

GEORGE MASON UNIVERSITY
COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT
GRADUATE SCHOOL OF EDUCATION
Elementary Education Program

EDCI 553.0021: SCIENCE METHODS FOR THE ELEMENTARY CLASSROOM
Fall 2015

[Meeting Time/Day and Location](#)

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Office Hours: 1-3 PM Monday and Tuesdays / Anytime by appointment

This course is only open to students in the Elementary Education [program](#).

COURSE DESCRIPTION

A. Prerequisites/Corequisites

Admission to the Elementary Education [program](#).

B. University Catalog Course Descriptions

Develops skills and abilities in science teaching methods, applications of technology, safety practices, and creation of integrated science curricula. Examines science teaching based on contemporary theory, practice, and standards. Prerequisite(s): Admission to elementary education licensure program.

Notes: Requires field experience in public schools.

C. Expanded Course Description

The primary goal of this course is to provide you with practical experience, theoretical background, and pedagogical skills that will allow you to be successful in your future career. To this end, there will be two main themes stressed over the duration of the course: 1) to facilitate the development of pedagogical approaches to inquiry-based teaching practice, and 2) to develop confidence and understanding for science and health content. With respect to content, the course will develop your background knowledge with the goal of successful teaching in an elementary science context, meaning that you will need to have a solid understanding of large-scale science topics beyond what is expected of elementary children. The course will also consider the intersection of science, self and society to investigate elements of health related content such as human body systems, nutrition, emotional health, as well as conceptions of gender and identity.

Most children come to school with a keen interest in the world around them, but often by the end of elementary school only a small percentage of students have retained this interest in science content. This is generally attributed to the ways in which “school science” often ignores the beauty and joy that can come from engaging with science and connecting scientific understanding to the everyday experiences of children. Consequently, we will conceptualize science as a verb where we are consider our *wonders*, *build new knowledge* and *discover* as opposed to the memorization of 'science facts.' For this reason, we will utilize constructivist approaches to learning and those approaches should help you scaffold science content that is

too often presented as an exercise in the acquisition of vocabulary.

This course plans to provide opportunities for students to enjoy and embrace the ideas that make us wonder about the world and our role within it. In many respects, science can be intimidating to learn in the ways it is presented in schools, media and the general public. Our goal is to unpack those social constructions of science to present science in a more realistic light where scientists are presented as humans struggling to better understand the world (just like the rest of us) as opposed to omnipotent, infallible heroes that society and textbooks wish to portray. This class experience is merely a first step in your evolution toward becoming the kind of educator you wish to be. Lastly, you will be required to bring your curiosity to class for each session. Please make sure to nurture and feed it as we move through our work together.

LEARNER OUTCOMES

This course will enable students to:

- A. Build pedagogical content knowledge base in science and health through inquiry-based investigation
- B. Conceptualize core principles regarding the Nature of Science, ie. how wonder, creativity experimentation, and evidence frame scientific thinking
- C. Develop lesson plans demonstrating inquiry-based principles in science and health education including the incorporation of technology
- D. Demonstrate age-appropriate safety standards when designing hands-on classroom experiences
- E. Examine science and health curricula and methods with respect to “Science for All” and standards documents at local, state, and national levels
- F. Develop viable assessment tools for science and health contexts

KEY PROFESSIONAL STANDARDS ADDRESSED FOR PBA ASSESSMENTS IN TASKSTREAM

INTASC (2011): [Interstate Teacher Assessment and Support Consortium, Model Core Teaching Standards](#)

#4. Content Knowledge. The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make the discipline accessible and meaningful for learners to assure mastery of the content.

#5. Application of Content. The teacher understands how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.

#6. Assessment. The teacher understands and uses multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and to guide the teacher’s and learner’s decision making.

#7. Planning for Instruction. The teacher plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.

#8. Instructional Strategies. The teacher understands and uses a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways.

