George Mason University  
College of Education and Human Development  
Secondary Education Program  
EDCI 673-001/483-001:  
Advanced Methods of Teaching Science in the Secondary School  
Spring 2020 – 3 Credits - Fairfax

**INSTRUCTOR:** Dr. Stephen Burton  
**DATE AND TIME:** Jan 27-May 11  
Mondays 4:30-7:20 pm  
**CLASS LOCATION:** Thompson 2020  
**TELEPHONE:** 616-502-2175  
**E-MAIL:** sburton7@gmu.edu  
**OFFICE HOURS:** By appointment  

**COMMUNICATION:** Email is the best form of communication. During usual circumstances, turnaround time is 24-36 hours. You can also reach me on my cell phone at 616-502-2175. However, please text me first using asking if I can receive a call at that time. If I do not respond right away, then I am unavailable. I will, text back later and we can schedule a time to talk on the phone.

**REQUIRED ELECTRONIC TEXTS:** We will have required readings from an NSTA class bundle, consisting of various books and journals (and sometimes webinars) from the National Science Teacher Association (NSTA) – our national organizing body. The purchase of these electronic materials also gives you a membership to NSTA, which opens up a great deal of resources to you. We are doing this instead of having one book for two reasons:  
1. NSTA is an important organization to know over the course of your career as a science teacher – they are a premiere organization in professional development- and you should get to know them and get involved as soon as possible  
2. NSTA peer-reviews all of their work, so their professional development materials are the best available – and the biggest body of materials as well

If you took Science Methods 1 during the fall of 2019 you should have already paid for the year-long course pack. You will not need to purchase the course pack again. However, if you did not take Science Methods 1 in the fall of 2019 OR chose not to purchase the course pack, you will need to make the purchase. [INSTRUCTIONS FOR PURCHASING THE NSTA LEARNING CENTER (NSTA LC) CAN BE FOUND HERE: http://bit.ly/2ZvDYtv.](http://bit.ly/2ZvDYtv.)

**PREREQUISITE:** Students must also complete 15 hours of field experience. EDCI 473 for EDCI 483, EDCI 573&522 for EDCI 673

**UNIVERSITY CATALOG COURSE DESCRIPTION:** Provides advanced study of teaching and curriculum development based on research and current issues. Emphasizes integrating science and technology and adapting instruction to the needs of diverse learners. School-based field experience required. Offered by Graduate School of Education. May not be repeated for credit.
Course Overview: EDCI 483/673 is the second course in a two-course sequence of science methods courses for students seeking a secondary school teaching license in earth science, biology, chemistry, or physics. The course builds on students’ knowledge of their subject matter and from their first science methods course. The course focuses on using technology in science teaching and learning and meeting the diverse needs of learners as called for by the Standards of Learning for Virginia Public Schools and National Science Education Standards and as outlined by the National Council for Accreditation of Teacher Education (NCATE), the National Science Teachers Association (NSTA), and the Interstate New Teacher Assessment and Support Consortium (INTASC). EDCI 483/673 introduces students to integrating technology in learning and teaching science, adapting inquiry-based lessons, assessment techniques, and the diverse needs of students.

Course Delivery Method: EDCI 483/673 is designated as a lecture course; however, students are expected to come to class prepared and actively participate in discussions and other hands-on learning experiences.

Course Materials Online: For dissemination of information, we will be using the website https://sites.google.com/site/gmuscimethods/home. Materials will be added throughout the semester based upon needs from the course. The Blackboard site, found at http://mymasonportal.gmu.edu, will be used primarily for submitting assignments and grades. Use the same login as your GMU email for the Blackboard Sites.

Google Sites: The Unit Plan assignment you will be completing will initially be posted through a website YOU WILL AUTHOR using Google Sites (https://sites.google.com/). To create a website with Google Sites, you will need to sign up for a Gmail email account (if you do not already have one).

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 https://ready.gmu.edu/.

Big Ideas in Science Education: During this semester, we will continue focusing on helping you begin your journey to becoming a reflective practitioner of reformed science education practices. We will focus on the following big ideas as a way to frame your understanding of effective science education practices throughout both Science Methods I and Science Methods II.

