

Department of Education
University of North Carolina-Asheville
Blueprint of 9-12 Mathematics Program

A. Description of the Proposed Program and Rationale for Changes

The following table compares the proposed revisions of the 9-12 mathematics licensure program to the current program.

Old Program	New Program
Education Courses	
EDUC 310 Introduction To Education, K-12 (3)	EDUC 210 Teaching and Learning in the 21 st Century, K-12 (4)
EDUC 311 Technology lab & Field Placement (1)	EDUC 211 Instructional Applications of Information and Communications Technology, K-12 (1)
EDUC 314 Reading & Writing in the Content Area (3)	EDUC 314 Multiple Literacies for Content Area Instruction (3)
EDUC 383 Methods & Management in the Teaching of Mathematics, 6-12 (4)	EDUC 383 Methods & Management in the Teaching of Mathematics, 6-12 (4)
EDUC 396 Research Methods in Education, K-12 (1)	EDUC 327 Differentiated Assessment and Instruction, 6-12 (3)
EDUC 455 Student Teaching & Seminar, K-12 (6)	EDUC 455 Student Teaching & Seminar (8)
EDUC 496 Directed Research in Education, K-12 (2)	EDUC 456 The Teacher as a 21 st Century Professional, K-12 (4)
Psychology Series	
PSYC 101 General Psychology: Brain & Behavioral Processes (3) OR PSYC 102 General Psychology: Personality & Social Processes (3)	Content integrated in EDUC 210 and 327
PSYC 318 Psychology Applied to Teaching (4)	
27 hours, 9 classes	27 hours, 7 classes
Mathematics Major	

MATH 191 Calculus I (4)	The core courses in the major remain the same.
MATH 192 Calculus II (4)	
MATH 251 Discrete Math (3)	
MATH 280 Introduction to the Foundations of Mathematics (3)	
MATH 291 Calculus III (4)	
MATH 332 Geometry (3)	
MATH 365 Linear Algebra I (3)	
MATH 381 Problems in Mathematics (1)	
MATH 461 Abstract Algebra I (3)	
MATH 480 Mathematics Seminar (1)	
STAT 225 Introduction to Calculus-Based Statistics (4)	
An additional 6 hours of MATH and STAT courses at the 300 or 400 level	
Required Courses Outside the Major	
Computer Science 201 Introduction to Algorithm Design (3)	This requirement remains the same.

Note: The new titles reflect our commitment to reshape course content to reflect 21st Century Knowledge, Skills, and Dispositions. For the sake of brevity, this document will discuss the most extensive programmatic changes.

UNCA program faculty began the revisioning process with the following goals:

- To address the 21st century standards thoroughly, emphasizing core subjects, 21st century content, ICT Literacy, life and leadership skills, differentiation, assessment, globalism, and family/community involvement
- To prepare candidates to work successfully with diverse groups of students and to effectively use formative and summative assessment (including multiple forms of data) to guide instruction and re-teaching
- To eliminate redundancy among courses and program activities
- To emphasize curricular integration and relevance and to reflect the current curricular realities
- To guide candidates to identify their own needs in terms of lifelong learning and professional development

The ideas for the revised program resulted from several sources:

- Data from current and former students (through course evaluations, student teaching exit interviews and surveys, ILT surveys, and their employers (ILT surveys))
- Input from public school partners, Mathematics department faculty, alumni, and current students regarding what the ideal 9-12 Mathematics licensure program might look like
- Examination of licensure programs at other liberal arts universities

Changes Reflected in the New Program

1. EDUC 210 introduces the realities of 21st century schools and classrooms and enumerates the responsibilities of public school teachers. Covers student diversity (culture, language, gender, academic/cognitive ability, socioeconomic status; developmental levels; learning styles; multiple intelligences). Emphasizes personal, professional, and social responsibility with regard to diversity considerations and differentiated instruction. Course field experiences will require candidates to apply critical thinking and problem-solving skills to their observations of/interactions with diverse student populations. Also covers: school law and accountability, particularly relative to meeting student needs; educational philosophy and self-reflection; school governance and finance; etc. Candidates will be expected to demonstrate effective communication and collaboration skills as well as ICT literacy. To accommodate the amount of content in this course and to allow for a more extensive field placement, a fourth credit hour will be added. The course is also being renumbered to allow candidates to take it earlier in their programs.

Rationale for change: To deepen candidates' understandings of the sorts of diversities they will encounter in their schools/classrooms, and to equip them with general practices used to differentiate instruction for students. This course will provide a framework for the increased emphasis on differentiation in subsequent classes. Candidates will demonstrate their leadership abilities, life skills, and ICT competency throughout course activities.

2. EDUC 211 will be completely updated to reflect the latest Instructional and Communications Technologies available to public school teachers. Emphasis will be on practical application of the Computer Skills SCOS in the classroom. In addition to basic technologies (PowerPoint, spreadsheet, database), the course will cover smart boards, podcasting, Movie Maker, NC Wise, Skype, and other current applications. The course is also being renumbered to allow candidates to take it earlier in their programs.

Rationale for change: Technology coursework needs to be regularly updated to ensure that it is current. Feedback has shown that candidates are finding technologies in their schools that they have not encountered in this course in its current iteration.

3. EDUC 314 Multiple Literacies for Content Area Instruction focuses on the expanding parameters of literacy across content areas. Covers the processes of multiple meaning-making strategies and ways to process and communicate information. Emphasizes schema theory, teaching strategies, motivation, cooperative learning and integration of communication skills. Field Placement required.

Rationale for change: This redesigned course expands the emphasis on reading and writing processes to a wider range of language use and information sharing. Core topics are covered through the lens of differentiation of instruction.

4. EDUC 327 (3) Differentiated Assessment and Instruction, 6-12 is a new course (parallel to EDUC 326 for K-6 licensure candidates) covering adolescent development, curricular assessment, and differentiated instruction. Gives particular emphasis to informal and standardized, formative and summative assessment. Candidates will conduct research into best instructional practices, plan differentiated instruction of essential curricular content based on assessment. They will design a

unit of instruction which is responsive to the School Improvement Plan and school- or district-wide initiatives.

Rationale for Change: To provide a more cohesive approach to assessment of student learning and address the emphasis on 21st Century Assessment in the public schools; to provide candidates with an opportunity to think critically about multiple aspects of student learning and to use data from assessments to drive instruction focusing on the needs of all students.