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ACEI: Association for Childhood Education International - Standards for elementary level teacher preparation:

2.2 Science— Candidates know and understand fundamental concepts of physical, life, and earth/space sciences as delineated in the National Science Education Standards. Candidates can design and implement age-appropriate inquiry lessons to teach science, to build student understanding of personal and social applications, and to convey the nature of science. (INTASC #1 Subject Matter Knowledge)

2.6 Health education— Candidates know, understand, and use the major concepts in the subject matter of health education to create opportunities for student development and practice of skills that contribute to good health. (INTASC #1 Subject Matter Knowledge)

3.1 Integrating and applying knowledge for instruction— Candidates plan and implement instruction based on knowledge of students, learning theory, connection across the curriculum, curricular goals, and community. (INTASC #7 Planning)

#4.0 Assessment for Instruction - Candidates know, understand and use formal and informal assessment strategies to plan, evaluate and strengthen instruction that will promote continuous intellectual, social, emotional, and physical development of each elementary student.

Technology (ISTE NETS): International Society for Technology in Education / National Educational Technology Standards

Standard I. Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments.

COURSE DELIVERY

Face to face, 100%

REQUIRED TEXTS & READINGS

Bryson, B. (2004). *A short history of nearly everything*. New York, NY: Broadway Books
(Any edition is fine...just don't but the abridged version...)

Board of Education, Commonwealth of Virginia. (2010). *Standards of learning for Virginia Public Schools: Science* Available online:

http://www.doe.virginia.gov/testing/sol/standards_docs/science/complete/stds_sciencek-12.doc

Board of Education, Commonwealth of Virginia. (2008). *Standards of learning for Virginia Public Schools: Health*. Available online:

http://www.doe.virginia.gov/testing/sol/standards_docs/health/complete/stds_healthk-10.doc

Articles and other materials will be provided throughout the course.

Optional Texts:

Bass, J., Contant, T., & Carin, A. (2009). *Teaching science as inquiry*. Upper Saddle River, NJ: Pearson.

Activities for Teaching Science as Inquiry (5th Edition) – Arthur Carin and Joel Bass

You can consider any elementary science teaching text as a resource for lesson ideas and support for theoretical underpinning regarding your pedagogical approaches.

COURSE ASSIGNMENTS/ASSESSMENTS

1. Wonder and Philosophy Project 15%

Wonder List: Spend some time after our first class section thinking about science. Don't worry about the list right away. Just worry about thinking about science that you see in the everyday. Ask yourself questions, feel the movements and forces while you drive, look at the sky, watch your pet, engage with another human, think about your place in this world, go for a few long walks and just think...no phone, no worries, just get lost in your thoughts. Remember this is homework so you have an excuse. After you have engaged with some of these and spent some time with your thoughts, **craft a list of 25 things you wonder about in relation to science**. There are no real rules here. Your wonders are yours and unique to how you envision the world around you. "Dance like nobody is watching" while you build your list.

Philosophy Statement: (1,000 words max)

This reflective thinking exercise is designed to both consider your past, present and future science experiences as both a student and future teacher. This exercise is a written introspection for how you believe science should be taught in schools as well as your own thoughts and experiences with classroom science. Look deeply into the following issues:

- 1) Provide some insights into your prior science experiences both inside and outside of school.
- 2) How do you feel science should be taught in schools? Why do you feel this is important?
- 3) How will science look in your future classroom? How will you enact these kinds of approaches? What research and theorists might you use to support your approaches?
- 4) Include any other aspects that you feel is important to address...

These questions have been provided as a guideline, but feel free to approach this assignment in the manner of your choosing as long as you look into these major issues in the process.

Due Tuesday Sept. 8 at 11:59 PM by email.

2. Inquiry-Based Unit Project 45% (Part of PBA)

The goal of this project is construct and teach an inquiry-based within your field site. We will design this work around the 5 E model of lesson planning. The unit will entail building a detailed and well-supported narrative description for the approach that will be employed. The five lesson sequence will build science content understanding in engaging and dynamic ways for students within your field site and provide some key theoretical and research-based support for the content, approach and activities constructed. The unit will be comprised of the following components and scored via the rubric provided later in the syllabus as part of the TBA.

Unit Planning document - Outline of the 5 E approach

Unit narrative description - roughly 750 word description of the unit goals, activities and theoretical foundations for the project

Five individual lesson plans - sequenced using the 5 E's with objectives clearly aligned to Virginia Science SOL's

Assessment description - roughly 250 words with supporting literature describing the assessment activities used across the lesson

Teaching Plan - clear depiction for dates/times for teaching unit at field site

References Cited section

Due to **Blackboard by 4:00 PM on Tuesday Oct 201.**

3. Reaction and reflection on Bryson reading 10%

This is an enjoyable text even for the "non-nerd" ... readable/accessible and at some points really demonstrates how science truly operates quite differently than how most people think.

