use within and across different social and cultural contexts will be discussed. Attention will be given to early literacy development, appropriate teaching techniques and materials, differentiation, and instructional design. Diagnostic tools for the assessment of literacy development in diverse populations will be introduced. Interpretations and application of data from these assessments will be discussed. Prerequisite: Students must be admitted to teacher prep; this course should be taken immediately prior to the Partnership term.

Education 441. Elementary School Literacy Instruction (PreK-6). This course will focus on teaching literacy in the elementary school, PreK-6 including reading, writing, speaking, listening, and viewing. PreK-6 concepts introduced in EDUC 310 will be applied in the elementary partnership setting during this course. Attention will be given to encoding and decoding to communicate meaningfully, motivation, materials, technologies, teaching strategies, and using assessment to inform instruction. This course must be taken concurrently with EDUC 440.

English 483. Writing: Theory and Practice for the Elementary Classroom. A study of theory and practice relating to writers at emergent, early, and developing stages. Includes discussion of the complex factors involved in literacy acquisition at the elementary level, along with exploration of effective ways to address these factors through writing instruction. Also includes extensive experience with writing: processes, strategies, and evaluation.

(b) Be proficient in systematic spelling instruction, including awareness of the purpose and limitations of "invented spelling," orthographic patterns, and strategies for promoting generalization of spelling study to writing; and Education 310. Foundations of Literacy Instruction. This course will provide an introduction to literacy learning and instruction. The nature and functions of literacy and the development of language use within and across different social and cultural contexts will be discussed. Attention will be given to early literacy development, appropriate teaching techniques and materials, differentiation, and instructional design. Diagnostic tools for the assessment of literacy development in diverse populations will be introduced. Interpretations and application of data from these assessments will be discussed. Prerequisite: Students must be admitted to teacher prep; this course should be taken immediately prior to the Partnership term.

Education 441. Elementary School Literacy Instruction (PreK-6). This course will focus on teaching literacy in the elementary school, PreK-6 including reading, writing, speaking, listening, and viewing. PreK-6 concepts introduced in EDUC 310 will be applied in the elementary partnership setting during this course. Attention will be given to encoding and decoding to communicate meaningfully, motivation, materials, technologies, teaching strategies and using assessment to inform instruction. This course must be taken concurrently with EDUC 440.

English 483. Writing: Theory and Practice for the Elementary Classroom. A study of theory and practice relating to writers at emergent, early, and developing stages. Includes discussion of the complex factors involved in literacy acquisition at the elementary level, along with exploration of effective ways to address these factors through writing instruction. Also includes extensive experience with writing: processes, strategies, and evaluation.

(c) Demonstrate the ability to teach the writing process: plan draft, revise, edit, and share in the narrative, descriptive, and explanative modes. Education 310. Foundations of Literacy Instruction. This course will provide an introduction to literacy learning and instruction. The nature and functions of literacy and the development of language use within and across different social and cultural contexts will be discussed. Attention will be given to early literacy development, appropriate teaching techniques and materials, differentiation, and instructional design. Diagnostic tools for the assessment of literacy development in diverse populations will be introduced. Interpretations and application of data from these assessments will be discussed. Prerequisite: Students must be admitted to teacher prep; this course should be taken immediately prior to the Partnership term.

Education 441. Elementary School Literacy Instruction (PreK-6). This course will focus on teaching literacy in the elementary school, PreK-6 including reading, writing, speaking, listening, and viewing. PreK-6 concepts introduced in EDUC 310 will be applied in the elementary partnership setting during this course. Attention will be given to encoding and decoding to communicate meaningfully, motivation, materials, technologies, teaching strategies and using assessment to inform instruction. This course must be taken concurrently with EDUC 440.

English 483. Writing: Theory and Practice for the Elementary Classroom. A study of theory and practice relating to writers at emergent, early, and developing stages. Includes discussion of the complex factors involved in literacy acquisition at the elementary level, along with exploration of effective ways to address these factors through writing instruction. Also includes extensive experience with writing: processes, strategies, and evaluation.

(5) Research. The individual must demonstrate the ability to guide students in their use of technology for both process and product as they work with reading, writing, and research.

Education 310. Foundations of Literacy Instruction. This course will provide an introduction to literacy learning and instruction. The nature and functions of literacy and the development of language use within and across different social and cultural contexts will be discussed. Attention will be given to early literacy development, appropriate teaching techniques and materials, differentiation, and instructional design. Diagnostic tools for the assessment of literacy development in diverse populations will be introduced. Interpretations and application of data from these assessments will be discussed. Prerequisite: Students must be admitted to teacher prep; this course should be taken immediately prior to the Partnership term.

Education 441. Elementary School Literacy Instruction (PreK-6). This course will focus on teaching literacy in the elementary school, PreK-6 including reading, writing, speaking, listening, and viewing. PreK-6 concepts introduced in EDUC 310 will be applied in the elementary partnership setting during this course. Attention will be given to encoding and decoding to communicate meaningfully, motivation, materials, technologies, teaching strategies, and using assessment to inform instruction. This course must be taken concurrently with EDUC 440.

b. Mathematics.

(1) Understanding of the mathematics relevant to the content identified in the Virginia Standards of Learning and how the standards provide the foundation for Education 450. Principles of Instruction. (PK-8). Methods of instruction in the elementary and middle school. The class will focus on generic teaching strategies, technologies, time utilization, teaching effectiveness research, and professional responsibilities. Required for those seeking licensure to teach at the elementary and/or middle school levels.

Education 451. Curriculum in the Elementary School (PK-6). This course will focus on mathematics, science, and social studies. Interdisciplinary units and content appropriate pedagogical approaches will be utilized to meet the Virginia standards of learning in grades PK-6. Required for those seeking a teaching license with an endorsement to teach at the elementary level.

(a) Number systems, their structure, basic operations, and properties; Mathematics 309. Numeration Systems. A study of different numeration systems. The development and characteristics of ancient numeration systems, base numeration systems and the real number system will be studied. Problem solving is emphasized.

Mathematics 310. Functions, Probability and Statistics. Examines functions, probability and statistics in the context of real life situations and will include student investigations and hands on activities. Prerequisite: MATH 309 and proficiency in computer spreadsheets, or permission of instructor.

(b) Elementary number theory, ratio, proportion, and percent; Mathematics 309. Numeration Systems. A study of different numeration systems. The development and characteristics of ancient numeration systems, base numeration systems and the real number system will be studied. Problem solving is emphasized.

