GEORGE MASON UNIVERSITY COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT GRADUATE SCHOOL OF EDUCATION

Elementary Education Program

EDCI 553.001: SCIENCE METHODS FOR THE ELEMENTARY CLASSROOM Fall 2015

Meeting Time/Day and Location

Instructor: Andrew Gilbert, Ph.D. Phone: (703) 993-3497
Email: agilbe14@gmu.edu

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.

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.

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

<u>Standard I</u>. 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.

(Part of PBA)

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

2. Inquiry-Based Unit Project

45

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 Monday Oct 19.

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 <u>class time on November</u>, **9th.** 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. <u>Make sure to provide some Use</u> 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. <u>Due in class Monday November</u>, 9th

4. Health mini-unit (Part of PBA)

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

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

Formatted: Font: Bold

Formatted: Font: Italic

30%

Formatted: Font: Bold

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 TENTATTIVE CLASS SCHEDULE

Session	Topic/Learning Experiences	Readings & Assignments	
FALL	Mondays, 4:30 PM – 7:10 PM		
Monday, Aug 31	What is Science? Nature of Science? Checks activityHow might we best teach science to young children?	Read Llewellyn, 5 E Begin wonder project	
	What do you wonder about?The 5 E process		
Monday, Sept 7	Labor Day – no class	Wonder Assignment Due, 11:59 PM Tuesday Sept. 8th via email mailto:agilbe14@gmu.edu	
Monday, Sept 14	 Unit construction Writing learning objectives, planning for inquiry, Virginia SOL's Physical Science - Mystery of the cans 	Begin Bryson Readings Conceptualize unit ideas	
Monday, Sept 21	 The role of wonder in science Enacting the 5E's Warm/Cold fronts - Physical/Earth Science 	Bring unit topic/ideas to class	
Monday,	Unit sharing, progress reports, issues/concerns	Bring children's book to	

Sept 28	Group brainstorming Pressure - Physical Science	class that could be utilized within your unitBring objectives, standards, and 5 E outline for your unit
Monday, Oct. 5	 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 12and Tuesday Oct. 13	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
Monday, Oct 19	 Brief updates regarding Bryson progress Earth History - Earth Science Forces - Paper planes / data collection/fair testing 	Unit Dueturn in via Blackboard by 4 PM MONDAY OCT 19
Monday, Oct 26	 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
Monday, Nov 2	 Seasons - Earth Science Sun, Moon and Earth - Earth Science 	work on Bryson reading and reflection
Monday, Nov 9	 Bryson discussion groups Life cycles, ecosystems - Biology Introduction of Health and intersection with Biology 	Written reflection on Bryson due, hard copy due in class
Monday, Nov 16	Food chains - Biology Nutrition - Health (Co-taught with Deanna Lavanty - Registered Dietitian)	Begin conceptualization and topic for health mini- unit
Monday, Nov 23	 Constructions of gender - Health Group discussion surrounding Health SOL's 	work on health mini-unit
Monday, Nov 30	Body systems - Health peer to peer discussions regarding mini-units	work on health mini-unit
Monday, Dec 7	 Last day of class Q&A on mini-unit Science/Health activityTBA Course evaluations 	work on health mini-unit
Monday, Dec	Exam weekno class meeting Health mini-unit due	Health Mini-Unit