Over the course of the first few months of the semester, read each of the following chapters:

Introduction & Chapter 1 - How to Build a Universe

Chapter 2 - Welcome to the Solar System

Chapter 5 - The Stone Breakers

Chapter 6 - Science Red in Tooth and Claw

Chapter 9 - The Mighty Atom

Chapter 12 - The Earth Moves

Chapter 24 - Cells

Also choose **one** of the following to read:

Chapter 20 - Small World

Chapter 21 - Life Goes On

Chapter 26 - The Stuff of Life

Reading and reflection must be completed by **class time on November, 10th**. You have some freedom in how you approach this written assignment, the main goal is to engage with issues you wrestled with as you read the text. The reading reaction should be roughly-based on some or all of the following writing prompts. **Make sure to provide some Use** key quotations and/or direct references to support your points.

a) What was your overall reaction to the text?

b) Was there a description of content, a scientist, or an approach that you found surprising, alarming or interesting...provide some details.

c) Can you provide a summary for how Bryson (as well as the scientists he engaged with and/or described) depicted the Nature of Science and how the notion of discovery works within the sciences. Is this consistent with how science and scientific discovery is often depicted in schools?

d) How do notions of 'wonder' and the 'unknown' play a role in how scientists look at the world?

e) Do you see notions of vulnerability at play with these scientists? Or do/did you have notions of vulnerability as you read and engaged with some of these ideas?

These are just some suggestions at writing prompts. Feel free to substitute your own thoughts, ideas and struggles that you may have found more interesting to wrestle with.

Roughly 1,000 words in total for the responses. **Due in class Monday November, 10th**

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4. Health mini-unit (Part of PBA) 30%

This project is designed to engage future teachers in the possibilities that exist when considering notions related to Health in elementary contexts. These can range from ideas closely tied to biological concepts toward deeper conceptions of self and society. You are encouraged to take some risks here and push your understanding for impactful ideas with children. The mini-unit will require the following pieces:

Unit Planning document - Outline of the 5 E approach **with associated state standards**

Unit narrative description including assessment approach - roughly 500 word description of the unit goals, activities and theoretical foundations for the project; provide clear descriptions for key assessments

One individual lesson plan - can represent any one of the unit lessons the 5 E's with objectives clearly aligned to Virginia Health SOL's

Technology plan - roughly 250 description for the incorporation of technology with respect to how you envision it impacting student learning and open spaces for creativity

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References Cited section

Due Tuesday December, 15th at 11:59 PM on Blackboard

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COURSE GRADING SCALE:

- A = 94% - 100%**
- A- = 90-93%**
- B+ = 85-89%**
- B = 80-84%**
- C = 70-79% – does not meet licensure requirements**
- F = Does not meet requirements of the Graduate School of Education**

BLACKBOARD REQUIREMENTS

Every student registered for any Elementary Education course with a required performance-based assessment is required to submit this assessment, **Inquiry-based unit project and Health mini-unit to Blackboard** (regardless of whether a course is an elective, a onetime course or part of an undergraduate minor). Evaluation of the performance-based assessment by the course instructor will also be completed in Blackboard. Failure to submit the assessment to Blackboard will result in the course instructor reporting the course grade as Incomplete (IN). Unless the IN grade is changed upon completion of the required Blackboard submission, the IN will convert to an F nine weeks into the following semester.

