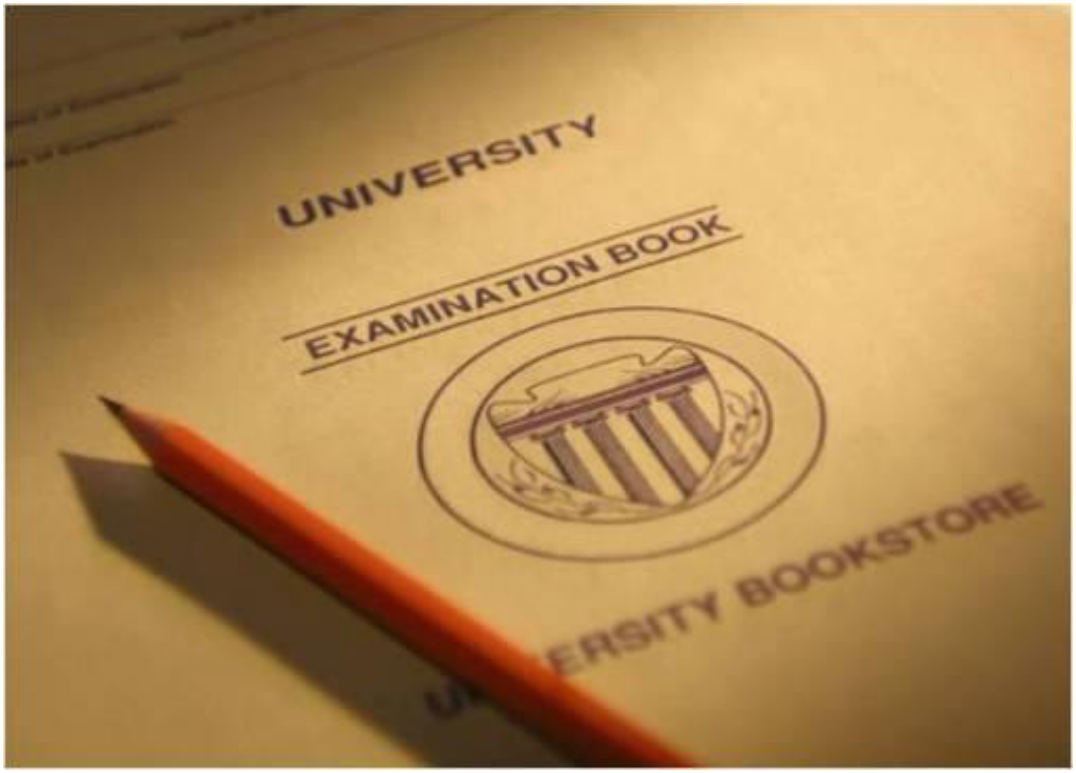
High Point University



School of Education

Comprehensive Exam Booklet

2016-2017

Table of Contents

Description of the Examination **3**

Preparing for the Exam **4**

Concepts for Core and Specialty Courses **4**

Evaluation Criteria **7**

Tips for Writing a Successful Comprehensive Examination **8**

University Honor Code **9**

Application to take the Comprehensive Examination **10**

Appendix A: Evaluation of Comprehensive Exam Rubric **11**

Appendix B: Study Guides/Points **15**

The Comprehensive Examination for M. Ed. Candidates in the Departments of Elementary and Special Education

Purpose

The Comprehensive Exam is designed to ensure that candidates receiving their M.Ed. degree in Elementary, Special Education or Secondary Mathematics have firmly grasped the foundational knowledge expected of candidates pursuing mastery in the fields of elementary and special education.

The Comprehensive Examination is required of all candidates completing the M.Ed. in Elementary Education, Special Education or Secondary Mathematics or the MAT degree (PHASE II) in Elementary Education or Secondary Mathematics. It should be taken during the semester in which the candidate plans to graduate and covers the following broad areas/themes: (1) theory and its application into practice, (2) research methods, (3) 21st century technology, (4) curriculum development (5) literacy instruction, (6) leadership in 21st century schools, (7) content knowledge (depends on which concentration has been selected), (8) thematic and integrated instruction, (9) formative and summative assessment, (10) parents and families, (11) diversity and multicultural education and (12) 21st century teaching and learning. The Comprehensive Examination is three hours in length and is administered on-campus, in a computer format. A passing score is required for obtaining the M.Ed. or MAT degree.

Application for the Exam

The comprehensive exam will be offered two times per semester (fall and spring). Graduate candidates consult the School of Education website for application deadlines and administration dates for the comprehensive examination. Candidates should complete the application (see page 10) and submit to the School of Education Office by the deadline. After you have been approved to take the exam, an email notification will be sent to inform you of the testing location.

The Exam

The Comprehensive Exam should be taken within the last 6 to 9 hours of coursework. The three-hour exam is administered on-campus as a computer exam. The exam is offered two times per semester (fall and spring). The exam is not offered during the summer. Passing this exam is a mandatory requirement for obtaining the M. Ed. degree. The exam can only be taken twice.

On the day of the exam, candidates will be presented with a list of six (6) questions and candidates will select three (3) to answer. The questions will address both the general core classes and the student's area of specialization (e.g., Elementary, Special Education). The list will contain three (3) general core questions and (3) specialty area questions. The student must choose at least one (1) of the general core questions and at least one (1) of the specialty area questions. The third question is the candidate's choice.