5. EDUC 396 and 496 have been replaced by EDUC 456: The Teacher as a 21st Century Professional. The new course is based on the premise that to continue to grow as teacher-leader, teachers must (a) know their own strengths and weaknesses, and develop habits as lifelong professional learners, (b) know their students and the communities served by their schools, and (c) know their colleagues and other members of the profession. Candidates in EDUC 456 will create/implement their own professional development plan, engage with their students' families and communities, and interact with peers and colleagues around current educational topics. To synthesize their learning, they will do extensive reflective writing about the activities in which they engaged, the impact of their experiences on their own professional growth, and their plans for continued learning. Taken concurrently with EDUC 455.

Rationale for Change: To emphasize the need for candidates to be proactive in their professional development and in their interactions with colleagues, students' families, and the educational community as a whole.

6. EDUC 455 has been increased to 8 credit hours so candidates will be considered full-time students.

Rationale for Change: Candidates will extend their twelve-week clinical experience through pre-clinical and post clinical observation, professional development activities, and reflection. Changing student teaching to full time will not only reflect the work they do but will also facilitate insurance and financial aid for them.

7. PSYC 101/102 and 318 have been eliminated from the program. The content from PSYC 318 has been redistributed across EDUC 210 and EDUC 327.

Rationale for Change: To eliminate redundancy and reduce program length.

B. Public School Partner Involvement in the 9-12 Mathematics Re-Envisioning Process

Public school partners, arts and sciences faculty members, program alumni, and current students have played an integral role in the re-envisioning of the 9-12 Mathematics licensure program at UNCA, providing input into the re-design of the program.

The program was re-designed in two phases. In the first phase, all faculty in the UNCA Department of Education worked with public school partners, arts and sciences liaisons, program alumni, and current students to identify district-level initiatives, review the new standards and program accreditation criteria, and discuss ideas for unit-wide changes.

Phase One: Focus on Unit-Wide Changes

- Teacher Focus Group (September 23, 2008): Cooperating teachers for all subjects/grade levels were oriented to the new program expectations and then discussed ideas for unit-wide and program changes.
- USTEC Retreat (October 28, 2008): Teachers and administrators from partner districts identified shared goals and brainstormed ideas for unit-wide program revision.
- Arts and Sciences Liaisons (October 30, 2008): Education faculty met with A&S faculty to explain implications of the re-envisioning process for major departments. A&S faculty input was solicited.
- USTEP Initial Preparation Subcommittee (December 1, 2008): Public school teachers and administrators met with department faculty and current and former students to discuss possible changes to the core requirements.
- Teacher Focus Group (December 4, 2008): Cooperating teachers for all subjects/grade levels discussed ideas for electronic evidences and program design.
- USTEP Initial Preparation Subcommittee (February 2, 2009): Committee members met to discuss the newly-designed core courses and the associated new evidences. After extensive discussion, all committee members agreed that the new core courses effectively reflect the new standards.
- Education and clinical faculty meet in two learning circles on Differentiated instruction, February 10 and 18, 2009. Discussion further supported planning of new course on assessment and differentiated instruction. Participants began consideration of course design.
- Using feedback from public school partners, department faculty vote to accept the recommendations for the new core (February 3, 2009)
- Teacher Focus Group (May 5, 2009): Discussion of Evidences Five and Six with clinical faculty and current candidates.

Phase Two: Focus on 9-12 Mathematics Program-Specific Changes

- E-mail exchanges with Mathematics Department Liaison (May 2009): discussion of 21st century Mathematics Standards and evidences.
- Meeting with coordinator of MATH 480 (May 27, 2009): discussion of evidence related to depth of content knowledge

Phase Three: Delivery and Evaluation

Once the program has been implemented, public school partners will be involved in its delivery and evaluation in several ways. Clinical teachers will serve as consultants in the development and delivery of the new classes, particularly EDUC 314 and 327, serving as guest lecturers and/or team teachers with university faculty. Further, public school personnel will be invited to lead and/or participate in the professional development discussions and seminars occurring during EDUC 456.

The coordinator and the Liaison from the Mathematics Department will meet each semester, following implementation, to evaluate the effectiveness of the program. Others involved with evaluation will include cooperating teachers, ILTs, employers, and program completers. Regular focus groups (generally held at cooperating teacher training sessions every semester) will give us up-to-date input from cooperating teachers who work with our students as we are transitioning to the new program.

C. Electronic Evidences and Standards

	Evidence	<i>Required and Recommended Alignment of the Descriptors of the Elements of each Standard with the Evidence</i>
1	Content Knowledge: Evidence that demonstrates breadth of content knowledge in the specialty area ¹ .	Required: 3b.1
2	Content Knowledge: Evidence that demonstrates candidate depth of understanding and application of content knowledge in the specialty area.	Required: 3b.1 Covered: 3b.1
3	Pedagogical and Professional Knowledge Skills and Dispositions: Evidence that demonstrates effective design of classroom instruction based on research-verified practice.	Covered: 2b.3, 2d.1., 3a.1, 3c.1, 3c.2, 3d.1, 4a.1, 4a.2, 4b.1, 4c.1, 4d.1, 4e.1, 4f.1, 5c.1
4	Pedagogical and Professional Knowledge Skills and Dispositions: Evidence that demonstrates knowledge, skills, and dispositions in practice. ²	Required: 1a.1, 1a.3, 1a.4, 1d.1, 1e.1, 2a.1, 2b.1, 2b.2, 2c.1, 2d.1, 2d.2, 3a.2, 3b.2, 3d.1, 4c.1, 4d.1, 4e.1, 4f.1, 4g.1, 4g.2, 4h.1, 4h.2, 5a.1
5	Positive Impact on Student Learning: Evidence that demonstrates impact on student learning.	Covered: 1a.1, 1a.2, 4h.1, 4h.2, 5a.1
6	Leadership and Collaboration: Evidence that demonstrates leadership and collaboration.	Covered: 1b.1, 1b.2, 1b.3, 1c.1, 1c.2, 2e.1, 5b.1

Institutions may choose to include two additional evidences and, except as noted in the table as *required*, may choose to align the descriptors differently. However, each element and all the *proficient-level* descriptors included in it **MUST** be addressed in the evidences.

The template for providing the required information follows. It includes the following three sections:

Section I: A brief description of the evidence and the descriptors of the elements of the standards it addresses.

¹ This evidence **MUST** be a transcript or passing scores on the appropriate Praxis II test(s).

² This evidence **MUST** be the state-adopted LEA/IHE Certification of Teaching Capacity.

Section II: A matrix showing where each descriptor of the elements of each standard is included in the key evidences.

Section III: A detailed description of the evidence, how it specifically addresses the descriptors for which it is cited, and how it is evaluated by the institution.