**PROPOSED FALL 2015 CLASS SCHEDULE
TENTATIVE CLASS SCHEDULE**

Session	Topic/Learning Experiences	Readings & Assignments
FALL	Mondays, 4:30 PM – 7:10 PM	
Tues Monday, Sept-Aug 31	<ul style="list-style-type: none"> • What is Science? Nature of Science? Checks activity • How might we best teach science to young children? • What do you wonder about? • The 5 E process 	--Read Llewellyn, 5 E --Begin wonder project
Tues Monday, Sept 87	Labor Day – no class	Wonder Assignment Due, 11:59 PM Tuesday Sept. 8th via email mailto:agilbe14@gmu.edu
Tues Monday, Sept 154	<ul style="list-style-type: none"> • Unit construction • Writing learning objectives, planning for inquiry, Virginia SOL's • Physical Science - Mystery of the cans • 	--Begin Bryson Readings --Conceptualize unit ideas
Tues Monday, Sept 22+	<ul style="list-style-type: none"> • The role of wonder in science • Enacting the 5E's • Warm/Cold fronts - Physical/Earth Science 	--Bring unit topic/ideas to class

	<ul style="list-style-type: none"> • 	
Tues Monday, Sept 29 8	<ul style="list-style-type: none"> • Unit sharing, progress reports, issues/concerns • Group brainstorming • Pressure - Physical Science 	--Bring children's book to class that could be utilized within your unit --Bring objectives, standards, and 5 E outline for your unit
Monday, Oct. 6 5	<ul style="list-style-type: none"> • 5-E lesson plans/unit thinking/wonder • Assessing/Evaluating student learning • Lesson peer review and Unit Q&A • Sound - Physical Science 	--Bring a draft lesson from unit for peer review -- continue work developing unit plans, including dates for teaching in your field site
Monday, Oct 12...and... Tuesday Oct. 13	<ul style="list-style-type: none"> • This will be a working session to complete both the unit and progress on Bryson readings. No face to face class meeting for either section. 	--continue work on assignments
Tues Monday, Oct 20 19	<ul style="list-style-type: none"> • Brief updates regarding Bryson progress • Earth History - Earth Science • Forces - Paper planes / data collection/fair testing 	--Unit Due...turn in via Blackboard by 4 PM TUESDMONDAY OCT 2019
Tues Monday, Oct 27 6	<ul style="list-style-type: none"> • Return units and articulate action plan for carrying out in schools • Fossils - Earth Science/Biology • Optimizing materials and building a science program • 	--work on Bryson reading and reflection
Tues Monday, Nov 3 2	<ul style="list-style-type: none"> • Seasons - Earth Science • Sun, Moon and Earth - Earth Science • 	--work on Bryson reading and reflection
Tues Monday, Nov 10 9	<ul style="list-style-type: none"> • Bryson discussion groups • Life cycles, ecosystems - Biology • Introduction of Health and intersection with Biology 	--Written reflection on Bryson due, hard copy <u>due</u> in class
Tues Monday, Nov 17 6	<ul style="list-style-type: none"> • Food chains - Biology • Nutrition - Health (Co-taught with Deanna Lavanty - Registered Dietitian) 	--Begin conceptualization and topic for health mini-unit
Tues Monday, Nov 24 3	<ul style="list-style-type: none"> • Constructions of gender - Health • Group discussion surrounding Health SOL's • 	--work on health mini-unit
Tues Monday, Dec 1 Nov 30	<ul style="list-style-type: none"> • Body systems - Health • peer to peer discussions regarding mini-units • 	--work on health mini-unit
Tues Monday, Dec 8 7	<ul style="list-style-type: none"> • Last day of class... Q&A on mini-unit • Science/Health activity...TBA • Course evaluations 	--work on health mini-unit

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<u>Tues</u> Monday, Dec 1 <u>5</u> 4	Exam week...no class meeting... Health mini-unit due	--Health Mini-Unit Project due <u>Tues</u> Monday, Dec. 1 <u>5</u> 4 by 11:59 pm via <u>Blackboard</u>

ASSESSMENT RUBRICS:

Rubric for EDCI 553's PBA: Unit Projects (You must earn at least 2 for all items or you will be required to resubmit)

PBA TASK 1: Science Unit Rubric (45% of total grade)

Assessment Summary: The project is meant to facilitate your understanding for the design and teaching of an inquiry-based science unit. This will require research into both inquiry-based lesson planning and science content. The goal is bring powerful learning theory to life in classrooms and design science experiences that both excite and engage elementary children.