- Our job is to help students figure out how to be lifelong learners
- The more students figure out answers to tough questions on their own, the more they will trust they can learn on their own
- Science is a process that uses evidence to think critically and explain the natural world
  - Process leads to the knowledge we currently teach as facts
  - If students don’t experience the process, they won’t value its ability to explain the natural world – plus they will only see science as a collection of facts
- Know your students – get into their heads when designing lessons
- Have a theory of learning – it is what should guide your instruction as you develop lessons
- Know what you want your students to be able to do and how you will assess it before you design any instruction
- Measure everything you do against student learning
- You don’t have to reinvent the wheel, but do need to customize it based on your learning theory and unit objectives
**Learning Goals, Objectives and Assessments:** Below is a list of the major goals with specific objectives and the assessments that will allow you to show that you have achieved those goals.

**Goal 1: Build a learning theory for developing and implementing lessons**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Assignment</th>
<th>Who must do this?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students will be able to explain why a student-centered approach to learning is effective in learning</td>
<td>Research Review</td>
<td>Methods I and II – Grad Students Only</td>
</tr>
<tr>
<td>Students will be able to describe their theory of learning, supporting with evidence from the literature</td>
<td>Learning Theory Alignment</td>
<td>Methods II</td>
</tr>
<tr>
<td>Student will be able to design lessons that clearly reflect their learning theory</td>
<td>Lessons (Both), Unit Plan (Methods II), Microteaching Reflection (Both)</td>
<td>Methods I and II</td>
</tr>
<tr>
<td>Students will be able to explain how the 5-E lesson design, the Learning Cycle, and a student-centered learning theory are effective ways to think about learning and lesson design</td>
<td>Reflection Questions</td>
<td>Methods I and II</td>
</tr>
</tbody>
</table>

**Goal 2: Do science to understand how science is done**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Assignment</th>
<th>Who must do this?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students will be able to conduct an investigation that results in new scientific knowledge</td>
<td>Nature of Science Assignment</td>
<td>Methods I</td>
</tr>
<tr>
<td>Students will be able to explain the epistemic features and unique characteristics (NOS) of science</td>
<td>Nature of Science Assignment</td>
<td>Methods I</td>
</tr>
</tbody>
</table>

**Goal 3: Recognize that inquiry learning using scientific practices has inherent risks that should be identified and addressed such that students learn to do science in an ethical and safe manner.**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Assignment</th>
<th>Who must do this?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students will be able to explore the web to describe the major safety and ethical concerns associated with conducting science in the classroom</td>
<td>Safety Assignment</td>
<td>Methods I</td>
</tr>
<tr>
<td>Students will be able to describe means to reduce the potential safety risks involved in conducting scientific investigations in the classroom while not compromising the benefit the students get while conducting inquiries</td>
<td>Safety Assignment</td>
<td>Methods I</td>
</tr>
<tr>
<td>Students will be able to design lessons and clearly indicate within the lesson: safety concerns, how to reduce them and what to do when accidents happen</td>
<td>Lessons (Both), Unit Plan (Methods II)</td>
<td>Methods I and II</td>
</tr>
</tbody>
</table>
**Goal 4: Develop an understanding of how inquiry can develop both scientific thinking and content knowledge**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Assignment</th>
<th>Who must do this?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students will be able to explain what inquiry in a science class looks like</td>
<td>Reflection Questions</td>
<td>Methods I and II</td>
</tr>
<tr>
<td>Student will develop lessons that are inquiry-focused</td>
<td>Lessons (Both), Unit Plan (Methods II)</td>
<td>Methods I and II</td>
</tr>
<tr>
<td>Students will be able to explain Model-Based Inquiry and its potential impact on helping students learn science content and scientific thinking</td>
<td>Reflection Questions</td>
<td>Methods I</td>
</tr>
<tr>
<td>Students will be able to develop lessons that incorporate Model-Based Inquiry</td>
<td>Lessons (Both), Unit Plan (Methods II)</td>
<td>Methods I and II</td>
</tr>
<tr>
<td>Students will be able to explain Cognitive Apprenticeships and its potential impact on helping students learn science content and scientific thinking</td>
<td>Reflection Questions</td>
<td>Methods I and II</td>
</tr>
<tr>
<td>Students will be able to develop lessons that incorporate Cognitive Apprenticeships</td>
<td>Lessons (Both), Unit Plan (Methods II)</td>
<td>Methods I and II</td>
</tr>
</tbody>
</table>