SECTION I: KEY EVIDENCES

In this section, list the 6-8 evidences that will be submitted as documentation of meeting the standards. All programs must provide a minimum of 6 evidences. A program may choose to include 2 additional evidences. The evidences must be those that all candidates in the program are required to complete and should be used by the program to determine candidate proficiencies as reflected in the program standards. Briefly describe each evidence and identify the descriptors of the elements of the standards each addresses. The recommended alignment of the descriptors with the evidences is reflected in the template. The institution may choose to align the descriptors and evidences differently. **The template submitted is to reflect the alignment used by the institution.**

Evidence	Name of Evidence	Briefly Describe the Evidence	Descriptors of the Elements of the Standards Addressed by the Evidence
1	Content Knowledge: Evidence that demonstrates breadth of content knowledge in the specialty area.	Transcript or Praxis II scores	3b.1. Demonstrates an appropriate level of content knowledge in the teaching specialty.
2	Content Knowledge: Evidence that demonstrates candidate depth of understanding and application of content knowledge in the specialty area.	Research Paper and Presentation	3b.1. Demonstrates an appropriate level of content knowledge in the teaching specialty.
3	Pedagogical and Professional Knowledge Skills and Dispositions: Evidence that demonstrates effective design of classroom instruction based on research-verified practice.	Unit Plan	<p>2b.3. Understands the influence of diversity and plans instruction accordingly.</p> <p>2d.1. Cooperates with specialists and uses resources to support the special learning needs of all students.</p> <p>3a.1. Develops and applies lessons based on the <i>North Carolina Standard Course of Study</i>.</p> <p>3c.1. Demonstrates knowledge of links between grade/subject and the <i>North Carolina Standard Course of Study</i> by relating content to other disciplines.</p> <p>3d.1. Integrates 21st century skills and content in instruction.</p> <p>4a.1. Identifies developmental levels of individual students and plans instruction accordingly.</p> <p>4a.2. Assesses and uses resources needed to address strengths and weaknesses of students.</p> <p>4b.1. Collaborates with colleagues to monitor student performance and make instruction responsive to cultural differences and individual learning needs.</p> <p>4c.1. Uses a variety of appropriate methods and materials to meet the needs of all students.</p> <p>4d.1. Integrates technology with instruction to maximize students' learning.</p> <p>4e.1. Integrates specific instruction that helps students develop the ability to apply processes and strategies for critical thinking and problem solving.</p>

			uses student learning teams. Candidates will reflect on each lesson taught.	<p>4f.1. Organizes student learning teams for the purpose of developing cooperation, collaboration, and student leadership.</p> <p>5c.1. Uses a variety of research-verified approaches to improve teaching and learning.</p>
4	<p>Pedagogical and Professional Knowledge Skills and Dispositions: Evidence that demonstrates knowledge, skills, and dispositions in practice.</p>	LEA/IHE Certification of Teaching Capacity	State-required evaluation of the candidate completed by the institution and the cooperating teacher.	<p>1a.1. Evaluates the progress of students toward high school graduation using a variety of assessment data measuring goals of the <i>North Carolina Standard Course of Study</i>.</p> <p>1a.3. Maintains a safe and orderly classroom that facilitates student learning.</p> <p>1a.4. Uses positive management of student behavior, including strategies of conflict resolution and anger management, effective communication for defusing and deescalating disruptive or dangerous behavior, and safe and appropriate seclusion and restraint.</p> <p>1d.1. Implements and adheres to policies and practices positively affecting students' learning.</p> <p>1e.1. Upholds the <i>Code of Ethics for North Carolina Educators</i> and the <i>Standards for Professional Conduct</i>.</p> <p>2a.1. Maintains a positive and nurturing learning environment.</p> <p>2b.1. Appropriately uses materials or lessons that counteract stereotypes and acknowledges the contributions of all cultures.</p> <p>2b.2. Incorporates different points of view in instruction.</p> <p>2c.1. Maintains a learning environment that conveys high expectations of every student.</p> <p>2d.1. Cooperates with specialists and uses resources to support the special learning needs of all students.</p> <p>2d.2. Uses research-verified strategies to provide effective learning activities for students with special needs.</p> <p>3a.2. Integrates effective literacy instruction throughout the curriculum and across content areas to enhance students' learning.</p> <p>3b.2. Encourages students to investigate the content area to expand their knowledge and satisfy their natural curiosity.</p> <p>3d.1. Integrates 21st century skills and content in instruction.</p> <p>4c.1. Uses a variety of appropriate methods and materials to meet the needs of all students.</p> <p>4d.1. Integrates technology with instruction to maximize students' learning.</p> <p>4e.1. Integrates specific instruction that helps students develop the ability to apply processes and strategies for critical thinking and problem solving.</p> <p>4f.1. Organizes student learning teams for the purpose of developing cooperation, collaboration, and student leadership.</p> <p>4g.1. Uses a variety of methods to communicate effectively with all students.</p> <p>4g.2. Consistently encourages and supports students to articulate thoughts and ideas clearly and effectively.</p> <p>4h.1. Uses multiple indicators, both formative and summative, to monitor and evaluate students' progress and to inform instruction.</p> <p>4h.2. Provides evidence that students attain 21st century knowledge, skills and dispositions.</p> <p>5a.1. Uses data to provide ideas about what can be done to improve students' learning.</p>

Evidence		Name of Evidence	Briefly Describe the Evidence	Descriptors of the Elements of the Standards Addressed by the Evidence
5	Positive Impact on Student Learning: Evidence that demonstrates impact on student learning.	Instructional Unit Project: Assessment Focus	Candidates will complete an in-depth diagnostic profile of a class, to include pre-teaching assessment, planning, implementation, post-teaching assessment, and remediation.	<p>1a.1. Evaluates the progress of students toward high school graduation using a variety of assessment data measuring goals of the <i>North Carolina Standard Course of Study</i>.</p> <p>1a.2 Draws on appropriate data to develop classroom and instructional plans.</p> <p>4h.1. Uses multiple indicators, both formative and summative, to monitor and evaluate students' progress and to inform instruction.</p> <p>4h.2. Provides evidence that students attain 21st century knowledge, skills and dispositions.</p> <p>5a.1. Uses data to provide ideas about what can be done to improve students' learning.</p>
6	Leadership and Collaboration: Evidence that demonstrates leadership and collaboration.	Professional Development (Self, Learner, Community) Project	Candidates will create a professional development plan and undertake activities designed to (a) strengthen their understandings of their own professional strengths and weaknesses and allow them to further develop particular areas; (b) become more deeply acquainted with their students' interests, families, living situations and work toward positive family/community contacts; and (c) consider educational issues/topics with their peers at UNCA, in their assigned schools, and at other universities.	<p>1b.1. Engages in collaborative and collegial professional learning activities.</p> <p>1b.2. Identifies the characteristics or critical elements of a school improvement plan.</p> <p>1b.3. Displays the ability to use appropriate data to identify areas of need that should be addressed in a school improvement plan.</p> <p>1c.1. Participates in professional development and growth activities.</p> <p>1c.2. Begins to develop professional relationships and networks.</p> <p>2e.1. Communicates and collaborates with the home and community for the benefit of students.</p> <p>5b.1. Participates in recommended activities for professional learning and development.</p>

SECTION II: RELATIONSHIP OF THE EVIDENCE TO THE STANDARDS

In the chart that follows identify where each proficient descriptor of each element of each standard is addressed in the evidence(s) described in Section I . Each proficient descriptor must be addressed. The template has been pre-populated with the recommended alignments. However, the template submitted MUST reflect the alignment used by the institution.