Description and standard addressed	Exceeds Expectations – 3	Meets Expectations – 2	Does Not Meet Expectations – 1	Does Not Meet Expectations – 0
<p>A. Lesson Framework (pedagogical process & procedure, narrative description)</p> <p>INTASC: # 7, 8 ACEI: #3.1</p> <p>(10 pts)</p>	Utilizes inquiry-based lesson model (5E's), clearly describes pedagogical process that embodies inquiry. Clearly described, highly usable and innovative ideas with original elements; uses a myriad of excellent and well-respected sources properly referenced within narrative descriptions.	Utilizes inquiry-based lesson model (5E's), clearly describes pedagogical process that embodies inquiry. Effectively describes, usable and effective ideas; uses dependable sources that properly referenced within narrative descriptions.	Difficult to use; does not have complete components; and/or is not self-explanatory. Does not utilize reputable sources within narrative descriptions and/or more needed clarity within narrative.	No consistent format nor serious professional commitment to student needs.
<p>B. Aligned Standards, Objectives, & Activities</p> <p>INTASC: # 4, 5, 7, 8; ACEI: #2.2, 3.1</p> <p>(5 pts.)</p>	All are student-oriented objectives and stated in observable student learning outcomes; spans all levels of student thinking; all are appropriate for the lesson. Standards, objectives and lesson activities all seamlessly align and support one another.	All are student-oriented objectives and stated in observable student learning outcomes; covers some levels of student thinking; most are clearly connected directly to lesson activities; there exists alignment between standards, objectives and activities.	A mix of student- and teacher-oriented objectives or not stated in terms of observable student learning outcomes; has only minimal levels of student thinking; has way too little or many objectives; and/or some are inappropriate for lesson. Standards, objectives and activities not clearly aligned.	Missing
<p>C. Assessment</p> <p>INTASC: #6 <u>ACEI #4</u></p> <p>(10 pts.)</p>	Innovative, well-supported assessment strategies clearly linked to objectives; demonstrates all stated objectives, copies of assessments included. Will include diagnostic, formative and summative approaches throughout the unit.	Assessment clearly linked to objectives; demonstrates nearly all stated objectives, copies of written assessments are attached. Will include diagnostic, formative and summative approaches throughout the unit.	Assessment is not clearly linked to objectives; demonstrates some stated objectives, and/or copies of written assessments are not attached. Does not include all three types of assessment.	Missing

<p>D. Science Content (Earth science, space science, life science, physical science)</p> <p>INTASC: #4, 5 ACEI SCIENCE #2.2</p> <p>(10 pts.)</p>	<p>Content utilized in lesson plan is accurate, complete (as defined by listed standards); incorporates innovative, exciting and scientifically accurate approaches; multiple connections are made to students everyday lives and accessible.</p>	<p>Content utilized in lesson plan is accurate, complete (as defined by listed standards); incorporates These approaches make attempts to connect to students everyday lives.</p>	<p>Content utilized in lesson plan is inaccurate in some places, key content is not addressed (as defined by listed standards); incorporates mostly scientifically accurate approaches; little effort to connect to students everyday lives.</p>	<p>Missing</p>
<p>E. Nature of Science and Safety</p> <p>INTASC Content #4, 5 ACEI SCIENCE #2.2</p> <p>(5 pts.)</p>	<p>Lesson supports essential enactment of science processes consistent with accepted notions of NOS. These include wonder, evidence, investigation, testing, concluding based on findings, etc. These approaches are well-supported with research literature. There also exists keen attention to issues that could arise and clearly provides appropriate safety measures.</p>	<p>Lesson supports enactment of science processes consistent with accepted notions of NOS. These include wonder, evidence, investigation, testing, concluding based on findings, etc. There also exists keen attention to issues that could arise and clearly provides appropriate safety measures.</p>	<p>Lesson tries to support enactment of science processes consistent with accepted notions of NOS, but misses on key approaches or those approaches are absent. (including wonder, evidence, investigation, testing, concluding based on findings, etc.) There is not enough attention paid to issues that could arise and do not clearly provide appropriate safety measures.</p>	<p>Missing</p>
<p>F. Resources and student handouts</p> <p>INTASC: #7, 8 ACEI: #3.1</p> <p>(5 pts.)</p>	<p>Sources of lesson plan ideas clearly identified so that someone else could locate the sources; more than two sources used to write each lesson plan or develop student materials; uses a myriad of appropriate and available materials.</p>	<p>Sources of lesson plan ideas clearly identified so that someone else could locate the sources; at least two sources used to write each lesson plan or develop student materials; uses a myriad of appropriate and available materials.</p>	<p>Source of lesson plan ideas not clearly identified so that someone else could locate the source and/or fails to use at least two sources to write each lesson plan and develop student materials and/or does not properly reference sources.</p>	<p>Missing</p>