14	Project due Monda	ay,
	Dec. 14 by 11:59 pt	m via
	Blackboard	

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	Exceeds Meets Does Not Meet		Does Not Meet	Does Not Meet	
standard addressed	Expectations – 3	Expectations – 2	Expectations – 1	Expectations – 0	
(pedagogical process & procedure,	Lesson Framework dagogical process brocedure, rrative description) ASC: # 7, 8 highly usable and innovative ideas with interest in the model of the innovative ideas with interest in the models in quiry. Clearly described, highly usable and innovative ideas with interest in the models in quiry. Clearly described, within narrative ideas; uses dependable into use; do not have complete components; and/or not self-explanation. Does not utilize reputable sources within narrative ideas; uses dependable into use; do not have complete components; and/or not self-explanation. The process in the model (5E's), clearly describes pedagogical process that embodies inquiry. Does not utilize reputable soon model (5E's), clearly describes pedagogical process that embodies inquiry. Does not willize reputable soon model (5E's), clearly describes pedagogical process that embodies inquiry. Does not utilize reputable soon model (5E's), clearly describes pedagogical process that embodies inquiry. Does not utilize reputable soon model (5E's), clearly describes pedagogical process with an embodies inquiry. Does not utilize reputable soon model (5E's), clearly describes pedagogical process with at embodies inquiry. Does not utilize reputable soon model (5E's), clearly describes pedagogical process with at embodies inquiry. Does not utilize reputable soor model (5E's), clearly describes pedagogical process with at embodies inquiry. Does not utilize reputable soor model (5E's), clearly describes pedagogical process with at embodies inquiry. Does not utilize reputable soor model (5E's), clearly describes pedagogical process with at embodies inquiry. Does not utilize reputable soor model (5E's), clearly describes pedagogical process with at embodies inquiry. Does not utilize reputable soor model (5E's), clearly describes pedagogical process with at embodies inquiry. Does not utilize reputable soor model (5E's), clearly describes pedagogical process with at embodies inquiry. Does not utilize reputable soor model (5E's), clearly describes ped		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	nplete nor serious professional and/or is commitment to student anatory. needs. lize nrces live and/or clarity	
(10 pts)	sources properly referenced within narrative descriptions.				
B. Aligned Standards,	All are student-	All are student-	A mix of student- and	Missing	
Objectives, & Activities	oriented objectives and stated in observable student learning	oriented objectives and stated in observable student learning	objectives or not stated in terms of observable	-	
INTASC: # 4, 5, 7, 8; ACEI: #2.2, 3.1	outcomes; spans all levels of student thinking; all are	outcomes; covers some levels of student thinking; most are	minimal levels of		
(5 pts.)	appropriate for the lesson. Standards, objectives and lesson activities all seamlessly align and support one another.	clearly connected directly to lesson activities; there exists alignment between standards, objectives and activities.	student thinking; has way too little or many objectives; and/or some are inappropriate for lesson. Standards, objectives and activities not clearly aligned.		
C. Assessment	Innovative, well-	Assessment clearly		Missing	
INTASC: #6 ACEI #4	strategies clearly linked to objectives; demonstrates all stated objectives, copies of assessments included.	assessments are attached. Will include	demonstrates some stated objectives, and/or copies of written assessments are not		
(10 pts.)	Will include diagnostic, formative and summative approaches throughout the unit.	diagnostic, formative and summative approaches throughout the unit.	attached. Does not include all three types of assessment.		

	Content utilized in	Content utilized in	Content utilized in	h. 4:
D. Science Content				Missing
(Earth science, space		lesson plan is accurate,	inaccurate in some	
science, life science,	complete (as defined	complete (as defined		
physical science)	by listed standards);	by listed standards);	places, key content is	
physical science)	incorporates	incorporates	not addressed (as	
INTASC: #4, 5	innovative, exciting and scientifically	These approaches make attempts to	defined by listed	
ACEI SCIENCE #2.2		connect to students	standards); incorporates mostly scientifically	
ACEI SCIEIVEE #2.2	accurate approaches; multiple connections	everyday lives.	accurate approaches;	
	are made to students		little effort to connect	
(10 pts.)	everyday lives and		to students everyday	
(10 pts.)	, , ,		, ,	
	accessible.		lives.	N 41 1
E. Nature of Science	Lesson supports essential enactment of	Lesson supports	Lesson tries to support enactment of science	Missing
and Safety		processes consistent	processes consistent	
INTASC Content #4, 5	science processes consistent with	P	F	
ACEI SCIENCE #2.2			with accepted notions	
	accepted notions of	of NOS. These include		
	NOS. These include	wonder, evidence,	key approaches or those	
	wonder, evidence,	investigation, testing,	approaches are absent.	
	investigation, testing,	concluding based on	(including wonder,	
	concluding based on	findings, etc. There also exists keen	evidence, investigation, testing, concluding	
	findings, etc. These		based on findings, etc.)	
	approaches are well-		based on findings, etc.)	
	supported with research literature.	could arise and clearly	TPI	
(5 pts.)		provides appropriate	There is not enough	
	There also exists keen attention to issues that	safety measures.	attention paid to issues that could arise and do	
	could arise and clearly		not clearly provide	
	provides appropriate		appropriate safety	
	safety measures.		measures.	
E Deserves and	Sources of lesson plan	Sources of lesson plan	Source of lesson plan	Missing
F. Resources and		ideas clearly identified		IVIISSIIIg
student handouts	so that someone else	so that someone else	identified so that	
	could locate the	could locate the	someone else could	
INTASC: #7, 8	sources; more than	sources: at least two	locate the source and/or	
ACEI: #3.1	two sources used to	sources used to write	fails to use at least two	
	write each lesson plan	each lesson plan or	sources to write each	
	or develop student	develop student	lesson plan and develop	
	materials; uses a	materials; uses a	student materials and/or	
	myriad of appropriate	myriad of appropriate	does not properly	
(5 pts.)	and available	and available	reference sources.	
	materials.	materials.	reference sources.	
	matchais.	materiais.	1	