NORTH CAROLINA TEACHER STANDARD	KEY EVIDENCE(S) FROM SECTION I DEMONSTRATING THE DESCRIPTORS OF THE ELEMENTS
1. TEACHERS DEMONSTRATE LEADERSHIP	
<p>a. Teachers lead in their classrooms.</p> <ol style="list-style-type: none"> Evaluates the progress of students toward high school graduation using a variety of assessment data measuring goals of the North Carolina Standard Course of Study. Draws on appropriate data to develop classroom and instructional plans. Maintains a safe and orderly classroom that facilitates student learning. Uses positive management of student behavior, effective communication for defusing and deescalating disruptive or dangerous behavior, and safe and appropriate seclusion and restraint. 	<p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p> <p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p> <p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p> <p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p>
<p>b. Teachers demonstrate leadership in the school.</p> <ol style="list-style-type: none"> Engages in collaborative and collegial professional learning activities. Identifies the characteristics or critical elements of a school improvement plan. Displays the ability to use appropriate data to identify areas of need that should be addressed in a school improvement plan. 	<p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p> <p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p> <p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p>

NORTH CAROLINA TEACHER STANDARD	KEY EVIDENCE(S) FROM SECTION I DEMONSTRATING THE DESCRIPTORS OF THE ELEMENTS
<p>c. Teachers lead the teaching profession.</p> <ol style="list-style-type: none"> 1. Participates in professional development and growth activities. 2. Begins to develop professional relationships and networks. 	<p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p> <p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p>
<p>d. Teachers advocate for schools and students.</p> <ol style="list-style-type: none"> 1. Implements and adheres to policies and practices positively affecting students' learning. 	<p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p>
<p>e. Teachers demonstrate high ethical standards</p> <ol style="list-style-type: none"> 1. Upholds the <i>Code of Ethics for North Carolina Educators</i> and the <i>Standards for Professional Conduct</i>. 	<p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p>
<p>2. TEACHERS ESTABLISH A RESPECTFUL ENVIRONMENT FOR A DIVERSE POPULATION OF STUDENTS</p>	
<p>a. Teachers provide an environment in which each child has a positive, nurturing relationship with caring adults.</p> <ol style="list-style-type: none"> 1. Maintains a positive and nurturing learning environment. 	<p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p>
<p>b. Teachers embrace diversity in the school community and in the world.</p> <ol style="list-style-type: none"> 1. Appropriately uses materials or lessons that counteract stereotypes and acknowledges the contributions of all cultures. 2. Incorporates different points of view in instruction. 3. Understands the influence of diversity and plans instruction accordingly. 	<p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p> <p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p> <p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p>

NORTH CAROLINA TEACHER STANDARD	KEY EVIDENCE(S) FROM SECTION I DEMONSTRATING THE DESCRIPTORS OF THE ELEMENTS
<p>c. Teachers treat students as individuals.</p> <p>1. Maintains a learning environment that conveys high expectations of every student.</p>	<p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p>
<p>d. Teachers adapt their teaching for the benefit of students with special needs.</p> <p>1. Cooperates with specialists and uses resources to support the special learning needs of all students.</p> <p>2. Uses research-verified strategies to provide effective learning activities for students with special needs.</p>	<p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p> <p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p>
<p>e. Teachers work collaboratively with the families and significant adults in the lives of their students.</p> <p>1. Communicates and collaborates with the home and community for the benefit of students.</p>	<p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p>
<p>3. TEACHERS KNOW THE CONTENT THEY TEACH</p>	
<p>a. Teachers align their instruction with the <i>North Carolina Standard Course of Study</i>.</p> <p>1. Develops and applies lessons based on the <i>North Carolina Standard Course of Study</i>.</p> <p>2. Integrates effective literacy instruction throughout the curriculum and across content areas to enhance students' learning.</p>	<p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p> <p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p>
<p>b. Teachers know the content appropriate to their teaching specialty.</p> <p>1. Demonstrates and appropriate level of content knowledge in the teaching specialty.</p> <p>2. Encourages students to investigate the content area to expand their knowledge and satisfy their natural curiosity.</p>	<p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p> <p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p>

NORTH CAROLINA TEACHER STANDARD	KEY EVIDENCE(S) FROM SECTION I DEMONSTRATING THE DESCRIPTORS OF THE ELEMENTS
<p>c. Teachers recognize the interconnectedness of content areas/discipline.</p> <ol style="list-style-type: none"> 1. Demonstrates knowledge of links between grade/subject and the <i>North Carolina Standard Course of Study</i> by relating content to other disciplines. 2. Relates global awareness to the subject. 	<p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p> <p><input type="checkbox"/>#1 #2 <input type="checkbox"/>#3x <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p>
<p>d. Teachers make instruction relevant to students.</p> <ol style="list-style-type: none"> 1. Integrates 21st century skills and content in instruction. 	<p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p>
4. TEACHERS FACILITATE LEARNING FOR THEIR STUDENTS	
<p>a. Teachers know the ways in which learning takes place, and they know the appropriate levels of intellectual, physical, social, and emotional development of their students.</p> <ol style="list-style-type: none"> 1. Identifies developmental levels of individual students and plans instruction accordingly. 2. Assess and uses resources needed to address strengths and weaknesses of students. 	<p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p> <p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p>
<p>b. Teachers plan instruction appropriate for their students.</p> <ol style="list-style-type: none"> 1. Collaborates with colleagues to monitor student performance and make instruction responsive to cultural differences and individual learning needs. 	<p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p>
<p>c. Teachers use a variety of instructional methods.</p> <ol style="list-style-type: none"> 1. Uses a variety of appropriate methods and materials to meet the needs of all students. 	<p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p>
<p>d. Teachers integrate and utilize technology in their instruction.</p> <ol style="list-style-type: none"> 1. Integrates technology with instruction to maximize students' learning. 	<p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p>