- The answers will be typed using 12 point font, Times New Roman, double-spaced, with standard 1 inch margins on all sides. Since the official student identification number will be used to identify each student, only your student identification number should be inserted into the header of the document along with page numbers. (Please bring your identification number with you to the exam. It is found on your Passport or in your "My Stuff" account.) There is no limit to the number of pages you may use to answer the questions.
- Special accommodations will be made for candidates with documented disabilities

- All references cited in the exam must identify the original author. At least two reliable and credible examples from professional literature should be used. ***For example: According to Smith (2006), phonics is a consequence of learning to read not a pre-requisite.***

All candidates are held responsible for any information or notifications related to the exam, thus it is important to check your HPU email account regularly.

Preparing for the Exam

You will be asked questions relevant to your graduate studies based on readings and experiences you have gained in and out of the classroom over the course of your studies at High Point University. The areas of concentration that will be covered on the exam reflect the major pedagogical beliefs, theories, and practices that have been discussed in your courses. In order to adequately prepare for the exam, we urge you not to study and commit to memory every major article and publication covered in your courses, rather review articles and literature that you feel are important and reflect you interests in education, then analyze how the publications are connected to the areas of concentration discussed on the following pages. You should be knowledgeable of the author's name and the year of publication and/or title of literary works or policy documents that best support your beliefs, knowledge, and dispositions towards education. Carefully review the topic information list below.

Topic Information by Course

The following section should help you prepare for the "comprehensiveness" of the questions. Be familiar with the literature and materials discussed in your core and specialty classes.

Core and Specialty Courses

The following information should help the candidate prepare for the exam. It is organized under each of 8 objectives of the Graduate Program's Conceptual Framework. The Elementary Education Program is divided into ten themes or broad areas that have been addressed throughout your courses: (1) theory and its application into practice, (2) research, (3) technology, (4) curriculum development, (5) literacy instruction, (6) thematic and integrated instruction, (7) assessment, (8) parents and families, (9) diversity, and (10) 21st Century teaching and learning. Many of the discussions below are appropriate for the Special Education Program of Study. Exceptions are noted at the end of this section.

To enhance powers of inquiry, breadth of knowledge, command of written and spoken language and insight into ethical behavior through the commitments outlined in the mission of the university.

Theory into practice: Historical, political, and social factors influence past and current systems of education in the United States. Throughout the history of education in the U.S., there has been emerging policies and practices that have influenced the way current systems of education are implemented. Ground breaking and controversial movements (i.e., *Brown v. Board of Education*, charters schools, privatization, bi-lingual education) each have left an indelible mark on what candidates of education are being taught, and what teachers are (and should be) doing in their classroom. This topic calls for you to examine the history of education through socio-political lens to present your understanding of the current systems of education based on historic events and changes in society. Tasks may include:

- Analyze the roles of education systems of schooling.
- Evaluate different systems of schooling.
- Analyze common themes and trends across educational systems.

- Identify current trends in education.

To demonstrate an advanced understanding and application of content for the licensure area(s).

Research in critical reading and literacy: What does it mean when a second grade teacher identifies a student who is struggling to read and write using a first grade text? What are the implications of this situation on teacher preparation? Perhaps even more important, what are the implications on the student's dispositions towards schooling and self? Examine the role of reading and literacy through a critical lens by questioning and engaging in reflection of the state of the reading and literacy movement in the U.S. and its response to reading and literacy as content, as well as a paradigm for student empowerment. Other areas may include the following tasks:

- Theoretical perspectives of education psychology
- Human development in relation to learning theories
- Psychological implication of family interactions as related to schooling
- Classroom management techniques

To demonstrate an advanced understanding and application of research-based techniques and strategies to meet the needs of diverse learners.

Diversity issues: Increasingly teachers have become more cognizant and responsive to the concerns and interest of candidates with special needs. There are a growing number of candidates with special needs in general education classrooms who require teachers to adapt their lesson appropriately. The issue of disability is often compounded by other factors such as ethnicity and social class. What are the dilemmas that confront candidates with disability and teachers in inclusive classrooms? How should teachers be prepared to adapt their instruction, including the gifted and talented student population? How does the increasing number of inclusive classroom influence policy to the end of providing equitable education for all candidates? The following tasks may be used:

- Describe in general terms the steps to perform in any research study, i.e., the research process.
- Describe a quantitative research study, describing what characteristics make it a quantitative study. Discuss the question you intend to study, how you will gather data, analyze it, and report findings.
- Describe a qualitative research study, describing what characteristics make it a qualitative study, and how the approach different from a quantitative study. Discuss the question you intend to study, how you will gather data, analyze it, and report findings.
- Discuss the variables to be considered in a study, how the study sample is to be determined, how one deals with potential bias in a study, and how internal and external reliability and validity would be determined.

To demonstrate advanced skills in the ability to effectively collaborate with members of the school community – including parents, families, colleagues, and community.

Collaboration with parents and families: There are several reasons why school/family partnerships are important. Schools that foster partnerships among administrators, faculty families, and candidates are more likely to have high levels of trust than are schools where partnerships are fragile or nonexistent. Student achievement increases when parents are partners with their children's educators. Family-professional partnerships enhance families' quality of life. (Turnbull & Turnbull) With that said, how can teachers create and enhance

school/family partnerships? How can teachers "walk in the shoes" of a parent? How can teachers overcome cultural and language barriers to foster collaboration?

To demonstrate advanced technological skills necessary for effective educational practices.