**Goal 5: Understand how to develop effective lessons and units with backwards design**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Assignment</th>
<th>Who must do this?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student will be able to explain the basic premise and order of backwards</td>
<td>Reflection Questions</td>
<td>Methods I and II</td>
</tr>
<tr>
<td>Students will use the basic organization of backwards design to develop a lesson plan</td>
<td>Lessons (Both), Unit Plan (Methods II)</td>
<td>Methods I and II</td>
</tr>
<tr>
<td>Students will be able to write measurable objectives</td>
<td>Lessons (Both), Unit Plan (Methods II)</td>
<td>Methods I and II</td>
</tr>
<tr>
<td>Students will be able to describe how teaching activities support student achievement of measurable objectives</td>
<td>Lessons (Both), Unit Plan (Methods II), Microteaching Reflection (Both)</td>
<td>Methods I and II</td>
</tr>
<tr>
<td>Students will be able to describe how assessments evaluate student achievement of the measurable objectives</td>
<td>Lessons (Both), Unit Plan (Methods II), Microteaching Reflection (Both)</td>
<td>Methods I and II</td>
</tr>
</tbody>
</table>

**Goal 6: Develop skills as reflective practitioners.**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Assignment</th>
<th>Who must do this?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students will be able to effectively examine classrooms using their learning theory as a lens and student behavior, engagement, and learning (when possible) as the evidence</td>
<td>Field Experience Paper</td>
<td>Methods I and II</td>
</tr>
<tr>
<td>Students will be able to examine use assessment data to reflect on and improve upon lessons</td>
<td>Microteaching Reflection (Both)</td>
<td>Methods I and II</td>
</tr>
</tbody>
</table>
Professional Association Standards (met through EDCI 483/673)
The course focuses on the teaching of science as called for by the state and national science standards and as outlined by the National Council for Accreditation of Teacher Education (NCATE), the National Science Teachers Association (NSTA), and the Interstate New Teacher Assessment and Support Consortium (INTASC). EDCI 573 builds a repertoire of science teaching and assessment strategies to facilitate student learning.

The pre-service and provisionally licensed teacher will:

- Understand the relationship of assessment in understanding student learning and informing instruction; RESEARCH-BASED PRACTICE; SPA STANDARD 2c, 5a, 5b, 5c
- Design evidence-based assessment techniques in science instruction; RESEARCH-BASED PRACTICE; SPA STANDARD 2c, 5a, 5b, 5c
- Build a repertoire of science teaching and assessment strategies using technology to help students become scientifically literate, think critically and creatively, and see relationships among science, technology, and society; RESEARCH-BASED PRACTICE; INNOVATION; COLLABORATION; SPA STANDARDS 2, 3, 4, 5
- Critique, adapt, and construct standards-based lessons including assessment and hands-on experiences for the diverse needs of learners including gender equity, cultural diversity, English language learners, gifted/talented students, and students with learning, physical, social, and emotional challenges. RESEARCH-BASED PRACTICE; SOCIAL JUSTICE; ETHICAL LEADERSHIP; SPA STANDARDS 2, 3, 4, 5

Grading:

Grading: High quality work and participation is expected on all assignments and in class. Attendance at all classes for the entire class is a course expectation. For each unexcused absence, the course grade will be reduced by 5% points. All assignments are graded. Each graded assignment will be assessed using a scoring rubric which will be handed out before the assignment is due. All assignments are due at the beginning of class on the day they are due. Completing work ahead of the scheduled due date is acceptable and encouraged. There are many assignments in this course, so staying organized and on top of the schedule is important for success. Graded assignments that are late will automatically receive a ten percent grade reduction (one full letter grade lower). After 5 days, any assignments still late will not be accepted unless prior arrangements have been made with the instructor.

Course Performance Evaluation

All assignments for this course will be submitted to Blackboard from evaluation. In addition, Google Sites will be used for the Unit Plan.

Grading Scale

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93-100%</td>
</tr>
<tr>
<td>A-</td>
<td>90-92%</td>
</tr>
<tr>
<td>B+</td>
<td>88-89%</td>
</tr>
<tr>
<td>B</td>
<td>80-87%</td>
</tr>
<tr>
<td>C</td>
<td>70-79%</td>
</tr>
<tr>
<td>F</td>
<td>Below 70%</td>
</tr>
</tbody>
</table>

Policy on Incompletes

If circumstances warrant, a written request for an incomplete must be provided to the instructor for approval prior to the course final examination date. Requests are accepted at the instructor’s discretion, provided your reasons are justified and that 80% of your work has already been completed. Your written request should be regarded as a contract between you and the instructor and must specify the date for completion of work. This date must be at least two weeks prior to the university deadline for changing incompletes to letter grades.
**Assignments:** Findings from science education research shows that frequent assessment of small amounts of material is most effective for learning science. Therefore, in this class formal and informal assessment will be continuously provided on assignments and class activities. Assessment is a two-way communication loop that informs both learning and teaching. All written assignments must be submitted through Blackboard or Tk20 as indicated. General formatting includes 1" margins, double-spacing, and Times New Roman (or equivalent) font. See Assignments section of the Syllabus for a description of the assignment.