Mathematics 310. Functions, Probability and Statistics. Examines functions, probability and statistics in the context of real life situations and will include student investigations and hands on activities. Prerequisite: MATH 309 and proficiency in computer spreadsheets, or permission of instructor.

(c) Algebra: operations with monomials and polynomials, algebraic fractions; linear and quadratic equations and inequalities, linear systems of equations and inequalities; radicals and exponents; arithmetic and geometric sequences and series; algebraic and trigonometric functions; and transformations among graphical, tabular, and symbolic form of functions; Mathematics 309. Numeration Systems. A study of different numeration systems. The development and characteristics of ancient numeration systems, base numeration systems and the real number system will be studied.

Problem solving is emphasized.

Mathematics 310. Functions, Probability and Statistics. Examines functions, probability and statistics in the context of real life situations and will include student investigations and hands on activities. Prerequisite: MATH 309 and proficiency in computer spreadsheets, or permission of instructor.

(d) Geometry: geometric figures, their properties, relationships, Pythagorean Theorem; deductive and inductive reasoning; perimeter, area, and surface area of 2- and 3- dimensional figures; coordinate and transformational geometry; and constructions; Mathematics 313. Geometry and Reasoning. A basic study of polygons, polyhedral, measurement, transformational geometry, coordinate geometry, descriptive statistics, graphical methods and empirical and theoretical probabilities and their uses.

(e) Probability and statistics: permutations and combinations; experimental and theoretical probability; prediction; graphical representations; including box-and-whisker plots; measures of central tendency, range, and normal distribution; and Mathematics 310. Functions, Probability and Statistics. Examines functions, probability and statistics in the context of real life situations and will include student investigations and hands on activities. Prerequisite: MATH 309 and proficiency in computer spreadsheets, or permission of instructor.

(f) Computer science: terminology, simple programming, and software applications.

Mathematics 310. Functions, Probability and Statistics. Examines functions, probability and statistics in the context of real life situations and will include student investigations and hands on activities. Prerequisite: MATH 309 and proficiency in computer spreadsheets, or permission of instructor..

(2) Understanding of the sequential nature of mathematics. Mathematics 309. Numeration Systems. A study of different numeration systems. The development and characteristics of ancient numeration systems, base numeration systems and the real number system will be studied. Problem solving is emphasized.

(3) Understanding of the multiple representations of mathematical concepts and procedures.

Mathematics 309. Numeration Systems. A study of different numeration systems. The development and characteristics of ancient numeration systems, base numeration systems and the real number system will be studied. Problem solving is emphasized.

(4) Understanding of and the ability to use the five processes – reasoning mathematically, solving problems, communicating mathematics effectively, making mathematical connections, and using mathematical representations at different levels of complexity.

Mathematics 309. Numeration Systems. A study of different numeration systems. The development and characteristics of ancient numeration systems, base numeration systems and the real number system will be studied. Problem solving is emphasized.

(5) Understanding of the contributions of different cultures toward the development of mathematics, and the role of mathematics in culture and society.

Mathematics 309. Numeration Systems. A study of different numeration systems. The development and characteristics of ancient numeration systems, base numeration systems and the real number system will be studied. Problem solving is emphasized.

(6) Understanding of the role of technology and the ability to use calculators and computers in the teaching and learning of mathematics. Education 450. Principles of Instruction. (PK-8). Methods of instruction in the elementary and middle

school. The class will focus on generic teaching strategies, technologies, time utilization, teaching effectiveness research, and professional responsibilities. Required for those seeking licensure to teach at the elementary and/or middle school levels.

Education 451. Curriculum in the Elementary School (PK-6). This course will focus on mathematics, science, and social studies. Interdisciplinary units and content appropriate pedagogical approaches will be utilized to meet the Virginia standards of learning in grades PK-6. Required for those seeking a teaching license with an endorsement to teach at the elementary level.

1) Understanding of the knowledge, skills, and processes of history and the social science disciplines as defined in the Virginia Standards of Learning and how the standards provide the necessary foundation for teaching history and social science, including in:

Sociology 320. Sociology of Education. Sociology of Education examines the structure and process of education in contemporary society. The primary focus is on U.S. public education. Topics include the contribution of sociology to understanding education and teaching; the relationship of education to other institutions such as the family, government, religion, and the economy; demographic changes that effect education; the effect of social class on student achievement and teaching; formal and informal positions, roles and processes in schools; and consideration of current issues such as school funding, compensatory and special education programs, race and gender issues, and educational reform movements. Open to Juniors and Seniors only.

Education 450. Principles of Instruction. (PK-8). Methods of instruction in the elementary and middle school. The class will focus on generic teaching strategies, technologies, time utilization, teaching effectiveness research, and professional responsibilities. Required for those seeking licensure to teach at the elementary and/or middle school levels.

Education 451. Curriculum in the Elementary School (PK-6). This course will focus on mathematics, science, and social studies. Interdisciplinary units and content appropriate pedagogical approaches will be utilized to meet the Virginia standards of learning in grades PK-6. Required for those seeking a teaching license with an endorsement to teach at the elementary level.

(a) History.

(i) The contributions of ancient civilizations to American social and political institutions; History 100. Foundations of Western Civilization. An introduction to the foundations of Western Civilization from the Dawn of Man through the Reformation, with an emphasis on the political, economic, social, intellectual, and cultural attributes that made this civilization unique. In the context of this course, students will come to understand the historical development of western civilization, relate the development of Western civilization to that of other regions of the world, and discuss how historical developments influence the present day.

History 110. Modern Western Civilization. A survey of the development of Modern Western Civilization from the Age of Absolutism to the present, with emphasis upon the political, economic, social, cultural, and intellectual attributes that have marked its rise to world-wide influence in the twentieth century.

(ii) Major events in Virginia history from 1607 to the present;

History 221. United States History. A survey of American life from the Colonial Era to 1877, with emphasis upon the political, cultural, diplomatic, and societal forces which have shaped its development.

History 222. United States History. A survey of American life from 1877 to modern times, with emphasis upon the political, cultural, diplomatic, and societal forces which have shaped its development.

(iii) Key individuals, documents, and events in the American revolution;

History 221. United States History. A survey of American life from the Colonial Era to 1877, with emphasis upon the political, cultural, diplomatic, and societal forces which have shaped its development.

History 222. United States History. A survey of American life from 1877 to modern times, with emphasis upon the political, cultural, diplomatic, and societal forces which have shaped its development.

(iv) The evolution of America's constitutional republic, its ideas, institutions, and practices;

History 221. United States History. A survey of American life from the Colonial Era to 1877, with emphasis upon the political, cultural, diplomatic, and societal forces which have shaped its development.