Technology. The classroom of today has changed considerably over the last two decades. Notebooks, pencils, and textbooks are being replaced by laptops, DVDs, and LCD screens. Instructional technology has the potential of transforming education and training. How does the technology of today impact teacher training programs? What is a reasonable expectation of computer and technology competency that teachers should have? What are the implications of the World Wide Web for education according to your view, expert opinion, and research findings? In particular, what are the major educational developments that are unfolding on the internet today that directly benefit K-12 education and other education and training situations What are some of the problems of and obstacles to using the WWW in classrooms? How can general education classroom teachers use technology to enhance the education of diverse candidates (i.e, candidates with disabilities, English language learners) in their classroom?

- Current trends in technology
- Current research of effectiveness of technological aspects (e.g., software, Internet)

To demonstrate advanced skills in the areas of problem-solving and reflection.

Curriculum development and mastery teaching: As teachers we must be able to develop or adapt curriculum to meet the needs of our candidates. Moreover, we are challenged to develop authentic, reliable and valid methods of assessment as well as integrate and meet the goals of state mandated standards. Curriculum development is a formidable task, and teachers must take into consideration several elements to facilitate meaningful and purposeful learning. What should be considered in order to develop curriculum? How do we intersect the instructional goals with individual student needs? We often hear of student-centered instruction and other pedagogical strategies, yet how do we put this into practice? Such questions raise our awareness of the complexity of curriculum development and adaptation to diverse candidates, school and community settings. Evaluate the impact of identified trends on educational policy, procedure, and outcomes.

- Analyze pros and cons of identified trends.
- Synthesize a position in regard to the trend, and defend it in terms of educational outcomes.
- Propose procedures for initiating and/or directing change relative to identified trends.
- Evaluate the implication of current research for the classroom setting.
- Create a research proposal, including a detailed review of the literature.

To demonstrate ability to serve as leaders and mentors for members of the school community.

This objective is met through the capstone experience involving the Product of Learning and the Internship options.

To demonstrate the ability to incorporate "21st Century Thinking" into the teaching and learning process.

21st Century Skills: Today's education system faces irrelevance unless we bridge the gap between how candidates live and how they learn. Schools are struggling to keep pace with the astonishing rate of change in candidates' lives outside of school. Candidates will spend their adult lives in a multitasking, multifaceted, technology-driven, diverse, vibrant worlds, - and they must arrive equipped to do so. We must also commit to ensuring that all candidates have equal

access to this new technological world, regardless of their economic background. (Partnership for 21st Century Skills) How can teachers expand the core subjects beyond mere basics to understanding at higher levels of comprehension and application in the real and virtual world? How can teachers incorporate learning skills into classrooms more deliberately, strategically, and broadly? What solutions are available to conquer the "digital divide" in schools?

Area of concentration: Special Education Candidates in the Special Education Program of Study should use the commentary and objectives of the Conceptual Framework as outlined in the section above. Note that the objectives are in bold print.

To demonstrate advanced skills in the areas of problem-solving and reflection.

The Diagnostic-Prescriptive Model has been the basis of special education since its inception. A related model, the Applied Behavioral Analysis Model, has been added in recent years with the huge increase of children identified as Autistic. These models have provided the standard for assessment that guides the development and curriculum and instruction for candidates with mental disabilities. The individualized education plan still drives the specially designed instruction as required by law. What is the impact of No Child Left Behind on IDEIA '04? There is a continued emphasis on goal-oriented outcomes that must address post-secondary employment and living conditions. How can teachers prepare candidates appropriately for the employment opportunities of the future? It has been said that technology is the great equalizer for people with disabilities. How can teachers access technology and use it to the candidates' greatest benefit? Evaluate the impact of identified trends on educational policy, procedure, and outcomes.

- Analyze pros and cons of identified trends.
- Synthesize a position in regard to the trend, and defend it in terms of educational outcomes.
- Propose procedures for initiating and/or directing change relative to identified trends.
- Evaluate the implication of current research for the classroom setting.
- Create a research proposal, including a detailed review of the literature.

Evaluation Criteria

Each of your essays will be evaluated by two faculty members in the School of Education. The faculty will use the criteria listed on the ***Evaluation for Comprehensive Exam Rubric*** (see Appendix A) to evaluate your responses. The exam will be graded as "Pass" or "Fail" and each question is worth **100 points.** Notification of the comprehensive exam results will be made available via email approximately 1 month after the exam.

Scoring Procedures:

Candidate responses are coded by their identification number. Questions will be scored blindly by two (2) faculty members. Faculty evaluations will be averaged together to provide a score for each question. If a candidate does not pass TWO (2) or more questions, the entire exam will need to be retaken at the next schedule date. If a candidate does not pass ONE (1) question, a similar question will need to be retaken at the next schedule date. Only one (1) reexamination is allowed. If a candidate fails the exam twice, that candidate will be unable to receive the master's degree.

Appealing Decisions
Candidates have the right to appeal decisions. See the Norcross Graduate School Bulletin for the appeal procedure.

Tips for Writing a Successful Comprehensive Examination
The emphasis of the exam is on the application of skills and knowledge learned in the program to practical issues in teaching. Graduate comprehensive exams are closed book, and prepared notes are not allowed.

It is recommended that the candidate develop a plan describing what you need to respond to each question and then follow the plan. A four to eight (4-8) week study plan is employed by most graduate candidates. The length of study is dependent on your current level of knowledge and your current level of comfort to take the exam. To reduce your stress level, prepare thoroughly for the exam.