<table>
<thead>
<tr>
<th>Assessments</th>
<th>EDCI 483</th>
<th>EDCI 673</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning Project</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Unit Plan Overview (done in parts)</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Lessons – 3 Individual Lessons</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lesson 1 – Opening</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Lesson 2 – Inquiry and Personalized</td>
<td>10</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Lesson 3</td>
<td>15</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Remaining components of unit plan</td>
<td>10</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Learning Theory Alignment</td>
<td>5</td>
<td>5</td>
<td></td>
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</tbody>
</table>

**Clinical Assignments**

<table>
<thead>
<tr>
<th>Clinical Assignments</th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesson Analysis</td>
<td>10</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Clinical Experience Reflection Paper</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Candidate Disposition/Professionalism</td>
<td>20</td>
<td>20</td>
<td>NA</td>
</tr>
</tbody>
</table>

**Other Assessments**

<table>
<thead>
<tr>
<th>Other Assessments</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Review</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

| **Total Points**                   | 100      | 100      |          |

**Field Experience Signup:** Per state guidelines, you are required to complete 15 hours of fieldwork during this class. For more information about field placement, go to [https://cehd.gmu.edu/epo/field-experience](https://cehd.gmu.edu/epo/field-experience). Additionally, please answer the survey sent by Dr. Zenkov. If you have missed this survey, go to [http://cehd.gmu.edu/endorse/ferf](http://cehd.gmu.edu/endorse/ferf) to sign up for your placement.

**Core Values Commitment:** The College of Education and 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/](http://cehd.gmu.edu/values/).

**Professional Dispositions:** Students are expected to exhibit professional behaviors and dispositions at all times. See [https://cehd.gmu.edu/students/policies-procedures/](https://cehd.gmu.edu/students/policies-procedures/)

**GMU Policies and Resources for Students:**

**Policies**

- Students must adhere to the guidelines of the Mason Honor Code (see [https://catalog.gmu.edu/policies/honor-code-system/](https://catalog.gmu.edu/policies/honor-code-system/)).
- Students must follow the university policy for Responsible Use of Computing (see [http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/](http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/)).
• Students are responsible for the content of university communications sent to their Mason 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.

• Students with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor (see https://ds.gmu.edu/).

• Students must silence all sound emitting devices during class unless otherwise authorized by the instructor.

Campus Resources

• Support for submission of assignments to Tk20 should be directed to tk20help@gmu.edu or https://cehd.gmu.edu/aero/tk20. Questions or concerns regarding use of Blackboard should be directed to http://coursesupport.gmu.edu/.

• For information on student support resources on campus, see https://ctfe.gmu.edu/teaching/student-support-resources-on-campus

For additional information on the College of Education and Human Development, please visit our website https://cehd.gmu.edu/students/.
**Tentative Calendar (subject to change based on student needs):**

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 27</td>
<td>What is effective science instruction? &amp; Overview of the class</td>
</tr>
</tbody>
</table>
| Feb 3 | Strategies 1C and 2C – Designing Effective Science Instruction  
Work Time – Planning Project |
| Feb 10 | Strategies 3C, 4C and 5C, BC(Objectives) – Designing Effective Science Instruction  
Work Time – Planning Project |
| Feb 12 | Assignment Due: Unit Plan - Planning Project- Draft - content and organization |
| Feb 17 | Strategy 6C - Designing Effective Science Instruction  
Work Time – Unit Plan Overview |
| Feb 19 | Assignment Due: Unit Plan Overview – Draft – Content and Organization |
| Feb 24 | Strategies 1E, 2U, 3U, and 5U – Designing Effective Science Instruction  
Work Time – Lesson 1 |
| Mar 2 | Strategies 1U, 4U, and 2E – Designing Effective Science Instruction  
Work Time – Lesson 1 |
| Mar 6 | Assignment Due: Lesson 1 Draft – Opening Lesson |
| **Mar 9** | **GMU SPRING BREAK** |
| Mar 16 | Strategies 1E (Personalized Learning) and BU (Constructivism) – Designing Effective Science Instruction  
Lesson 1 – Individual Feedback  
Work Time – Lesson 2 |
| Mar 23 | Strategies 2U, 4E, 6U and BU (Technology) – Designing Effective Science Instruction  
Work Time – Lesson 2 |
| Mar 30 | Work Time – Lesson 2 |
| April 5 | Assignment Due: Lesson 2 Draft – Inquiry and Personalized Lesson |
| Apr 6 | Lesson 2 – Individual Feedback  
Work Time Lesson 3 |
| Apr 13 | Strategies 3E and 6E – Designing Effective Science Instruction  
Work Time Lesson 3  
Assignment Due: Lesson 3 Draft – Personalized Lesson |
| **Apr 20** | **NO FORMAL CLASS - Work Time Revisions** |
| Apr 26 | Assignment Due: Draft Complete Unit Plan – on website (include revised lesson 1 and 2  
Assignment Due: Learning Theory Alignment |
| Apr 27 | Presentations-Peer Review |
| **May 1** | **Assignment Due: Lesson Analysis** |
| May 4 | Presentations-Peer Review & Evaluations |
| May 8 | Assignment Due: Clinical Experience Reflection |
| May 10 | **NO FORMAL CLASS - Work Time Revisions** |
| May 12 | Assignment Due: Final Unit Plan Revision |