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	Exceeds	Meets	Does Not Meet	Does Not Meet
standard addressed	Expectations – 3	Expectations – 2	Expectations – 1	Expectations – 0
A. Narrative	0,	1. 3	Difficult to doe, does	No consistent format
description of unit	describes inquiry-			nor serious professional
fromowork and lesson				commitment to student
(structure, standards,	(5E's or other inquiry	//	not self-explanatory and alignment is not	needs.
	describes pedagogical	1 00	clearly articulated.	
pedagogical process	1		Does not carry out	
& procedure,	inquiry that clearly		inquiry principles.	
& procedure,		ideas that are aligned	1 71 1	
materials)	Lesson also provides	to VA state standards.		
INTASC: # 7, 8	clearly described,	Uses a myriad of		
ACEI: #3.1		appropriate and		
11CEI: #3.1		available materials.		
	original elements.	Clearly addresses		
(5 pts.)	Uses a myriad of	safety concerns.		
<u></u>	appropriate and available materials.			
C. Assessment Plan	Narrative description	Narrative description	Narrative description is	Missing
C. Assessment Flan	provides powerful		not clearly linked to	iviissing
INTASC: #6	innovative, well-	•	objectives;	
			demonstrates some	
TCET II I	strategies clearly	demonstrates nearly all	stated objectives,	
	linked to objectives;	stated objectives. Will	and/or copies of written	
	demonstrates all stated	include diagnostic,	assessments are not	
	objectives. Will		attached. Does not	
	include diagnostic,	summative approaches	* *	
(5 pts.)			of assessment.	
	summative approaches			
	throughout the unit.			

D. Health Content	Content utilized in	Content utilized in	Does not address health	Missing		
D. Health Content		lesson plan is accurate,				
INTASC #4,5	complete (as defined	complete (as defined	opportunities for			
ACEI HEALTH #2.6	by Virginia SOLs);	by Virginia SOLs);	student development			
ACEITIEALITI #2.0	and incorporates	and incorporates	and practice of skills			
	culturally relevant,	challenging ideas that	that contribute to good			
	challenging and	broaden student	health OR health			
	innovative ideas that	thinking in regards to	content utilized is not			
	broaden student	0 0	accurate.			
	thinking in regards to	Makes an effort to				
	health related content.	connect to students				
(10 pts.)	Directly connected to	lives and experience.				
(10 p.s.)	students lives and	•				
	experience.					
E. Technology Plan	Provides excellent	Strong description for	Description for	Missing		
	description for	technology use that	technology lacks			
ISTE: #I	technology use that	connects subject	specifics and does not			Formatted: Font: Not Bold
	connects subject	matter with technology				1 Offiatted: 1 Offi: Not Bold
(5 pts.)	matter with multiple	approaches that	advance student			Formatted: Font: Not Bold
	forms technology that		learning in creative,			
•	advance student	learning through	innovative and		1	Formatted: Font: 10 pt
	learning through	creative, and	meaningful ways.			Formatted: Font: 10 pt
	creative, and	innovative ways.			~ \	Formatted: Centered
	innovative ways.				1	
	C	C	C	Missing		Formatted: Font: 10 pt
F. Resources and	and unit ideas clearly	Sources of lesson plan and unit ideas clearly	and unit ideas not	Missing		Formatted: Font: 10 pt
student handouts	identified so that	identified so that	clearly identified so		Y	Formatted: Font: 10 pt
	someone else could	someone else could	that someone else could		'	1 omatour sim to pr
INTASC: #7, 8		locate the sources; at	locate the source and/or			
ACEI: #3.1		,	fails to use at least two			
		to write the lesson plan				
		and unit. Uses	lesson plan and unit/			
	the lesson plan or	dependable sources	Does not fully develop			
(5 - 10)	develop student	that properly	student materials and/or			
(5 pts.)	materials; uses a	referenced.	does not properly			

reference sources. Lastly, does not utilize

reputable sources.

GEORGE MASON POLICY STATEMENTS

1. GMU Policies and Resources for students

myriad of excellent

and well-respected sources properly

referenced.

l

- 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
- 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
- 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

Formatted: Font: Bold

Formatted: Space After: 0 pt

Formatted: Line spacing: single

Formatted: Space After: 0 pt

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. Formatted: Space After: 0 pt 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. Formatted: Space After: 0 pt **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. Formatted: Space After: 0 pt Please Note Your G-Number must be clearly noted (visible and legible) on the face of the document(s) that you submit. Formatted: Space After: 0 pt The internship application can be downloaded at http://cehd.gmu.edu/teacher/internships-field-<u>experience</u> Formatted: Space After: 0 pt **Deadlines** Spring internship application: Traditional: September 15 Formatted: Line spacing: single Fall internship application: Traditional: February 15 Formatted: Line spacing: single Year Long Internship: April 1 (All testing deadlines are August 1 immediately preceding the fall start; RVE deadline is December 1) Formatted: Line spacing: single For additional information on the College of Education and Human Development, Graduate School of Education, please visit our website [See http://gse.gmu.edu/] 14