Suggested General Study Tips:

- Set up a schedule for your studying – early morning, lunch time, after dinner…. Try to stick to your schedule.
- Carefully review the topic information.
- Write down key words, terms, theories, and theorists that could be used to build a strong response.
- Study at a broad overview level rather than tiny details. The questions are broad with more than one reasonable mode of answering. A broad overview helps in synthesizing the materials. This does not mean you should neglect detail in your exam answers. Details can add much to your answers by showing a real grasp of the material when integrated with more general explanations and examples.
- Review your course materials from your graduate courses; be aware of key issues and authors in the field. Be prepared with ***at least two*** relevant professional references for each response. ***For example: According to Smith (2006), phonics is a consequence of learning to read not a pre-requisite.***
- Prepare outlines, charts, visual summaries, pneumatic devices, etc.
- If you feel you need to strengthen your writing skills, have someone with good writing skills go over a couple of your essays or you can contact the University's Writing Center which is located in the Smith Library. Their email is: writingcenter@highpoint.edu.
- Consider studying with peers in your program.
- Study guides/points are provided on page 15 to assist you with items that may be covered on the exam. If you do not see a course or professor listed, please contact the chair of the academic department related to your degree.

Tips for composition:
When you are asked to respond to a multi-part essay question and are required to cite sources, the following strategy can be used to ensure that you meet the minimum criteria for an acceptable response.

- Break the essay down into its constituent parts. Consider webs, concept maps during prewriting.
- Make sure that you establish a "working thesis" statement (*The exact topic + your approach toward that topic.)*

- Create an introductory paragraph that introduces the question and your main points.
- Include in the answer authoritative sources and/or real life examples.
- Write a minimum of five paragraphs that address the question.
- Summarize the question and your main points in a concluding paragraph.
- Use APA style to cite the source of your information. Use third person unless the question asks for your opinion or reaction.

Final Note: Study …… Study…… Study….. Study…… And then study some more! Do not walk into the comprehensive exam cold – You must study extensively in order to pass. Look at this as an opportunity to review everything you have learned, plus studying the latest trends and issues in the field. Challenge yourself to learn as much as possible about EVERYTHING you think might be on the exam. So, challenge yourself and be proud of what you are doing to better yourself. Good luck and happy studying!

University Honor Code

As a Graduate Student, you will be responsible for upholding High Point University's Honor Code.

University students have the right and responsibility to live and learn in an environment free from fraudulence and dishonesty. The High Point University Honor Code which has been officially adopted and endorsed by the faculty and by the Board of Trustees affirms that:

- Every student is honor-bound to refrain from conduct which is unbecoming of a High Point University student and which brings discredit to the student and/or to the University.
- Every student is honor-bound to refrain from cheating
- Every student is honor-bound to refrain from collusion
- Every student is honor-bound to refrain from plagiarism
- Every student is honor-bound to confront a violation of the University Honor Code
- Every student is encouraged to report a violation of the University Honor Code

HIGH POINT UNIVERSITY
SCHOOL OF EDUCATION
APPLICATION TO TAKE GRADUATE COMPREHENSIVE EXAMINATION

To be eligible to take the comprehensive examination, a graduate student must be fully matriculated in a graduate program at High Point University and have a cumulative grade point average of at least 3.0 at the graduate level.

Complete Section I of this form, obtain the approval and signature of your graduate advisor in Section II, and forward this application Jodi Moser in the School of Education, Room 237.

Comprehensive Exam Date	**Comprehensive Exam Application Deadline**
Fall Exam :	Fall Application Deadline:
Spring Exam I:	Spring Application Deadline:
Spring Exam II:	

Section I: Candidate Information

Name: HPU ID Number:

Address: Telephone Number:

City/State/Zip: Email Address:

Anticipated Graduation Date:

Program of Study:

Signature of Candidate: Date of Request:

Section II: Permission

The above named candidate has completed appropriate course work and is recommended to take the comprehensive examination on the date requested.

Signature of Graduate Advisor: _____ Date:

☐ Approved ☐ Denied

Reason for Denial:

Signature: _____ Date:

Copy to:	☐ *Norcross Graduate School*	☐ *Graduate Advisor*	☐ *Student*

Appendix A

HIGH POINT UNIVERSITY

School of Education

Evaluation of Comprehensive Examination

Candidate ID #: Date:

Reader : Question:

Instructions: Please read the enclosed comprehensive examination question and the candidate's response. Score the question and place in the chart below the number of points earned for each area. Return to Jodi Moser by . Thank you!

Area	Points	
Content: *65 Points*		
Evidence based. (**maximum 35 points**)		
30-35: Student demonstrates mastery of knowledge and insight pertaining to the content, issue, and /or problem being addressed. Statements are fully supported by ***at least two*** reliable and credible examples referenced from professional literature. Student uses the relevant terminology, theories and theorists, citations or other indicators that the student has to demonstrate a deep understanding of the content. Citations from sources are noted using the author's last name and year of publication.	Possible Points:	Earned Points:
25-29: Student demonstrates some knowledge and insight pertaining to the content, issue, and/or problem being addressed. Statements are usually supported by ***at least two*** appropriate example referenced from professional literature. Student also uses the relevant terminology, theories and theorists, citations of other indicators that the student has to demonstrate a grasp of the content. Citations from sources are noted using the author's last name and year of publication.	65	
0-24: Student demonstrates little knowledge and insight (or shows lapses of knowledge and insight) pertaining to the content, issue, and/or		