History 222. United States History. A survey of American life from 1877 to modern times, with emphasis upon the political, cultural, diplomatic, and societal forces which have shaped its development.

Political Science 150. American Government and Politics. An introduction to the American political system, with an emphasis upon the national political institutions, processes, groups, public behavior, and issues that shape contemporary society.

(b) Geography

(i) The use of maps and other geographic representations, tools, and technologies to acquire, process, and report information;

Geography 241. Cultural Geography. A study of the interaction between man and the land. Spatial and time elements are interwoven with selected topics such as man's religions, settlement patterns, political organization, economics, and population characteristics.

Geography 342 (Biology 342, Earth Science 342). Terrestrial Biogeography. Investigates the past and present geographic distribution of organisms on land. This broad, interdisciplinary course will combine insights from biology, ecology, geography, and geology to examine changes in species distribution over space and time. The course will address topics including: 1) biological patterns across the globe, 2) underlying physical factors controlling these patterns, 3) the role of earth's history in developing these patterns, 4) and implications for the conservation of plants and animals.

(ii) The relationship between human activity and the physical environment in the community and the world; Earth Science 300. The Dynamic Planet. This course explores the major principles of the earth sciences, including geology, oceanography, meteorology and astronomy. The course focuses on earth-shaping processes, atmospheric dynamics, oceanographic circulation, and earth's place in the solar system. It is designed to develop an awareness and appreciation for these geosystems and their important interrelationships, as well as an understanding of the scientific approach to problem solving. Emphasis will be placed on interactions between systems in order to better understand the earth as a single, multidimensional system. For liberal studies majors and others seeking teaching endorsement.

Philosophy 308. Introduction to Ethics. An introduction to ethical theories and their applications to moral issues. This course has three major components: (1) a survey of the main normative and metaethical theories; (2) a detailed examination of the method of philosophical analysis; and (3) the application of ethical theories and philosophical analysis to contemporary moral issues.

Geography 241. Cultural Geography. A study of the interaction between man and the land. Spatial and time elements are interwoven with selected topics such as man's religions, settlement patterns, political organization, economics, and population characteristics.

Geography 342 (Biology 342, Earth Science 342). Terrestrial Biogeography. Investigates the past and present geographic distribution of organisms on land. This broad, interdisciplinary course will combine insights from biology, ecology, geography, and geology to examine changes in species distribution over space and time. The course will address topics including: 1) biological patterns across the globe, 2) underlying physical factors controlling these patterns, 3) the role of earth's history in developing these patterns, 4) and implications for the conservation of plants and animals.

(iii) Physical processes that shape the surface of the earth; Earth Science 300. The Dynamic Planet. This course explores the major principles of the earth sciences, including geology, oceanography, meteorology and astronomy. The course focuses on earth-shaping processes, atmospheric dynamics, oceanographic circulation, and earth's place in the solar system. It is designed to develop an awareness and appreciation for these geosystems and their important interrelationships, as well as an understanding of the scientific approach to problem solving. Emphasis will be placed on interactions between systems in order to better understand the earth as a single, multidimensional system. For liberal studies majors and others seeking teaching endorsement.

(c) Civics

(i) The privileges and responsibilities of good citizenship and the importance of the Rule of Law for the protection of individual rights; Political Science 150. American Government and Politics. An introduction to the American political system, with an emphasis upon the national political institutions, processes, groups, public behavior, and issues that shape contemporary society.

(ii) The process of making laws in the United States and the fundamental ideals and principles of a republican form of government; and Political Science 150. American Government and Politics. An introduction to the American political system, with an emphasis upon the national political institutions, processes, groups, public behavior, and issues that shape contemporary society.

(iii) The understanding that Americans are a people of diverse ethnic origins, customs, and traditions, who are united by basic principles of a republican form of government and a common identity as Americans.

History 221. United States History. A survey of American life from the Colonial Era to 1877, with emphasis upon the political, cultural, diplomatic, and societal forces which have shaped its development.

History 222. United States History. A survey of American life from 1877 to modern times, with emphasis upon the political, cultural, diplomatic, and societal forces which have shaped its development.

(d) Economics.

(i) The basic economic principles that underlie the United States market economy;

History 221. United States History. A survey of American life from the Colonial Era to 1877, with emphasis upon the political, cultural, diplomatic, and societal forces which have shaped its development.

History 222. United States History. A survey of American life from 1877 to modern times, with emphasis upon the political, cultural, diplomatic, and societal forces which have shaped its development.

(ii) The role of the individual and how economic decisions are made in the market

place; and

History 221. United States History. A survey of American life from the Colonial Era to 1877, with emphasis upon the political, cultural, diplomatic, and societal forces which have shaped its development.

History 222. United States History. A survey of American life from 1877 to modern times, with emphasis upon the political, cultural, diplomatic, and societal forces which have shaped its development.

(iii) The role of government in the structure of the United States economy. Political Science 150. American Government and Politics. An introduction to the American political system, with an emphasis upon the national political institutions, processes, groups, public behavior, and issues that shape contemporary society.

(2) Understanding of the nature of history and the social sciences, and how the study of the disciplines assists students in developing critical thinking skills in helping them to understand:

(a) The relationship between past and present;

Geography 342 (Biology 342, Earth Science 342). Terrestrial Biogeography. Investigates the past and present geographic distribution of organisms on land. This broad, interdisciplinary course will combine insights from biology, ecology, geography, and geology to examine changes in species distribution over space and time. The course will address topics including: 1) biological patterns across the globe, 2) underlying physical factors controlling these patterns, 3) the role of earth's history in developing these patterns, 4) and implications for the conservation of plants and animals.

Geography 241. Cultural Geography. A study of the interaction between man and the land. Spatial and time elements are interwoven with selected topics such as man's religions, settlement patterns, political organization, economics, and population characteristics.

History 221. United States History. A survey of American life from the Colonial Era to 1877, with emphasis upon the political, cultural, diplomatic, and societal forces which have shaped its development.

History 222. United States History. A survey of American life from 1877 to modern times, with emphasis upon the political, cultural, diplomatic, and societal forces which have shaped its development.

(b) The use of primary sources such as: artifacts, letters, photographs, and newspapers;

History 221. United States History. A survey of American life from the Colonial Era to 1877, with emphasis upon the political, cultural, diplomatic, and societal forces which have shaped its development.

History 222. United States History. A survey of American life from 1877 to modern times, with emphasis upon the political, cultural, diplomatic, and societal forces which have shaped its development.