Health Mini-unit:

PBA Task Two: Health Mini Unit with Narrative (30% of total grade)

Assessment Summary: The health mini-unit comes from the same philosophical positioning as the science unit; however, the focus will be squarely placed on conceptualizing your approach then actual lesson planning. That said, you will be required to identify an important health topic for upper elementary students (interpreted from the Virginia SOL's) and provide a narrative description for the unit processes. Secondly, you will need to develop one detailed lesson from the unit narrative as well as design a student resource, handout or activity in support of your lesson or other aspect the unit. Lastly, a detailed assessment plan will need to be part of the narrative discussion regarding your unit.

Description and standard addressed	Exceeds Expectations – 3	Meets Expectations – 2	Does Not Meet Expectations – 1	Does Not Meet Expectations – 0
<p>A. Narrative description of unit framework and lesson (structure, standards, alignment, pedagogical process & procedure, materials)</p> <p>INTASC: # 7, 8 ACEI: #3.1</p> <p>(5 pts.)</p>	<p>Narrative thoroughly describes inquiry-based lesson approach (5E's or other inquiry framework), clearly describes pedagogical process that embodies inquiry that clearly aligned to standards. Lesson also provides clearly described, highly usable and innovative ideas with original elements. Uses a myriad of appropriate and available materials.</p>	<p>Describes inquiry-based lesson approach (5E's or other inquiry framework), clearly describes pedagogical process that embodies inquiry and contains usable and effective ideas that are aligned to VA state standards. Uses a myriad of appropriate and available materials. Clearly addresses safety concerns.</p>	<p>Difficult to use; does not have complete components; and/or is not self-explanatory and alignment is not clearly articulated. Does not carry out inquiry principles.</p>	<p>No consistent format nor serious professional commitment to student needs.</p>
<p>C. Assessment Plan</p> <p>INTASC: #6 ACEI #4</p> <p>(5 pts.)</p>	<p>Narrative description provides powerful innovative, well-supported assessment strategies clearly linked to objectives; demonstrates all stated objectives. Will include diagnostic, formative and summative approaches throughout the unit.</p>	<p>Narrative description clearly links assessment to objectives; demonstrates nearly all stated objectives. Will include diagnostic, formative and summative approaches throughout the unit.</p>	<p>Narrative description is not clearly linked to objectives; demonstrates some stated objectives, and/or copies of written assessments are not attached. Does not include all three types of assessment.</p>	<p>Missing</p>

D. Health Content INTASC #4.5 ACEI HEALTH #2.6 (10 pts.)	Content utilized in lesson plan is accurate, complete (as defined by Virginia SOLs); and incorporates culturally relevant, challenging and innovative ideas that broaden student thinking in regards to health related content. Directly connected to students lives and experience.	Content utilized in lesson plan is accurate, complete (as defined by Virginia SOLs); and incorporates challenging ideas that broaden student thinking in regards to health related content. Makes an effort to connect to students lives and experience.	Does not address health content to create opportunities for student development and practice of skills that contribute to good health OR health content utilized is not accurate.	Missing
E. Technology Plan ISTE: #1 (5 pts.)	Provides excellent description for technology use that connects subject matter with multiple forms technology that advance student learning through creative, and innovative ways.	Strong description for technology use that connects subject matter with technology approaches that advance student learning through creative, and innovative ways.	Description for technology lacks specifics and does not clearly offer ways to advance student learning in creative, innovative and meaningful ways.	Missing
F. Resources and student handouts INTASC: #7, 8 ACEI: #3.1 (5 pts.)	Sources of lesson plan and unit ideas clearly identified so that someone else could locate the sources; or originality described in detail, more than two sources used to write the lesson plan or develop student materials; uses a myriad of excellent and well-respected sources properly referenced.	Sources of lesson plan and unit ideas clearly identified so that someone else could locate the sources; at least two sources used to write the lesson plan and unit. Uses dependable sources that properly referenced.	Source of lesson plan and unit ideas not clearly identified so that someone else could locate the source and/or fails to use at least two sources to write the lesson plan and unit/ Does not fully develop student materials and/or does not properly reference sources. Lastly, does not utilize reputable sources.	Missing