NORTH CAROLINA TEACHER STANDARD	KEY EVIDENCE(S) FROM SECTION I DEMONSTRATING THE DESCRIPTORS OF THE ELEMENTS
<p>e. Teachers help students develop critical-thinking and problem-solving skills.</p> <p>1. Integrates specific instruction that helps students develop the ability to apply processes and strategies for critical thinking and problem solving.</p>	<p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p>
<p>f. Teachers help students to work in teams and develop leadership qualities.</p> <p>1. Organizes student learning teams for the purpose of developing cooperation, collaboration, and student leadership.</p>	<p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p>
<p>g. Teachers communicate effectively.</p> <p>1. Uses a variety of methods to communicate effectively with all students.</p> <p>2. Consistently encourages and supports students to articulate thoughts and ideas clearly and effectively.</p>	<p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p> <p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p>
<p>h. Teachers use a variety of methods to assess what each student has learned.</p> <p>1. Uses multiple indicators, both formative and summative, to monitor and evaluate students' progress and to inform instruction.</p> <p>2. Provides evidence that students attain 21st century knowledge, skills and dispositions.</p>	<p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p> <p><input type="checkbox"/>#1 <input type="checkbox"/>#2 <input type="checkbox"/>#3 <input type="checkbox"/>#4 <input type="checkbox"/>#5 <input type="checkbox"/>#6 <input type="checkbox"/>#7 <input type="checkbox"/>#8</p>

NORTH CAROLINA TEACHER STANDARD	KEY EVIDENCE(S) FROM SECTION I DEMONSTRATING THE DESCRIPTORS OF THE ELEMENTS
5. TEACHERS REFLECT ON THEIR PRACTICE	
a. Teachers analyze student learning. 1. Uses data to provide ideas about what can be done to improve students' learning.	<input type="checkbox"/> #1 <input type="checkbox"/> #2 <input type="checkbox"/> #3 <input type="checkbox"/> #4 <input type="checkbox"/> #5 <input type="checkbox"/> #6 <input type="checkbox"/> #7 <input type="checkbox"/> #8
b. Teachers link professional growth to their professional goals. 1. Participates in recommended activities for professional learning and development.	<input type="checkbox"/> #1 <input type="checkbox"/> #2 <input type="checkbox"/> #3 <input type="checkbox"/> #4 <input type="checkbox"/> #5 <input type="checkbox"/> #6 <input type="checkbox"/> #7 <input type="checkbox"/> #8
c. Teachers function effectively in a complex, dynamic environment. 1. Uses a variety of research-verified approaches to improve teaching and learning.	<input type="checkbox"/> #1 <input type="checkbox"/> #2 <input type="checkbox"/> #3 <input type="checkbox"/> #4 <input type="checkbox"/> #5 <input type="checkbox"/> #6 <input type="checkbox"/> #7 <input type="checkbox"/> #8

SECTION III: DETAILED DESCRIPTION OF THE EVIDENCES

#1 Required (State prescribed)

Content Knowledge: Evidence that demonstrates breadth of content knowledge in the specialty area.

A transcript OR passing scores on the appropriate Praxis II test(s) must be submitted. This evidence must address descriptor 3b.1.

I. Name of Evidence: Transcript

II. Specific Requirements: Complete a major in Mathematics with the Teacher Licensure concentration, which covers the full range of competencies required for 9-12 Mathematics Licensure, including knowledge of number sense, numeration, numerical operation, and algebraic thinking; spatial sense, measurement, and geometry; patterns, relationships, and functions; data analysis, probability, and statistics; mathematical process skills; and mathematical tools.

III. How the Evidence Addresses the Descriptors: Candidates must demonstrate breadth of content knowledge in the specialty area by achieving a grade of C or better in their major and licensure course work. The 9-12 Math licensure program of study has been carefully reviewed to ensure that all specialty standards are being addressed, either by particular courses or through competency-based activities within courses. We will assess candidates' transcripts to ensure they have grades of C or better on 24 hours of the relevant coursework which is listed in the table at the beginning of this document.

Standard 1: Number sense, numeration, numerical operation, and algebraic thinking
Mathematics teacher candidates possess the mathematical knowledge needed to enable students to understand numbers, ways of representing numbers, and relationships among numbers and number systems and to enable students to understand meanings of operations and how they relate to one another. Candidates enable students to develop computational fluency and to make reasonable estimates. At the middle and secondary grade levels, teacher candidates need the mathematical knowledge to enable students to transfer their understanding of numbers and number operations to symbolic expressions involving variables. Courses in mathematics major, EDUC 383

Standard 2: Spatial sense, measurement and geometry
Mathematics teacher candidates possess the mathematical knowledge needed to enable students to analyze the characteristics and properties of 2- and 3-dimensional geometric shapes; to develop mathematical arguments about geometric relationships; to understand units, processes of measure, and measurable attributes of objects; and

to apply appropriate techniques, tools, and formulas to determine measurements. They enable students to develop the visualization, spatial reasoning, and geometric modeling to solve problems. Teacher candidates particularly at middle and secondary grade levels need the mathematical knowledge to enable students to use coordinate geometry in solving problems, to understand concepts of symmetry, and to apply transformations. MATH 191, MATH 192, MATH 332, EDUC 383

Standard 3: Patterns, relationships, and functions

Mathematics teacher candidates possess the mathematical knowledge needed to enable students to understand patterns, relations, and functions. This includes the use of algebraic symbols to represent and analyze mathematical situations, the use of mathematical models to represent and understand quantitative relationships, and the analysis of “change” in various contexts. MATH 191, MATH 192, MATH 291, MATH 461

Standard 4: Data analysis, probability and statistics

Mathematics teacher candidates possess the mathematical knowledge needed to enable students to formulate questions that can be addressed with data, along with the necessary skills to collect, organize, and display relevant data to answer those questions. They enable students to select and use appropriate statistical methods to analyze data, to understand and apply basic concepts of probability, and to develop and evaluate inferences and predictions that are based on data. STAT 225

Standard 5: Mathematical process skills

Mathematics teacher candidates possess the mathematical knowledge needed to enable students to develop skills in problem solving, making connections between various branches of mathematics, reasoning and proof, and communication and representation of mathematical ideas. MATH 280, MATH 381, EDUC 383

Standard 6: Mathematical tools

Mathematics teacher candidates must be versed in the appropriate use of mathematical tools and manipulatives. EDUC 383, MATH 332

IV. How the Evidence Is Evaluated: Candidates must meet university and departmental grade and hour requirements. Candidates must have a C or better on 24 hours of the above-listed coursework. Data are gathered by Institutional Research and evaluated by the 9-12 Mathematics coordinator.