English 381. Literature for Young Adults. A survey of young adult literature from 1967 to the present. Selection and evaluation of books, poetry, short stories, and other media. Instruction in and practice with response theory using written assignments and oral presentations. Prerequisite: completion of General Education Goal 3

Education 450. Principles of Instruction. (PK-8). Methods of instruction in the elementary and middle school. The class will focus on generic teaching strategies, technologies, time utilization, teaching effectiveness research, and professional responsibilities. Required for those seeking licensure to teach at the elementary and/or middle school levels.

Education 451. Curriculum in the Elementary School (PK-6). This course will focus on mathematics, science, and social studies. Interdisciplinary units and content appropriate pedagogical approaches will be utilized to meet the Virginia standards of learning in grades PK-6. Required for those seeking a teaching license with an endorsement to teach at the elementary level.

(c) How events in history are shaped both by ideas and actions of people; Sociology 320. Sociology of Education. Sociology of Education examines the structure and process of education in contemporary society. The primary focus is on U.S. public

education. Topics include the contribution of sociology to understanding education and teaching; the relationship of education to other institutions such as the family, government, religion, and the economy; demographic changes that effect education; the effect of social class on student achievement and teaching; formal and informal positions, roles and processes in schools; and consideration of current issues such as school funding, compensatory and special education programs, race and gender issues, and educational reform movements.

History 221. United States History. A survey of American life from the Colonial Era to 1877, with emphasis upon the political, cultural, diplomatic, and societal forces which have shaped its development.

History 222. United States History. A survey of American life from 1877 to modern times, with emphasis upon the political, cultural, diplomatic, and societal forces which have shaped its development.

(d) Diverse cultures and shared humanity; Sociology 320. Sociology of Education. Sociology of Education examines the structure and process of education in contemporary society. The primary focus is on U.S. public education. Topics include the contribution of sociology to understanding education and teaching; the relationship of education to other institutions such as the family, government, religion, and the economy; demographic changes that effect education; the effect of social class on student achievement and teaching; formal and informal positions, roles and processes in schools; and consideration of current issues such as school funding, compensatory and special education programs, race and gender issues, and educational reform movements.

History 221. United States History. A survey of American life from the Colonial Era to 1877, with emphasis upon the political, cultural, diplomatic, and societal forces which have shaped its development.

History 222. United States History. A survey of American life from 1877 to modern times, with emphasis upon the political, cultural, diplomatic, and societal forces which have shaped its development.

(e) Civic participation in a pluralistic democracy; and Sociology 320. Sociology of Education. Sociology of Education examines the structure and process of education in contemporary society. The primary focus is on U.S. public education. Topics include the contribution of sociology to understanding education and teaching; the relationship of education to other institutions such as the family, government, religion, and the economy; demographic changes that effect education; the effect of social class on student achievement and teaching; formal and informal positions, roles and processes in schools; and consideration of current issues such as school funding, compensatory and special education programs, race and gender issues, and educational reform movements.

History 221. United States History. A survey of American life from the Colonial Era to 1877, with emphasis upon the political, cultural, diplomatic, and societal forces which have shaped its development.

History 222. United States History. A survey of American life from 1877 to modern times, with emphasis upon the political, cultural, diplomatic, and societal forces which have shaped its development.

(f) The relationship between history, literature, art, and music. Sociology 320. Sociology of Education. Sociology of Education examines the structure and process of education in contemporary society. The primary focus is on U.S. public education. Topics include the contribution of sociology to understanding education and teaching; the relationship of education to other institutions such as the family, government, religion, and the economy; demographic changes that effect education; the effect of social class on student achievement and teaching; formal and informal positions, roles and processes in schools; and consideration of current issues such as school funding, compensatory and special education programs, race and gender issues, and educational reform movements.

History 221. United States History. A survey of American life from the Colonial Era to 1877, with emphasis upon the political, cultural, diplomatic, and societal forces which have shaped its development.

History 222. United States History. A survey of American life from 1877 to modern times, with emphasis upon the political, cultural, diplomatic, and societal forces which have shaped its development.

d. Science.

(1) Understanding of the knowledge, skills, and processes of the earth, life, and physical sciences as defined in the Virginia Science Standards of Learning and how these standards provide a sound foundation for teaching science in the elementary grades; Geography 342 (Biology 342, Earth Science 342). Terrestrial Biogeography. Investigates the past and present geographic distribution of organisms on land. This broad, interdisciplinary course will combine insights from biology, ecology, geography, and geology to examine changes in species distribution over space and time. The course will address topics including: 1) biological patterns across the globe, 2) underlying physical factors controlling these patterns, 3) the role of earth's history in developing these patterns, 4) and implications for the conservation of plants and animals.

Education 450. Principles of Instruction. (PK-8). Methods of instruction in the elementary and middle school. The class will focus on generic teaching strategies, technologies, time utilization, teaching effectiveness research, and professional responsibilities. Required for those seeking licensure to teach at the elementary and/or middle school levels.

Education 451. Curriculum in the Elementary School (PK-6). This course will focus on mathematics, science, and social studies. Interdisciplinary units and content appropriate pedagogical approaches will be utilized to meet the Virginia standards of learning in grades PK-6. Required for those seeking a teaching license with an endorsement to teach at the elementary level.

(2) Understanding of the nature of science and scientific inquiry, including:

(a) The role of science in explaining and predicting events and phenomena; and Geography 342 (Biology 342, Earth Science 342). Terrestrial Biogeography. Investigates the past and present geographic distribution of organisms on land. This broad, interdisciplinary course will combine insights from biology, ecology, geography, and geology to examine changes in species distribution over space and time. The course will address topics including: 1) biological patterns across the globe, 2) underlying physical factors controlling these patterns, 3) the role of earth's history in developing these patterns, 4) and implications for the conservation of plants and animals.

Education 450. Principles of Instruction. (PK-8). Methods of instruction in the elementary and middle school. The class will focus on generic teaching strategies, technologies, time utilization, teaching effectiveness research, and professional responsibilities. Required for those seeking licensure to teach at the elementary and/or middle school levels.

Education 451. Curriculum in the Elementary School (PK-6). This course will focus on mathematics, science, and social studies. Interdisciplinary units and content appropriate pedagogical approaches will be utilized to meet the Virginia standards of learning in grades PK-6. Required for those seeking a teaching license with an endorsement to teach at the elementary level.