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GEORGE MASON POLICY STATEMENTS

1. GMU Policies and Resources for students
 - a. Students must adhere to the guidelines of the George Mason University Honor Code [See <http://academicintegrity.gmu.edu/honorcode/>].
 - b. Students must follow the university policy for Responsible Use of Computing [See <http://universitypolicy.gmu.edu/1301gen.html>].
 - c. Students are responsible for the content of university communications sent to their George Mason University email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students solely through their Mason email account.

- d. The George Mason University Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students' personal experience and academic performance [See <http://caps.gmu.edu/>].
 - e. Students with disabilities who seek accommodations in a course must be registered with the George Mason University Office of Disability Services (ODS) and inform their instructor, in writing, at the beginning of the semester [See <http://ods.gmu.edu/>].
 - f. Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.
 - g. The George Mason University Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing [See <http://writingcenter.gmu.edu/>].
2. Professional Dispositions
 3. Students are expected to exhibit professional behaviors and dispositions at all times. http://cehd.gmu.edu/assets/docs/forms/secondary_ed/sec_ed_handbook.pdf
 4. Core Values Commitment
The College of Education & Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles. <http://cehd.gmu.edu/values/>

Emergency Procedures

You are encouraged to sign up for emergency alerts by visiting the website <https://alert.gmu.edu>. There are emergency posters in each classroom explaining what to do in the event of crises. Further information about emergency procedures exists on <http://www.gmu.edu/service/cert>

IMPORTANT INFORMATION FOR LICENSURE COMPLETION
Student Clinical Practice: Internship Requirements

Testing

Beginning with Spring 2015 internships, all official and passing test scores must be submitted and in the Mason system (i.e. Banner/PatriotWeb) by the internship application deadline. Allow a minimum of six weeks for official test scores to arrive at Mason. Testing too close to the application deadline means scores will not arrive in time and the internship application will not be accepted.

Required tests:

[Praxis Core Academic Skills for Educators Tests \(or qualifying substitute\)](#)
[VCLA](#)
[Praxis II \(Content Knowledge exam in your specific endorsement area\)](#)
For details, please check <http://cehd.gmu.edu/teacher/test/>

Endorsements

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Please note that ALL endorsement coursework must be completed, with all transcripts submitted and approved by the CEHD Endorsement Office, prior to the internship application deadline. Since the internship application must be submitted in the semester prior to the actual internship, please make an appointment to meet with the Endorsement Specialist and plan the completion of your Endorsements accordingly.

CPR/AED/First Aid

Beginning with spring 2015 internships, verification that the Emergency First Aid, CPR, and Use of AED Certification or Training requirement must be submitted and in the Mason system (i.e. Banner/PatriotWeb) by the application deadline. Students must submit one of the "acceptable evidence" documents listed at <http://cehd.gmu.edu/teacher/emergency-first-aid> to CEHD Student and Academic Affairs. In order to have the requirement reflected as met in the Mason system, documents can be scanned/e-mailed to CEHDacad@gmu.edu or dropped-off in Thompson Hall, Suite 2300.

Background Checks/Fingerprints

All local school systems require students to complete a criminal background check through their human resources office (not through George Mason University) **prior to beginning field hours and internship**. Detailed instructions on the process will be sent to the student from either the school system or Mason. Students are **strongly advised** to disclose any/all legal incidents that may appear on their records. The consequence of failing to do so, whether or not such incidents resulted in conviction, is termination of the field hours or internship.

Please Note

Your G-Number must be clearly noted (visible and legible) on the face of the document(s) that you submit.

Application

The internship application can be downloaded at <http://cehd.gmu.edu/teacher/internships-field-experience>

Deadlines

Spring internship application:

Traditional: September 15

Fall internship application:

Traditional: February 15

Year Long Internship: April 1 (All testing deadlines are August 1 immediately preceding the fall start; RVE deadline is December 1)

For additional information on the College of Education and Human Development, Graduate School of Education, please visit our website [See <http://gse.gmu.edu/>]

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