#3 Required

Pedagogical and Professional Knowledge Skills and Dispositions: Evidence that demonstrates effective design of classroom instruction based on research-verified practice.

It is recommended this evidence address descriptors 1a.2, 2b.3, 2d.1, 3a.1, 3c.1, 3c.2, 3d.1, 4a.1, 4a.2, 4b.1, 4c.1, 4d.1, 4e.1, 4f.1, 5c.1.

Descriptors addressed IF different from those recommended: 2b.3, 2d.1, 3a.1, 3c.1, 3d.1, 4a.1, 4a.2, 4b.1, 4c.1, 4d.1, 4e.1, 4f.1, 5c.1

I. Name of Evidence: Research Paper and Presentation (completed in MATH 480)

II. Specific Requirements: In the Research Paper and Presentation assignment the Mathematics major is required to demonstrate skills of information literacy, oral competency, and written exposition. The candidate must use primary sources to develop a research paper and presentation that demonstrate the ability to learn independently about a mathematical topic or application in more depth than the treatment of that topic in a standard undergraduate course. The candidate demonstrates the ability to communicate effectively through writing and demonstrates the ability to communicate mathematical content effectively by speaking to a group and using appropriate multimedia tools. By conducting an in-depth study on a mathematical topic, the candidate will demonstrate the ability to collect and synthesize information from journals and databases.

III. How the Evidence Addresses the Descriptors: This seminar research paper requires candidates to demonstrate a sophisticated level of understanding of a mathematical topic or application and to synthesize information from many primary sources. Candidates must communicate their ideas successfully in a substantial written product and presentation to faculty and their peers.

IV. How the Evidence Is Evaluated: The Research Paper and Presentation is evaluated by a committee of faculty in the Mathematics Department. The following is a list of the elements assessed for the final product:

- Substance of the mathematical content
- Correctness and completeness of the mathematical details
- Clarity of the written product and of the presentation
- Quality of the writing
- Mastery of the multimedia elements of the presentation
- Appropriate formatting of sources.

I. Name of Evidence: Integrated Thematic Unit Plan

II. Specific Requirements: Candidates will design and implement a five-day integrated thematic teaching unit. In consultation with their cooperating teacher, they will select a unit topic and undertake the following tasks:

Requirements:

1. Situational Context : The situational context should provide information about the school and the classroom to which you have been assigned. Ask your cooperating teacher for information about the school: size; ethnic diversity (in general); language diversity; percentage of students on free and reduced lunch, other descriptors for this school.

You will also describe your class of students. Be sure to include: gender breakdown; ethnic diversity; language diversity; special services/needs (specific information here may be confidential; if this is the case, ask your teacher simply to give you a number of students receiving special services); estimate of number of students receiving free/reduced lunch (also may be confidential); learning styles (if known), behavioral and motivational challenges. Describe class rules, rewards and consequences.

Explain how your situational context will affect your planning and teaching. Describe special considerations you'll need to make.

2. Objectives: What NC SCS goals and objectives are you addressing in the unit? What cognitive levels (Bloom's Taxonomy) are you addressing? What learning outcomes are you addressing?
3. Pre-Teaching Assessment: Utilize your learning from EDUC 327 to design an appropriate pre-teaching assessment that measures instructional and SCS goals and taps into a variety of levels of thinking. (The assessment does not have to be paper and pencil but must be measurable and provide results that can be analyzed as to number/percent correct, etc.) The assessment must include: goals/objectives; assessment items; directions for administration; scoring guide; and materials (describe or include).
Administer the assessment to your students prior to writing your lesson plans. Analyze the data. Consider the performance of your students as a whole, and as members of NCLB subgroups. Note patterns, misconceptions, areas with which your students are already familiar, etc. Write up your analysis, including considerations you'll need to make when writing your lesson plans. How will what you learned impact the methods and materials you use and the way you assess your students' progress on the unit? Submit student work samples representing various levels of performance.
4. Study of School Services: Make appointments with the specialists and resource people listed on the Study of School Services for. This activity is designed to allow you to talk to the various people who can support you as you plan and deliver your unit. Upon completion of the survey, write a summary that details how you will use what you learned in your lesson planning, implementation, and reflection.

5. Writing the Plans and Teaching the Unit: Using the information you gathered during the pre-teaching assessment, you will write five lesson plans following the given format. Be sure to include 3 levels of differentiation for instruction. Within your five lessons, you must include each of the following stipulations at least once: (a) use instructional technology effectively; (b) develop critical thinking and problem-solving; (c) organize student learning teams to encourage cooperation, collaboration, and leadership; (d) make cross curricular connections which are effective.
6. Assessment: Describe the various ways you will assess student learning. Make sure you use formative and summative assessments. Make sure assessments address a variety of cognitive levels and multiple intelligences. I will need to know how assignments figure into an overall grade. Include rubrics and scoring keys as appropriate
7. Reflection: This component will be specific to the three days you taught in your field placement. Make sure to reflect on the content and pedagogy. Make sure to analyze both cause and effect and include suggestions for improvement

III. How the Evidence Addresses the Descriptors:

- 2b.3: Students must first analyze the diversity in their schools and classrooms for instructional implications. They will then administer the pre-assessment, which will provide them information about specific student knowledge on the unit topic. They are required to specify differentiated instructional strategies as part of the plan, implement these strategies, and reflect on their effectiveness.
- 2d.1: Candidates will conduct a Study of School Services which requires them to interview various specialists and resource people in the school. They will then write a summary of the experience, reflecting on how they will use what they have learned to assist them as they design and implement the unit.
- 3a.1: All lessons must be aligned with the *North Carolina Standard Course of Study*. Objectives are specified.
- 3c.1: The unit must involve cross curricular integration by relating content to other disciplines. Candidates are observed by their course instructor and cooperating teacher to see that this integration is accomplished successfully in practice. This integration is also reflected in the field placement assessment.
- 3d.1: Candidates are required to indicate in the objectives for their lesson plans which 21st Century skills and content the lesson/unit address.
- 4a.1: Candidates must discuss the developmental levels of their students in their plans for differentiated instruction.
- 4a.2 As part of their analysis of the pre-assessment results, candidates must give an explanation of the relationship between their assessment data and the unit resources they will use.
- 4b.1: Cooperating teachers and candidates will work together to assess monitoring, culturally relevant teaching, and differentiation. These topics will be covered in the

candidate's daily reflections and will be evaluated on the clinical placement assessment form to be completed by the cooperating teacher. Further, in conducting the Study of School Services, candidates will collaborate with school personnel who can advise them on making their lessons responsive to individual student needs.