(b) The science skills of data analysis, measurement, observation, prediction, and experimentation. Geography 342 (Biology 342, Earth Science 342). Terrestrial Biogeography. Investigates the past and present geographic distribution of organisms on land. This broad, interdisciplinary course will combine insights from biology, ecology, geography, and geology to examine changes in species distribution over space and time. The course will address topics including: 1) biological patterns across the globe, 2) underlying physical factors controlling these patterns, 3) the role of earth's history in developing these patterns, 4) and implications for the conservation of plants and animals. 2 lecture periods and 1 two hour lab period.

(3) Understanding of the knowledge, skills, and processes for an active elementary

science program including the ability to:

(a) Design instruction reflecting the goals of the Virginia Science Standards of Learning; Education 450. Principles of Instruction. (PK-8). Methods of instruction in the elementary and middle school. The class will focus on generic teaching strategies, technologies, time utilization, teaching effectiveness research, and professional responsibilities. Required for those seeking licensure to teach at the elementary and/or middle school levels.

Education 451. Curriculum in the Elementary School (PK-6). This course will focus on mathematics, science, and social studies. Interdisciplinary units and content appropriate pedagogical approaches will be utilized to meet the Virginia standards of learning in grades PK-6. Required for those seeking a teaching license with an endorsement to teach at the elementary level.

(b) Conduct research projects and experiments in a safe environment; Education 450. Principles of Instruction. (PK-8). Methods of instruction in the elementary and middle school. The class will focus on generic teaching strategies, technologies, time utilization, teaching effectiveness research, and professional responsibilities. Required for those seeking licensure to teach at the elementary and/or middle school levels.

Education 451. Curriculum in the Elementary School (PK-6). This course will focus on mathematics, science, and social studies. Interdisciplinary units and content appropriate pedagogical approaches will be utilized to meet the Virginia standards of learning in grades PK-6. Required for those seeking a teaching license with an endorsement to teach at the elementary level.

(c) Organize key science content into meaningful units of instruction; Education 450. Principles of Instruction. (PK-8). Methods of instruction in the elementary and middle school. The class will focus on generic teaching strategies, technologies, time utilization, teaching effectiveness research, and professional responsibilities. Required for those seeking licensure to teach at the elementary and/or middle school levels.

Education 451. Curriculum in the Elementary School (PK-6). This course will focus on mathematics, science, and social studies. Interdisciplinary units and content appropriate pedagogical approaches will be utilized to meet the Virginia standards of learning in grades PK-6. Required for those seeking a teaching license with an endorsement to teach at the elementary level.

(d) Adapt instruction to diverse learners using a variety of techniques; Education 450. Principles of Instruction. (PK-8). Methods of instruction in the elementary and middle school. The class will focus on generic teaching strategies, technologies, time utilization, teaching effectiveness research, and professional responsibilities. Required for those seeking licensure to teach at the elementary and/or middle school levels.

Education 451. Curriculum in the Elementary School (PK-6). This course will focus on mathematics, science, and social studies. Interdisciplinary units and content appropriate pedagogical approaches will be utilized to meet the Virginia standards of learning in grades PK-6. Required for those seeking a teaching license with an endorsement to teach at the elementary level.

(e) Evaluate instructional materials, instruction, and student achievement; and Education 450. Principles of Instruction. (PK-8). Methods of instruction in the elementary and middle school. The class will focus on generic teaching strategies, technologies, time utilization, teaching effectiveness research, and professional responsibilities. Required for those seeking licensure to teach at the elementary and/or middle school levels.

Education 451. Curriculum in the Elementary School (PK-6). This course will focus on mathematics, science, and social studies. Interdisciplinary units and content appropriate pedagogical approaches will be utilized to meet the Virginia standards of learning in grades PK-6. Required for those seeking a teaching license with an endorsement to teach at the elementary level.

(f) Incorporate instructional technology to enhance student performance in science. Education 450. Principles of

Instruction. (PK-8). Methods of instruction in the elementary and middle school. The class will focus on generic teaching strategies, technologies, time utilization, teaching effectiveness research, and professional responsibilities. Required for those seeking licensure to teach at the elementary and/or middle school levels.

Education 451. Curriculum in the Elementary School (PK-6). This course will focus on mathematics, science, and social studies. Interdisciplinary units and content appropriate pedagogical approaches will be utilized to meet the Virginia standards of learning in grades PK-6. Required for those seeking a teaching license with an endorsement to teach at the elementary level.

(4) Understanding of the content, processes, and skills of the Earth sciences, biology, chemistry, and physics supporting the teaching of elementary school science as defined by the Virginia Science Standards of Learning and equivalent course work reflecting each of these core science areas.

Geography 342 (Biology 342, Earth Science 342). Terrestrial Biogeography. Investigates the past and present geographic distribution of organisms on land. This broad, interdisciplinary course will combine insights from biology, ecology, geography, and geology to examine changes in species distribution over space and time. The course will address topics including: 1) biological patterns across the globe, 2) underlying physical factors controlling these patterns, 3) the role of earth's history in developing these patterns, 4) and implications for the conservation of plants and animals.

Biology 114. Fundamentals of Life Science. An inquiry into the common features of life at the molecular, cellular, and organismic levels. Emphasis on classification, life cycles, metabolic processes, genetics, ecology, evolution, and importance in society. For Liberal Studies majors or students seeking licensure. Does not meet the requirements for a biology major or minor.

Chemistry 100. Chemistry for Educators. This half semester course is designed for students seeking a K-8 teaching endorsement and does not fulfill requirements for any science major. This course presents basic concepts in chemistry including the structure of the atom, classification of matter, physical/chemical properties, and discussion of different types of chemical reactions.

Physics 100. Physics for Educators. This half semester course is designed for students seeking a K-8 teaching endorsement and does not fulfill requirements for any science major. Major physics concepts presented include motion, forces, energy, electricity & magnetism, light, and sound

Education 450. Principles of Instruction. (PK-8). Methods of instruction in the elementary and middle school. The class will focus on generic teaching strategies, technologies, technologies, time utilization, teaching effectiveness research, and professional responsibilities. Required for those seeking licensure to teach at the elementary and/or middle school levels.

Education 451. Curriculum in the Elementary School (PK-6). This course will focus on mathematics, science, and social studies. Interdisciplinary units and content appropriate pedagogical approaches will be utilized to meet the Virginia standards of learning in grades PK-6. Required for those seeking a teaching license with an endorsement to teach at the elementary level.

(5) Understanding of the core scientific disciplines to ensure:

(a) The ability to teach the processes and organizing concepts common to the natural and physical sciences; and Education 450. Principles of Instruction. (PK-8). Methods of instruction in the elementary and middle school. The class will focus on generic teaching strategies, technologies, time utilization, teaching effectiveness research, and professional responsibilities. Required for those seeking licensure to teach at the elementary and/or middle school levels.