problem being addressed. Statements are weakly or inconsistently supported by examples referenced from professional literature. Student also only occasionally or inconsistently uses the relevant terminology, theories and theorists, citations or other indicators that the student has to demonstrate a weak, incomplete, or inaccurate understanding of the content. Citations from sources are not consistently noted correctly. **<u>Critical reflection</u>.** (**maximum 30 points**) **25-30**: Student is critically reflective, forming broad and insightful connections between the issues raised in the question and its relevance to education from diverse points of view. Student should demonstrate critical reflection of the issue and/or problem stated by examining evidence that may support or oppose the content of the question, raising relevant questions to provoke further inquiry, demonstrating critical and logical thinking that intersects with related issues, and/or suggesting alternative interpretations based on evidence. **20-24**: Student notices some connections between the issues raised in the question and its relevance to education from diverse points of view. Student recognizes and/or acknowledges evidence that may support or oppose the content of the question, raising some relevant questions and demonstrating a developing capacity for critical and logical thinking within the issues presented by the question, but not necessarily with related issues or involving alternative interpretations. When alternative interpretations are presented, they are often not based on evidence, but rather are more purely speculative or superficially considered. **0-19**: Student only occasionally notices connections between issues raised in the question and its relevance to education from diverse points of view. Issues are more often understood in isolation, instead of in relation to other issues and/or their relevance to other perspectives on education. Student demonstrates lapses of understanding of the issue and/or problem, and only inconsistently examines evidence that may support or oppose the content of the question. Student demonstrates knowledge (and may show lapses of knowledge) without raising questions to provoke further inquiry, and without demonstrating any thinking that intersects with related issues and/or suggesting any		

alternative interpretations.		
Organization and Presentation: *35 Points* **Organization. [maximum 20 points]** **15-20**: The content of the essay reads easily and is coherent in organization. The essay does not jump between ideas, but rather is structured with a beginning, middle, and end. The essay states what is being asked. Statements are explained in detail without raising additional questions from the reader. Language usage is appropriate for a professional paper. APA format is demonstrated. **10-14**: The content of the essay is generally clear and coherent, though there may be lapses in these qualities. Some jumping around may occur, though there is generally a discernable beginning, middle and end. Some passages may drift from what is being asked. Statements may be lacking in detail or may introduce additional questions than the essay set out to address. Language may have lapses in style or professional format. **0-9**: The content of the essay is unclear; details are lacking in coherence. The essay lacks linear organization so that the reader has little to no sense of beginning, middle, and end. Numerous passages distract from the main idea, which itself is difficult to discern. Statements are often lacking in detail and/or are off topic. Language usage is not appropriate for a professional paper and does not observe APA format.	Possible Points: 35	Earned Points:

Mechanics. [maximum 15 points] Correct spelling, grammar, punctuation, capitalization, and syntax is evident and consistent. Starting with the fifth mechanical error, and continuing from that point through the rest of the essay, one point may be deducted for each mechanical error.		
Total Points NOTE: Candidate must ***average at least 80 points*** from the two readers in order to pass this question.	Possible Points : 100	Earned Points:

Revised 1/14

Appendix B: Study Guides/Points by Instructor and Course

Core Courses

EDU 5010: Advanced Instructional Technology for the 21st Century (LITERACY CONCENTRATION)

- Formative assessment tools and use
- Appropriate use of iPad Apps and examples
- Role of eBooks in Literacy with examples
- Use of iPad Apps to engage students in the classroom
- Current research on iPad apps and student engagement in Literacy

EDU 5010: Advanced Instructional Technology for the 21st Century (SPECIAL ED, MAT)

- Use of Twitter (research and experience with examples) on the development of a personal learning network
- Use of Interactive Whiteboards in student engagement
- Formative assessment tools and use
- Organization of resources to enhance teacher effectiveness and student time on task
- Use of Hooks and Review to increase student engagement and understanding

EDU 4511/5011: Technology Integration for Elementary STEM Based Programs

- Use of Legos (Story Starters) to enhance student understanding of subject areas
- Role of Stop Motion Video in demonstrating understanding
- Formative assessment tools and use
- Appropriate use of iPad Apps and examples
- Role of 3D animation in student understanding
- Role of STEM Clubs in engaging students and teachers in science and math
- Current research on STEM and student engagement in science and math

EDU 5030: Methods of Educational Research (Dr. Tess Hegedus)

- Institutional Review Board & human research participants
- Annotated bibliographies
- Citation managers
- Qualitative vs. Quantitative Research
- Research design
- Mixed methods research
- Action Research
- Sampling
- Identifying a research problem; Problem statements
- Writing research questions; hypotheses

- Research proposal structure
- Literature review; literature matrices
- Theoretical and conceptual frameworks
- Qualitative methods (observational protocols, field notes, semi-structured interviews)
- Quantitative methods (instruments, scales, surveys, reliability, validity)
- Coding and analysis
- SPSS analytics (frequencies, descriptive statistics, T-test procedures)

EDU 5030: Methods of Educational Research (Dr. Sarah Vess)

- Action Research
  - What is it?
  - How is it used to improve teacher performance and student learning outcomes?
  - Can you provide an example of an action research project that could be utilized in your classroom?
  - Now you have the data, what will you do with it as an action researcher to improve instruction
- Types of Research Design
  - Quantitative versus Qualitative: explain each, pros and cons, where do you feel most education research falls and why
  - Sampling—different types of sampling, which is preferable, if you use a less preferable sampling strategy what are the steps you can take to optimize the sample
- Data Collection Techniques
  - Ways to collect data: survey, interview, experiments, tests, etc.
  - Role of bias in research: what types of bias might we encounter with the teacher as the researcher, what are ways to minimize bias in research
- Research Ethics and Protection of Human Subjects
  - Ethical Research Principles from APA: What are they, why were they put into place, history of research that necessitated these regulations
  - What is the role of an institution's IRB? Why must research be reviewed by IRB
  - What are the main components of protection for human subjects involved in research (consent, ability to withdraw consent, limit undue stress, etc.)