- 4c.1: Lesson plans must demonstrate a variety of methods and materials as evidenced by the unit rubric.
- 4d.1: Every candidate must include instructional technology as an aspect of their unit.
- 4e.1: Lesson plan objectives and procedures are evaluated for higher-order thinking skills and levels of questioning. This indicator is further assessed as part of the final field placement assessment.
- 4f.1: Candidates must include the use of student learning teams as an aspect of their unit.
- 5c.1: In their reflections on instruction, candidates must use scholarly literature to defend their use of particular teaching practices. This element will be assessed in the rubric for the unit.

IV. How the Evidence Is Evaluated: Units are evaluated by means of a comprehensive unit rubric. All candidates must score at a Level 3 or above on each element of the unit rubric in order to successfully complete the unit plan. This is a requirement for candidates to meet for the Decision Point which is assessed before they are allowed to continue to student teaching. Candidates' teaching is observed and evaluated by their cooperating teacher and by the course instructor using a common rubric.

#4 Required (State-prescribed)

Pedagogical and Professional Knowledge Skills and Dispositions: Evidence that demonstrates knowledge, skills, and dispositions in practice.

This evidence must be the state-approved LEA/IHE Certification of Teaching Capacity.

Descriptors addressed: 1a.1, 1a.3, 1a.4, 1d.1, 1e.1, 2a.1, 2b.1, 2b.2, 2c.1, 2d.1, 2d.2, 3a.2, 3b.2, 3d.1, 4c.1, 4d.1, 4e.1, 4f.1, 4g.1, 4g.2, 4h.1, 4h.2, 5a.1

I. Name of Evidence: LEA/IHE Certification of Teaching Capacity

II. Specific Requirements: The cooperating teacher, the university supervisor, and the candidate will work together to complete the Student Teaching Exit Criteria, which will include the LEA/IHE Certification of Teaching Capacity.

III. How the Evidence Addresses the Descriptors: As set out by NCDPI

IV. How the Evidence Is Evaluated: All candidates will be required to score at the "Proficient" level on all indicators on the LEA/IHE Certification of Teaching Capacity.

#5 Required

Positive Impact on Student Learning: Evidence that demonstrates impact on student learning.

It is recommended this evidence address descriptors 1a.1, 4b.1, 4h.1, 4h.2, 5a.1.

Descriptors addressed IF different from those recommended: 1a.1, 1a.2, 4h.1, 4h.2, 5a.1

I. Name of Evidence: Assessing, Teaching, Differentiating: Unit-Based Instruction (6-12)

II. Specific Requirements: As part of a unit of instruction to be implemented during student teaching, candidates will design and administer an appropriate pre-teaching assessment which reflects SCS goals and objectives, is developmentally appropriate, taps multiple levels of thinking, and meets the needs of the particular class of students. The candidate may look at several sources of data about students' knowledge and interests. Although the assessment may be qualitative, the candidate must be able to report the results in terms of number/percentage correct. The assessment must include: goals/objectives; assessment items; directions for administration; scoring guide; and materials.

Candidates will administer the assessment to their students prior to planning the unit of instruction. They will analyze the data, considering the performance of their students as a whole, and as members of NCLB subgroups. (Data may be presented in a table, accompanied by a narrative.) The candidate will note patterns, misconceptions, content with which students are already familiar, and areas which will require the development of background knowledge. They will use this information to plan their unit of instruction to meet the needs of different learners and also in order to prepare a final report on the impact of differentiated instruction on student learning. Candidates will be encouraged to consider the following questions: How will what you learned impact the methods and materials you use and the way you assess your students' progress on the unit? What sort of specific differentiation do you intend to make based on these data?

Candidates will plan and teach the unit of study, which must include formative assessment of the students' progress on the unit goals and objectives. They are to use the formative assessment to guide their teaching and are to speak to its effects in their lesson reflections each day.

After teaching the unit, the candidate will administer an appropriate post-teaching assessment. (This may or may not be the same assessment used prior to planning and teaching, but must address the same goals/objectives.) They will follow up with students who have not demonstrated mastery, applying appropriate teaching strategies.

Candidates will write a detailed analysis of students' learning from pre-test to post-test. What objectives did all students master? Who had gains/losses? Which students did not meet one or more objectives? (This can be reflected in a table.) Candidates will consider NCLB subgroups' performances as part of this analysis, and speak to the success (or lack thereof) of their differentiation strategies. Candidates will discuss specific 21st century knowledge, skills, and dispositions. Candidate responses will answer these questions: Were your goals/objectives appropriate for this group of students? How did students' learning contribute to their progress in the course and towards high school graduation? If not, what should you have done differently? What would have made the unit more successful? Time? Different methods? Different materials? What did the students learn from your unit? What did YOU learn?

III. How the Evidence Addresses the Descriptors

1a.1: Candidates' final report requires them to reflect upon the notion that all teachers are responsible for moving students toward high school graduation. Candidates will have to relate their experiences with assessment, teaching, and differentiation at this grade level/subject to students' eventual progress through high school.

1a.2: Candidates will utilize the results of their pre-teaching assessments to plan their unit and the results of their post-teaching assessments to develop their plans for differentiation.

4h.1: Candidates will utilize the results of the pre-teaching assessment and of formative assessment during the unit to plan and deliver the lessons. They must explain their data-driven decisions in their discussion of their pre-teaching assessment, in their lesson reflections, and in their post-assessment write-ups.

4h.2: Candidates must speak to their students' progress toward 21st century knowledge, skills, and dispositions in their pre- and post-assessment write-ups and in their lesson reflections.

5a.1: In their discussions for this project, candidates must make a direct link between their data and their ideas for improving their teaching and their students' learning.

IV. How the Evidence Is Evaluated

The evidence will be assessed by the university supervisor using a rubric which matches the template for this assignment.

#6 Required

Leadership and Collaboration: Evidence that demonstrates leadership and collaboration.

It is recommended this assessment address descriptors 1b.1, 1b.2, 1b.3, 1c.1, 1c.2, 2e.1, 5b.1.

Descriptors addressed IF different from those recommended: 1b.1, 1b.2, 1b.3, 1c.1, 1c.2, 2e.1, 5b.1

I. Name of Evidence: Professional Development Project: Self, Learner, Community

II. Specific Requirements:

Candidates will complete this assignment as part of the requirements for EDUC 383 (taken the semester prior to student teaching) and EDUC 456 (taken concurrently with student teaching). The initial task will be a thoughtful written response to the following prompt:

What is a lifelong learner? You've undoubtedly heard the phrase bandied about, and probably even think it sounds like a "no-brainer" for a future teacher...you're going to be a lifelong teacher, so of course you'll be a lifelong learner, right? But what does it really MEAN to be a lifelong learner? In this course, we're operating on the premise that teacher professionals are lifelong learners who have to "know" many things beyond their content and how to teach it.