Education 451. Curriculum in the Elementary School (PK-6). This course will focus on mathematics, science, and social studies. Interdisciplinary units and content appropriate pedagogical approaches will be utilized to meet the Virginia

standards of learning in grades PK-6. Required for those seeking a teaching license with an endorsement to teach at the elementary level.

(b) Student achievement in science. Education 450. Principles of Instruction. (PK-8). Methods of instruction in the elementary and middle school. The class will focus on generic teaching strategies, time utilization, teaching effectiveness research, and professional responsibilities. Required for those seeking licensure to teach at the elementary and/or middle school levels.

Education 451. Curriculum in the Elementary School (PK-6). This course will focus on mathematics, science, and social studies. Interdisciplinary units and content appropriate pedagogical approaches will be utilized to meet the Virginia standards of learning in grades PK-6. Required for those seeking a teaching license with an endorsement to teach at the elementary level.

(6) Understanding of the contributions and significance of science including:

(a) Its social and cultural significance; Biology 114. Fundamentals of Life Science. An inquiry into the common features of life at the molecular, cellular, and organismic levels. Emphasis on classification, life cycles, metabolic processes, genetics, ecology, evolution, and importance in society. For Liberal Studies majors or students seeking licensure. Does not meet the requirements for a biology major or minor.

(b) The relationship of science to technology; and Education 450. Principles of Instruction. (PK-8). Methods of instruction in the elementary and middle school. The class will focus on generic teaching strategies, time utilization, teaching effectiveness research, and professional responsibilities. Required for those seeking licensure to teach at the elementary and/or middle school levels.

Education 451. Curriculum in the Elementary School (PK-6). This course will focus on mathematics, science, and social studies. Interdisciplinary units and content appropriate pedagogical approaches will be utilized to meet the Virginia standards of learning in grades PK-6. Required for those seeking a teaching license with an endorsement to teach at the elementary level.

(c) The historical development of scientific concepts and scientific reasoning. Geography 342 (Biology 342, Earth Science 342). Terrestrial Biogeography. Investigates the past and present geographic distribution of organisms on land. This broad, interdisciplinary course will combine insights from biology, ecology, geography, and geology to examine changes in species distribution over space and time. The course will address topics including: 1) biological patterns across the globe, 2) underlying physical factors controlling these patterns, 3) the role of earth's history in developing these patterns, 4) and implications for the conservation of plants and animals.

Does your program prepare special education teachers to:

- **teach students with disabilities effectively**
Yes
- **participate as a member of individualized education program teams**
Yes
- **teach students who are limited English proficient effectively**
Yes

Provide a description of how your program prepares special education teachers to teach students with

disabilities effectively, including training related to participation as a member of individualized education program teams, as defined in section 614(d)(1)(B) of the *Individuals with Disabilities Education Act*, and to effectively teach students who are limited English proficient. Include planning activities and a timeline if any of the three elements listed above are not currently in place.

INSTITUTION: Longwood University,

Program: Initial Licensure Special Education General Curriculum K-12 endorsement competencies:

A. Core Coursework

The program in special education is designed to ensure through course work and field experiences in a variety of settings that the candidate has demonstrated the following core competencies to prepare children and youth for participation in the general education curriculum and within the community to the maximum extent possible. The candidate shall also complete the competencies in at least one of the endorsement areas of Special Education General Curriculum K-12, in addition to those required under professional studies, including reading and language acquisition.

1. Foundations. Characteristics, legal and medical aspects.

a. Knowledge of the foundation for educating students with disabilities, including:

(1) Historical perspectives, models, theories, philosophies, and trends that provide the basis for special education practice;

(2) Characteristics of children and youth with disabilities relative to age, varying levels of severity, and developmental differences manifested in cognitive, linguistic, physical, psychomotor, social, or emotional functioning;

(3) Normal patterns of development (i.e., physical, psychomotor, cognitive, linguistic, social, emotional development and their relationship to the various disabilities);

(4) Medical aspects of disabilities;

(5) The dynamic influence of the family system and cultural/environmental milieu and related issues pertinent to the education of students with disabilities;

(6) Educational implications of the various disabilities; and

(7) Understanding of ethical issues and the practice of accepted standards of professional behavior.

b. An understanding and application of the legal aspects, regulatory requirements, and expectations associated with identification, education, and evaluation of students with disabilities, including:

(1) Legislative and judicial mandates related to education and special education (e.g., the Individuals with Disabilities Education Act, § 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act, the No Child Left Behind Act of 2001, etc.);

(2) Current regulations governing special education (e.g., individualized education program (IEP) development; disciplinary practices, policies, and procedures; and alternative placements/programs in schools); and

(3) "Rights and responsibilities" of parents, students, teachers, and schools as they relate to individuals with disabilities and disability issues.

SPECIAL EDUCATION 515. Survey of Exceptional Students. An introduction to all exceptionalities included in special education, psychology of exceptional learners. Implications of inclusion and legislation pertaining to the education of students with disabilities.

SPECIAL EDUCATION 520. Language Development and Disorders. The normal acquisition of language and deviations in development of language due to environmental and organic etiologies. Language development teaching methods for the exceptional child stressed.

SPECIAL EDUCATION 682. Collaboration in the School, Home and Community. Techniques for mainstreaming the child with mild/moderate disabilities through collaboration with the regular classroom teacher.

SPECIAL EDUCATION 545. Psychoeducational Assessment. Psychological and educational assessment, administration and interpretation of informal, curriculum-based, standardized, and criterion-referenced tests.

Interpretation of test results as a basis for placement and instruction.

SPECIAL EDUCATION 689. Seminar of Current Issues in Special Education. A discussion of current selected issues in special education such as litigation, legislation, personnel preparation and research.