EDU 4540/5040: Diversity in Education: Societal and Organizational Perspectives (Dr. Jane Bowser)

- Brain Based Learning
- Rules for Engagement (engaging all students in learning)
- How poverty impacts student learning
- How race impacts student learning
- Diversity in the classroom – how to reach all students
- Designing outreach projects to reach diverse populations in the schools

EDU 5060: Developing Leaders in 21st Century Schools (Dr. Dustin Johnson)

- Why is data-driven instruction so critical? Describe the importance of planning, observations, and feedback in terms of providing a successful data-driven learning environment. (Leverage Leadership)
- What is the difference between climate and culture? What are some strategies a leader can implement to promote a strong, positive climate/culture for teachers, students, and leadership teams within the school? (Leverage Leadership)
- Why is it essential for a teacher leader to possess both instructional and managerial skills? Provide examples of how both skills could benefit a leader.
- Discuss effective, research-based strategies used to build collaborative leadership within a school.
- Be able to discuss organizational, strategic, interpersonal, and motivational leadership skills. (How To Thrive As A Teacher Leader)

EDU 5060: Developing Leaders in 21st Century Schools (Dr. Tawannah Allen)

- What is a teacher leader?
- What do teacher leaders do?
- What are obstacles to teacher leadership?
- What is the relationship to teacher leadership and school culture?
- How is teacher leadership demonstrated (3 areas)?
- Where is teacher leadership demonstrated?
- What is the relationship to teacher leadership and the NC Teacher Evaluation Instrument?
- What are areas that you discovered were strengths for you as a teacher leader? Areas for growth?
- How has the role of the principal changed to support teacher leadership?
- What is the relationship of teacher leadership to Professional Learning Communities?

EDU 5080: Advanced Educational Psychology

- The relationship between research and theory in educational psychology
- The mission guiding North Carolina public schools
- The 21st Century Model of Teaching and Learning
- Discuss the three basic developmental assumptions.
- The relationship between heredity and environment in terms of human development.
- Cognitive Development and its relationship to Emotional and Moral Development
- How classroom teachers should use “Arousal” to create states of disequilibrium in students. Give examples of Arousal.
- Basic characteristics of pre-operations, concrete, formal operations and various teaching strategies for each stage of development
- The impact of emotional development on cognitive development and the impact of cognitive development on emotional development.
- The consequences of a “healthy” vs. “unhealthy” resolution in Erikson’s theory of Psychosocial development

- How the term “psychosocial” used in Erikson’s theory and how our psychological needs and social environment change as we mature
- The relationship of cognitive, psychosocial, and physical development on the adolescent.
- Advantages of Cooperative Leaning and Differentiated Instruction in today’s diverse classrooms
- The strategies of Cooperative Learning and Differentiated Instruction
- Explain differences between STAD, TGT, and Jigsaw Cooperative Learning and how to write a lesson plan using one or all of these approaches
- Be able to explain how a “team reward” is used in cooperative learning, how to group students using cooperating learning
- Be able to explain how to “Tier Assignments”, “Adjust Questions” and use “Learning Contracts” when differentiating instruction.
- Explain how students process information using the Information Processing Theory
- The key characteristics of short and long term memory
- Discuss how strategies such as graphic organizers, Cornell Notes, concept maps, and Guided Note, mnemonics assist students in processing information on a short and long-term basis
- Explain the “Oreo cookie” analogy discussed in class as it relates to human behavior
- Explain human behavior and learning in terms of the ABC chain.
- Differentiate between antecedents and consequences as they relate to why certain behaviors are exhibited and why they are maintained.
- Why is an understanding of functional assessment so critical in terms of classroom management?
- How does one use a set of antecedents to come up with interventions for dealing with problematic behavior?

EDU 4566/5166: Using Data to Make Instructional Improvements (Dr. James Davis)

- Be prepared to identify discuss the advantages and disadvantages of both formative assessments and summative assessments.
- Be prepared to identify and discuss 4-5 examples of each type of assessment, formative and summative. Explain how a teacher may plan to use formative assessment to guide their instruction and positively impact student achievement.
- Be prepared to discuss how data is used to guide instruction for regular education learners, gifted learners, and struggling learners.
- Be prepared to identify and discuss 4-5 types of data that a teacher may utilize in their classroom. In addition, be prepared to identify and discuss three things for each group of learners (below), that a teacher may implement in their classroom for, regular education students, gifted learners, and struggling learners.
- Be prepared to discuss how data is a pertinent part of all professional learning communities. Be prepared to describe the characteristics of an effective PLC, identify and explain 4-5 data sources that a PLC may utilize, and create 4-5 action steps that a PLC may implement, based upon the analysis of data in relation to overall school improvement.
- Be prepared to discuss how teachers and school teams may effectively translate data into information to improve both teaching and learning.
- Be prepared to discuss various and innovative ways that data may be used with current school improvement efforts.
- Be sure that you can understand and demonstrate an awareness with methods of using data to improve instruction / positively impact student achievement.

- Be prepared to discuss how an educator may develop data-driven plans of action, for both themselves, and students, while also monitoring and evaluating the plan for improvement in student learning.
- Be prepared to discuss how educators at the classroom and school level may work with others to systematically collect, analyze, and use data regarding a school's progress toward attaining strategic goals and objectives and focus on the alignment of learning, teaching, curriculum, instruction, and assessment to maximize candidate learning.