As a 21st-Century professional, you must know your:

- students, their families, and the community served by the school.
- colleagues.
- own strengths and weaknesses, both personally and professionally.

Consider the questions below and write a thoughtful narrative response: Who are your students? Consider gender, development, home situation, ability/disability, linguistic diversity, cultural diversity. What are their lives like? What are their interests? How is the makeup of your school and classroom going to affect your teaching?

What neighborhoods are served by your school? What sort of family involvement is in evidence there? How does your cooperating teacher facilitate relationships with parents? What sorts of support services are available to families when need arises? In what ways will you "grow" your relationships with students' families and with the local community?

Who are your colleagues in the school, in the UNCA licensure program, and in licensure programs at other universities? In what ways are your experiences similar? In what ways are they different? What can your colleagues teach you? What do you have to offer them?

In what areas do you feel you've "got it together" and in which areas do you know you will need to pursue new learning and support? What do you need to learn this semester? How will you go about learning it?

Candidates will complete the initial writing in class and develop a professional development plan that addresses each of the "strands" for the class. As part of that exercise, candidates will be given a list of activities from which they can choose (and about which they should take field notes/write informal reflections) during the semester. (Some activities may be completed during the EDUC 380-level course.) Activities for each of the three course strands are:

- Knowledge of the students, their families, and the community served by the school:

- Administer, by interview or survey, an interest inventory to students. How does knowing more about your students' interests facilitate your relationships with them? Your planning? Your teaching?
- Participate in one or more parent conferences and IEP meetings as feasible. How did you prepare for the meeting? In what ways did you participate? What concerns arose? How were these handled? How did this experience benefit you?
- Maintain records of all family contacts, and give evidence of ways in which you have communicated with your students' families.
- Ride the school bus in the afternoon. Survey the neighborhood(s) through which the bus passes. How does what you see jibe with what you anticipated? What new information have you discerned as a result of this activity?
- Attend/participate in an event relevant to the community outside of school hours (PTO meeting, Fall Festival, district school board meeting, etc.). What did you learn from this experience?
- Complete a modified version of the School Services Study. Include conversations with
 - Exceptional Children's Program personnel
 - Guidance counselor
 - ELL coordinator/teacher if applicable
 - Other applicable specialists (Title I reading, etc.)
 What advice or information did you receive that will help you serve your students? What other questions arose as you met with this group of professionals?
- Knowledge of colleagues and the school
 - Select and participate in a professional reading group with UNCA peers and with preservice teachers from other institutions. You will serve as moderator for at least one group session. What points made by the book were of interest to your group? On what points did you and your colleagues agree? Disagree? How are your experiences similar to/different from those of your colleagues?
 - Examine the school improvement plan. Bring it to seminar to discuss with peers. What are the critical elements? What does YOUR school's plan have in common with your peers' plans? How do they differ? Based on your teaching and on your students' performance results, what areas, if any, do you believe should be addressed in subsequent school improvement plans? What sort of professional development activities do you think would help teachers enhance their knowledge in this area?
- Knowledge of own strengths and weaknesses – personal professional development
 - Participate in the book discussion group as outlined above.
 - Attend at least one professional development activity related to your school improvement plan. Implement, to the degree possible, your new learning. Be prepared to reflect on this experience.

For a final reflection, candidates will answer these questions, making specific references to their field notes, their professional development plan, and the response they gave to the initial prompt.

Reflect on your professional development plan in light of your experiences this semester. Describe what you learned about your students, their families, the community, your colleagues, and yourself over the course of this semester. Provide specific examples of new ideas that you've explored (whether you embraced them or ultimately decided against them). Explain how your teaching and your thinking changed as a result of the activities you undertook. What questions have arisen for you as a result of this semester's activities? Utilize your experiences to discuss plans for continued growth as a lifelong learner in each of these areas.

III. How the Evidence Addresses the Descriptors

1b.1: Several activities in which the candidates engage require them to engage collegially and collaboratively with other members of the educational community. They will participate in the discussion of professional literature with peers at UNCA and at other institutions; they will attend school-based professional development activities; they will attend regular seminars with peers to discuss educational issues and topics.

1b.2: Candidates must attain the school improvement plan, identify the critical elements, and compare it to the plans from their peers' schools, identifying commonalities and differences.

1b.3: Candidates must consider the data from their students' performance and recommend areas that might need to be addressed in a school improvement plan.

1c.1: Candidates will identify areas in which they need additional professional development and then participate in several professional relevant growth activities.

1c.2: Candidates will interact with peers at UNCA and at other universities to discuss relevant aspects of professional development. Our current partnership with Winston-Salem State University gives candidates the opportunity to get to know peers whose backgrounds and experiences vary from their own. Candidates will engage in professional conversations using technology (wikis, blogs, teleconferencing).

2e.1: Candidates will complete activities that engage them with students' families and communities. They will participate in parent-teacher conferences and IEP meetings as appropriate, ride the school bus to become familiar with the neighborhoods served by their school, maintain records of contact with families, and give evidence of ways in which they have communicated with family and community members.

5b.1: Each candidate will create an individual professional development plan and participate in appropriate activities. They will then give evidence of applying their new learning in their student teaching situation and reflect on its effectiveness; further, they will identify areas in which they need further study.

IV. How the Evidence is Evaluated: Candidate responses will be evaluated using a common rubric.

D. Timeline for Implementation

- 2008-2009 School Year: Devise new program
- April, 2009: Senate document removing HIST and PSYC requirements from K-6 program passed, instituting changes for Fall 2009
- Summer, 2009: Devise new curriculum for EDUC 211
- April-September, 2009: Prepare documents required to institute changes at UNCA
- August-December, 2009: Pilot the new Assessment course (to be numbered EDUC 326) as a Special Topics Course (EDUC 373)
- August/September, 2009: Receive feedback from NCDPI
- September – December, 2009: Submit APC documents seeking university approval of changes; revise blueprint according to DPI feedback; develop rubrics for Evidences 2, 3, 5, & 6
- Spring 2010: Pilot new courses for EDUC 210, 211, 314 and begin planning EDUC 327
- Spring 2010: All future “contracts” for candidates will follow the new program as appropriate.
- Fall 2010: Full implementation of new program, including EDUC 327 and 456