2. Assessments and management of instruction and behavior.

a. An understanding and application of the foundation of assessment and evaluation related to best special education practice, including:

- (1) Ethical issues and responsibilities in the assessment of individuals with disabilities;
- (2) Procedures for screening, prereferral, referral, and eligibility determinations;
- (3) Factors that may influence assessment findings such as cultural, behavioral, and learning diversity;
- (4) Administration, scoring, and interpretation of commonly used individual and group instruments, including norm-referenced, criterion-referenced, and curriculum-based measures as well as task analysis, observation, portfolio, and environmental assessments; and
- (5) Synthesis and interpretation of assessment findings for eligibility, program planning, and program evaluation decisions.

b. An understanding and application of service delivery, curriculum, and instruction of students with disabilities, including:

- (1) Classroom organization and curriculum development;
- (2) Scope and sequence of the general education curriculum;
- (3) Complex nature of language acquisition and reading (reading competencies in Professional studies requirements):
Reading, special education – language acquisition and reading: Skills in this area shall be designed to impart a thorough

understanding of the complex nature of language acquisition and reading to include: phonemic awareness, an understanding of sound/symbol relationships, explicit phonics instruction, syllables, phonemes, morphemes, decoding skills, word attack skills, and a knowledge of how phonics, syntax, and semantics interact. Additional skills shall include proficiency in a wide variety of comprehension strategies, as well as the ability to foster appreciation of a variety of literature and independent reading;

- (4) Complex nature of numeracy acquisition and the sequential nature of mathematics;
- (5) Alternative ways to teach content material including curriculum adaptation and curriculum modifications;
- (6) Procedures to develop, provide, and evaluate instruction consistent with students' individual needs;
- (7) Strategies to promote successful integration of students with disabilities with their nondisabled peers;
- (8) Use of technology to promote student learning; and
- (9) Structure and organization of general education classrooms and other instructional settings representing the continuum of special education services (to include field experiences).

c. An understanding and application of classroom and behavior management techniques and individual interventions, including techniques that:

- (1) Promote emotional well-being and teach and maintain behavioral conduct and skills consistent with norms, standards, and rules of the educational environment;
- (2) Address diverse approaches based upon behavioral, cognitive, affective, social and ecological theory and practice;
- (3) Provide positive behavioral supports; and
- (4) Are based on functional assessment of behavior.

d. The ability to prepare students and work with families to promote successful student transitions throughout the educational experience to include postsecondary training, employment, and independent living that addresses an understanding of long-term planning, career development, life skills, community experiences and resources, self-advocacy and self-determination, guardianship, and legal considerations.

SPECIAL EDUCATION 515. Survey of Exceptional Students. An introduction to all exceptionalities included in special education, psychology of exceptional learners. Implications of inclusion and legislation pertaining to the education of students with disabilities.

SPECIAL EDUCATION 545. Psychoeducational Assessment. Psychological and educational assessment, administration and interpretation of informal, curriculum-based, standardized, and criterion-referenced tests.

Interpretation of test results as a basis for placement and instruction. Prerequisites: SPED 202 or 489 or 515 and SPED 375 or 520.

SPECIAL EDUCATION 540. Curriculum and Methods for Exceptional Learners: General Curriculum. This

course focuses on effective (research-based) adaptations and modifications of general educational materials and curricula for exceptional learners. Planning for individualized education programs (IEP's) across the grade levels is also included.

SPECIAL EDUCATION 565. Behavior Management. This course is designed to provide students with an overview of techniques used in the management of behavior. The principles and practice of behavior modification and applied behavior analysis for teachers will be stressed.

SPECIAL EDUCATION 519. Instructional Phonics. This course covers the principles of decoding and word identification skills. The emphasis will be on phonological and phonemic awareness, on alphabetic principles and explicit phonics instruction, and on morphemic analysis to build vocabulary. Effective practices to promote fluency with decoding skills and to improve comprehension will also be included. Students will be expected to master phonics concepts and skills and informal assessment of these skills.

SPECIAL EDUCATION 520. Language Development and Disorders. The normal acquisition of language and deviations in development of language due to environmental and organic etiologies. Language development teaching methods for the exceptional child stressed

SPECIAL EDUCATION 525. Evidence Based Language Arts Instruction. All teachers, especially special educators, must demonstrate proficiency not only with the components of evidence based Language arts instruction,

but they must also be proficient in their delivery and monitoring of this instruction. This course will systematically teach the skills needed for an individual teacher to deliver evidence based language arts programs.

SPECIAL EDUCATION 575. Career and Life Planning for Exceptional Learners in the General Curriculum. An in-depth study of preparatory skills for vocational opportunities for exceptional learners within the general curriculum. An overview of social, leisure and recreational opportunities and assistive technology for exceptional learners in the general curriculum.

SPECIAL EDUCATION 682. Collaboration in the School, Home and Community. Techniques for mainstreaming the child with mild/moderate disabilities through collaboration with the regular classroom teacher.

SPECIAL EDUCATION 692. Special Education Graduate Professional Semester. Students will be supervised in a classroom student teaching experience of at least 350 hours during their last semester of classes. For those who are already teaching under a Provisional License, the Directed Teaching semester will be a mentorship of their current teaching position. Students will need to pass Praxis II and the Virginia Communication and Literacy

Assessment (VCLA) and apply to the Office of Professional Services

3. Collaboration.

a. Skills in consultation, case management, and collaboration, including:

(1) Coordination of service delivery with related service providers, general educators, and other professions in collaborative work environments to include:

(a) Understanding the Standards of Learning (SOL), the structure of the curriculum, and accountability systems across K-12;

(b) Understanding and assessing the organization and environment of general education classrooms across the K-12 setting;

(c) Implementation of collaborative models, including collaborative consultation, co-teaching, and student intervention teams;

(d) Procedures to collaboratively develop, provide, and evaluate instructional and behavioral plans consistent with students' individual needs;

(e) Understanding the roles and responsibilities of each member of the collaborative team; and

(f) Application of effective communication strategies with a variety of stakeholders in the collaborative environment.

b. Training, managing, and monitoring paraprofessionals;

c. Involvement of families in the education of their children with disabilities;

d. Understanding the standards of professionalism;

e. Cooperating with community agencies and other resource providers; and

f. Models and strategies for promoting students' self-advocacy skills.

SPECIAL EDUCATION 519. Instructional Phonics. This course covers the principles of decoding and word

identification skills. The emphasis will be on phonological and phonemic awareness, on alphabetic principles

and explicit phonics instruction, and on morphemic analysis to build vocabulary. Effective practices to promote

fluency with decoding skills and to improve comprehension will also be included. Students will be expected to

master phonics concepts and skills and informal assessment of these skills.

SPECIAL EDUCATION 540. Curriculum and Methods for Exceptional Learners: General Curriculum. This

course focuses on effective (research-based) adaptations and modifications of general educational materials and

curricula for exceptional learners. Planning for individualized education programs (IEP's) across the grade levels

is also included.

SPECIAL EDUCATION 682. Collaboration in the School, Home and Community. Techniques for mainstreaming the child with mild/moderate disabilities through collaboration with the regular classroom teacher.

SPECIAL EDUCATION 565. Behavior Management. This course is designed to provide students with an overview of techniques used in the management of behavior. The principles and practice of behavior modification and applied behavior analysis for teachers will be stressed.