Specialized Courses- Elementary Education (Literacy, STEM and Content)

EDU 5130: Numerical Representation & Number Concepts in Elementary Mathematics

- Van Hiele's Levels of Geometric thinking
- Role of proofs in understanding elementary mathematics
- The importance of the positional relationship of numbers in mathematics as it compares to other positional systems of numbers (binary for example)
- Role of math in the STEM classroom
- Developmental perspective of Addition, Subtraction, Multiplication, and Division.
- Manipulative use in with relation to specific content and why certain manipulatives are better for certain tasks.
- Difference between knowing math and doing math
- Role of theories such as constructivism, behaviorism, and social learning theory in mathematics
- Relational understanding vs instrumental understanding and link between Skemp's theory and learning
- Difference between teaching for Problem solving, through problem solving and about problem solving.
- What is mathematical proficiency and how does it relate to the use of math practices, the NCTM principles and standards, and learning progressions for math in student learning?

EDU 4531/5131: Literature and Informational Texts for Children and Young Adults

- Evaluating Children's Literature – Literary & Visual Elements
- Analysis of Qualities of Genres of Children's Literature
- Graphic Novels, Wordless, and Hybrid Books
- The Book Awards
- Classroom Library Considerations
- Reader Response – Different Readers, Different Readings
- Teaching the Curriculum with Children's Literature
- What is Multicultural Literature? Windows and Mirrors
- Evaluation and Selection of Multicultural Literature
- Teaching with Picture Books Across the Grades
- Multimodal Responses to Texts: Writing, Drama, Art & Music
- Controversial Literature, Banned Books, and Censorship
- Literature and Technology: Evaluating and Incorporating of E-Books/Apps

- Using Trade Books in the Content Areas
- Effective Classroom Libraries

EDU 4532/5132: Foundations of Writing Instruction

- Process Writing – a Recursive Process
- Writing Identities
- Role of Writer's Notebook
- Writing Workshop Framework
- Writing Workshop – Tone, Time, Structure, Tools, Choice
- Sociocultural Framework in Writing Workshop
- Craft Lessons
- Noticing and Naming – an Inquiry Approach
- Conferring with Students : Effective Conference Elements
- Linking Assessment to Instruction
- Code-switching Language with Writers
- Spelling Development and Approximations
- Assessing the Writing Process
- Writing Tests as a Genre
- Considerations – Revision and Editing
- Multimodalities
- Publishing – Print and Non-Print Options
- ELL students and the Writing Process
- Understanding ELL writing development

EDU 4533/5133: Integrated Principles of Science and Social Studies Instruction

- Learning theory: Piaget, Vygotsky, Kolberg, Rotter etc.. and the role they play in understanding what students need in terms of differentiated instructional strategies for science and social studies..
- Developmental Patterns of children with regard to social studies/science processes
- Understand the nature of science and the nature of social studies
- 5 themes of Social Studies
- Science Process Skills
- Levels of integrated curriculum and an example of each level using a science and social studies topic.
- Using visualization stimulation to promote critical thinking and problem-solving
- Differentiation between Project-based learning and Problem-based learning in an inquiry model of instruction for science and social studies (examples)
- Using Inquiry based learning in science and social studies teaching

EDU 5134: Foundations of Reading

- Theoretical Orientation to Reading; Theories of Literacy Learning
- Schemas and Transactions in the Reading Process; Connecting Cultural Understandings to Teaching Reading; ELL Considerations
- Non-visual and Visual information; Tunnel Vision; the Role of Prediction; Surface Structure and Deep Structure
- Constructing Meaning with Cue Systems; The Role of Prediction and the Pragmatic Cue System in Reading
- Comprehensive Literacy Workshop Model: Reading Aloud; DLTA; Shared Reading; Guided Reading/Strategy Groups; Independent Reading; Sustained Silent Reading; Literacy Centers; Reading Conferences
- Literature Based Approaches to Reading; Literature Circles: Forming Groups, Encouraging Discussion, Assessment
- Conditions of Learning (Cambourne)
- Reader Response Theory
- The Teaching/Learning Cycle
- Emergent Literacy Theory
- Language Experience Approach
- Think Aloud
- Developing Strategic Readers: Constructing Meaning Strategies.
- Developing Reading Fluency/Flow; Deep Reading vs Close Reading
- Helping Children to Select Appropriate Reading Materials.
- The Limitations of Phonics**:** Recoding versus Decoding

EDU 5135: Diagnosis & Assessment in the Teaching of Reading

- Understanding use of reading tests, assessing tests for reliability and validity
- Norm Referenced vs Criterion Referenced Tests
- Using High-Stakes Tests to Make Critical Educational Decisions; Problems with Grade Equivalent Scores
- Principles to Guide Authentic Assessment; Principles of Kidwatching
- Systems for Conferring, Housing Data, and Evaluating Data
- Concepts of Print Test; Sulzby's Emergent Reader Continuum
- Definition of Reading; Attitudes Toward Reading ; Burke Reading Inventory and Burke Reading Interview Modified for Older Readers; Reading interests
- Formative vs Summative Assessment
- R.M.I. - General Procedures for Collecting Data; Marking Miscues
- Coding a Reader's Performance to Determine how the Syntactic, Semantic, and Graphophonic Cues are Being Used
- Constructing and Interpreting a Profile for Instructional Purposes
- Types of Retell, Retell Assessment Forms – Considerations
- Miscue Analysis vs Running Records

- DIBELS, TRC, WRCPM, DAZE, RTI
- Retrospective Miscue Analysis
- Eye Movement Research