SPECIAL EDUCATION 545. Psychoeducational Assessment. Psychological and educational assessment, administration and interpretation of informal, curriculum-based, standardized, and criterion-referenced tests.

Interpretation of test results as a basis for placement and instruction.

SPECIAL EDUCATION 689. Seminar of Current Issues in Special Education. A discussion of current selected issues in special education such as litigation, legislation, personnel preparation and research.

SPECIAL EDUCATION 575. Career and Life Planning for Exceptional Learners in the General Curriculum. An in-depth study of preparatory skills for vocational opportunities for exceptional learners within the general curriculum. An overview of social, leisure and recreational opportunities and assistive technology for exceptional

learners in the general curriculum.

B. General Curriculum Coursework

The program in special education general curriculum K-12 ensures through course work and field experiences in a variety of settings that the candidate seeking endorsement in special education general curriculum has the special education core competencies and the specific competency requirements specified in this section.

1. Characteristics

a. Demonstrate knowledge of definitions, characteristics, and learning and behavioral support needs of students with disabilities who are accessing the general education curriculum at the elementary, middle, and high school levels, including but not limited to, students with:

- (1) Learning disabilities;
- (2) Emotional disturbance;
- (3) Mental retardation;
- (4) Developmental delay;
- (5) Autism;
- (6) Other health impaired;
- (7) Traumatic brain injury; and

(8) Multiple disabilities.

b. Knowledge of characteristics shall include:

(1) Age-span/developmental issues;

(2) Levels of severity;

(3) Cognitive functioning;

(4) Language development;

(5) Emotional and behavioral adjustment;

(6) Social development;

(7) Medical aspects; and

(8) Cultural/ethnic and socioeconomic factors.

2. Individualized education program implementation.

a. Apply knowledge of assessment and evaluation throughout the K-12 grade levels to:

(1) Construct, use, and interpret a variety of standardized and non-standardized data collection techniques, such as task analysis, observation, portfolio assessment and other curriculum-based measures;

(2) Make decisions about student progress, instruction, program, accommodations, placement, and teaching methodology for students with disabilities who are accessing the general education curriculum and the standards of learning; and

(3) Demonstrate the use of assessment, evaluation, and other information to develop and implement individual educational planning and group instruction with students with disabilities who are accessing the general education curriculum across the K-12 grade levels, including:

(a) Identify and apply differentiated instructional methodologies including systematic instruction, multisensory approaches, learning cognitive strategies, study skills, diverse learning styles, and technology use;

(b) Teach skills and remediate deficits in academic areas at the elementary, middle, and secondary levels;

(c) Provide explicit instruction of reading and math at appropriate developmental/grade level in a systematic and cumulative manner to students with disabilities who are accessing the general education curriculum;

(d) Knowledge and understanding of the scope and sequence of the standards of learning at the elementary, middle, and secondary levels;

(e) Promote the potential and capacity of individual students to meet high academic, behavioral, and social expectations;

(f) Design alternative ways to teach content material including modifying curriculum in both directive and nondirective methodologies;

(g) Use assistive and instructional technology in order to access the general education curriculum;

(h) Implement and evaluate group management techniques and individual interventions that teach and maintain emotional, behavioral and social skills; and

(i) Implement and monitor IEP specified accommodations within the general education classroom.

SPED 540, SPED 545, SPED 565 SPED 515, SPED 525, SPED 520, SPED 682

3. Transitioning.

a. Demonstrate the ability to prepare students and work with families to provide successful student transitions throughout the educational experience to include postsecondary training, employment, and independent living that addresses an understanding of long-term planning, career development, life skills, community experiences and resources, self-advocacy, and self-determination, guardianship and legal considerations.

(1) Skills in consultation, case management, and collaboration for students with varying degrees of disability severity.

(a) Coordinate service delivery with general educators, related service providers, and other providers;

(b) Awareness of community resources agencies and strategies to interface with community agencies when developing and planning IEPs;

(c) Knowledge of related services and accommodations that pertain to postsecondary transitions that increase student access to postsecondary education and community resources;

(d) Ability to coordinate and facilitate meetings involving parents, students, outside agencies, and administrators.

(2) Understand the difference between entitlement and eligibility for agency services as students move to the adult world including a basic understanding of Social Security Income benefits planning, work incentive, Medicaid, and community independent living.

(3) Recognize uses of technology and seek out technology at postsecondary settings that shall aid the student in their education, work, and independent living.

(4) Recognize and plan for individual student potential and their capacity to meet high academic, behavioral, and social expectations and the impact of academic and social success on personal development:

(a) Knowledge of person-centered planning strategies to promote student involvement in planning;

(b) Knowledge of generic skills that lead to success in school, work and community, including time management, preparedness, social interactions, and communication skills.

(5) Understand social skill development and the unique social skills deficits and challenges associated with disabilities:

(a) Assesses social skill strengths and needs;

(b) Plans and uses specialized social skills strategies.

(6) Knowledge of use and implementation of vocational assessments to encourage and support students' self-advocacy and self-determination skills.

(a) Knowledge of legal issues surrounding age of majority and guardianship.

SPECIAL EDUCATION 575. Career and Life Planning for Exceptional Learners in the General Curriculum. An in-depth study of preparatory skills for vocational opportunities for exceptional learners within the general curriculum. An overview of social, leisure and recreational opportunities and assistive technology for exceptional

learners in the general curriculum.

SPECIAL EDUCATION 682. Collaboration in the School, Home and Community. Techniques for mainstreaming the child with mild/moderate disabilities through collaboration with the regular classroom teacher.

C. Completion of supervised classroom experiences with students with disabilities and the general curriculum K-12.

SPECIAL EDUCATION 692. Special Education Graduate Professional Semester. Students will be supervised in a classroom student teaching experience of at least 350 hours during their last semester of classes. For those who are already teaching under a Provisional License, the Directed Teaching semester will be a mentorship of their current teaching position. Students will need to pass Praxis II and the Virginia Communication and Literacy Assessment (VCLA) and apply to the Office of Professional Services .

Section VII. Contextual Information

Please use this space to provide any additional information that describes your teacher preparation program(s). You may also attach information to this report card. The U.S. Department of Education is especially interested in any evaluation plans or interim or final reports that may be available.

Supporting Files

[Draft Institutional Report](#)

Longwood University
Traditional Program
2009-10

[Contact Us](#) - [Glossary](#) - [Log out](#)

Title II, Higher Education Act
OMB Control No.: 1840-0744 (exp. 9/30/2012)