EDU 5136: Literacy across the Curriculum

- Teacher's Role in the Content Area Classroom
- Book Clubs: Using literature circles across content areas, integrating struggling readers and ELL students in book clubs, Holding Thinking to Reuse, Literature Inquiries
- Content Inquiry Units: Define, Purposes, Benefits, Planning, Integration across curriculum
- Learner Centered Strategies for Learning Content: Vocabulary, Authentic Texts, Comprehension Constructors
- Textbook Feature Analysis; Why Textbooks are not Enough; Readability versus Leveling
- Connecting Students with Accessible texts; Text Sets—multimodal texts in text sets
- Adolescent Male Readers: Preventing Readicide, Understanding and Engaging male readers
- Comprehension Instruction Across the Curriculum
- Importance of Mental Modeling; Metacognitive awareness
- Setting a Purpose for Reading; Different Genres, Different Strategies
- Incorporating Current Events into Content Area
- Instructional Strategies – Inquiry, Motivation, and Enhanced Learning using Technology, Photography,
- Using Drama and Art to Extend the Reader
- Performance Based Assessments
- Group Accountability and Assessment
- Meeting the Needs of "Struggling" Readers

EDU 5137: Integrating STEM Instruction into the Elementary Classroom

- STEM Literacy
- Six guiding principles of the *Framework for K-12 Science Education* (National Research Council, 2011)
- Next Generation Science Standards (NGSS) structure to include: Science & Engineering practices, Disciplinary Core Ideas, and Crosscutting Concepts
- Five guiding principles of STEM Education that drive STEM-based curriculum development from *STEM Lesson Essentials* (Vasquez et al., 2013)
- 4 Major domains of science
- Principles that have guided the introduction and development of K-12 engineering education (Katehi, 2009)
- Understanding By Design (Wiggins & McTighe, 2005)
- STEM Habits of Mind (within each discipline)
- Essential 21st Century Skills (P21 Framework, 2009)
- Four elements of Creativity (fluency, flexibility, originality, and elaboration) (Torrance, 1979)

- Convergent & divergent thinking
- STEM integrative approaches
- Engineering Design Process & features
- Operationalize terms: technology & engineering
- Problem-based Learning vs. Project-based Learning

EDU 5233: Connected Systems and Interdependence in Science

- The Earth's spheres: Atmosphere, Hydrosphere, Geosphere, Biosphere
- Cells as the building blocks of life (life, death, and evolution)
- Hierarchical structure of life in the biosphere
- Global cycles of life: Biogeochemical cycling
  - Carbon, nitrogen, phosphorus cycles
- Macronutrients essential for all life: CHNOPS (carbon, hydrogen, nitrogen, oxygen, phosphorus, and sulfur)
- Energy and matter in ecosystems
- Soil: properties, formation, fertility, and moisture
- The hydrologic (water) cycle
- Distribution of water on Earth

Specialized Courses- Special Education

EDU 5141: Curriculum Assessment and Planning for Students with Intellectual Disabilities

- Alternative Assessments
- Learning Progressions
- Preference Assessments
- Systematic Instruction

- Data collection and behavioral objectives Peer Training Social Skills
- Generalization Maintenance Antecedent Prompting Data-based Decisions

EDU 5142: Instructional and Transition Planning for Elementary Students with Intellectual Disabilities

- Basics of Applied Behavior Analysis
- Groups Small Group Academic Instruction with Peer Modeling Time Delay
- System of Least Prompts/Most to Least Prompts Graduated Guidance
- Simultaneous Prompting Explicit Instruction Demo of Behavior Change

EDU 5144: Consultation and Collaboration with Families and Community Agencies

- What is school-based consultation (SBC)?
- How does SBC relate to collaboration?
- What skills are necessary to be an effective consultant (i.e. listening, questioning)? Understand the dynamics of the consultant/consultee relationship

- What are the possible obstacles to an effective consultant/consultee relationship
- Understand the concepts of Power and Resistance
- Know the root causes of resistance and how to overcome it
- Understand the multiple layers of consultation and different areas within the school that consultation can occur
- Systems level of change—understand the process and the consultative role within the concept
- Problem-solving processes—understand the steps of one of the models covered in class and how to apply the process to a problem or situation
- Role of legal systems and government in service availability as well as major laws which impact resources and services for individuals with disabilities
- Importance for a teacher to know the community, services available, the family, understanding the relationship and the need for services outside of school for the student to be successful, understanding the challenge families have in accessing services and strategies to overcome these obstacles from a consultative relationship, relevance of these services across the lifespan and beyond graduation

EDU 5145: Assistive Technology and Instructional Support for the 21st Century Classroom

- Legislation leading to Assistive Technology (AT) mandates
- Universal Design for Learning (UDL) as it relates to AT
- Best practices in the assessment of AT
- SETT Framework
- Consideration of AT using the Quality Indicators of Assistive Technology (QIAT)
- Wisconsin Assistive Technology Initiative (WATI)-Consideration of AT
- Areas to consider for AT
- AT Continuum—no tech to high tech and examples for each area of AT
- Funding for AT

EDU 5146: Building Self-Determination and Advocacy Skills in Persons with Intellectual Disabilities

- Definition of Self-Determination
- Wehmeyer's Functional Theory of Self-Determination
- Assessment tools for Self-Determination
    - AIR
    - ARC Self Determination
    - Informal instruments
- Skills that make up Self-Determination and research to prove usefulness
    - choice making
    - problem solving and decision making
    - self management
    - goal setting
    - self advocacy
- How teachers can create opportunities for Self-Determination
        - Self-Determination throughout the lifespan of an individual