**Assignments:**

All assignment instructions are posted on Blackboard – the instructions given on the syllabus are for descriptive purposes only.
**In-Class Assignments:**

- **Professionalism** – over the semester, your professional behavior will be evaluated. Professional behavior such as authentic effort, collaboration, and reflection will be based on (submitted to Reflection Journal in MyMason):
  - PRODUCT: Reading and Reflection Questions
  - PRODUCT: Interaction with the professor and preservice teacher colleagues
  - PRODUCT: Timeliness and quality of submitted assignments (quality evaluated on authentic effort)

- **Unit Plan** - Design a unit (lasting at least 5 days) - build on google sites
  - PRODUCT – Planning Project
  - PRODUCT – Overview
  - PRODUCT – 3 in-depth lesson plans with support materials
    - Lesson 1 – Opening Lesson
    - Lesson 2 – Inquiry and Personalized Lesson
    - Lesson 3 – Personalized Lesson
  - PRODUCT – Remaining lessons of unit (short-version) and support materials
  - PRODUCT – Assessment Map
  - PRODUCT – Learning Theory Alignment

- **Research Review** – explore the educational research on science specific teaching strategies – (submitted to MyMason)
  - PRODUCT – Part 1 – orientation toward educational research – Discussion Board
  - PRODUCT – Part 2 – Identifying examples of resources – Discussion Board
  - PRODUCT – Part 3 – Summarizing and applying the research - Discussion Board

**Field Experience:**

- **15 Hours for Science Methods** (ideally 5 days, 3 hours per day) – move beyond observing to engaging with students (if allowed)

- **Lesson Analysis** – You will teach a lesson at your school and reflect on the experience - submit to Blackboard assessments
  - PRODUCT: Lesson plan – submit to Blackboard Assessments
  - PRODUCT: Reflection – submit to Blackboard Assessments - 8 pages maximum

- **Clinical Experience Reflection** – Submit to Blackboard assessments
  - PRODUCT: Turn in a log sheet, signed by the teacher(s) showing you completed the 15 hours of field experience.
  - PRODUCT: Written Summary (5 pages maximum - 2 pages maximum for each area of focus)
RECOMMENDED ONLINE RESOURCES:


Other articles/handouts will be distributed in class or posted on-line at the course website. (Your GMU email address is required for communication with the course instructor and for using Blackboard!)

OTHER RESOURCES


**NOTICE OF MANDATORY REPORTING OF SEXUAL ASSAULT, INTERPERSONAL VIOLENCE, AND STALKING:** As a faculty member, I am designated as a “Responsible Employee,” and must report all disclosures of sexual assault, interpersonal violence, and stalking to Mason’s Title IX Coordinator per University Policy 1202. If you wish to speak with someone confidentially, please contact one of Mason’s confidential resources, such as Student Support and Advocacy Center (SSAC) at 703-380-1434 or Counseling and Psychological Services (CAPS) at 703-993-2380. You may also seek assistance from Mason’s Title IX Coordinator by calling 703-993-8730, or emailing titleix@gmu.edu.

**SUSTAINABILITY AND DISPOSITIONS INFORMATION**

**Sustainability at GMU**

George Mason University is focusing on making our community “greener” and reducing the impact on the environment. This course will contribute to this effort in the following ways. I hope that you will create other ways to contribute to this effort.

- Handouts will be available electronically through the Blackboard platform
- All assignments will be submitted through the blackboard on a Wiki site established for each individual student.
- You should consider reducing waste in your teaching practice (ex: unnecessary paper) and in developing your unit plan
- Incorporate teaching sustainability in the content of your lesson plans (for example, human’s role in reducing their impact on the environment.) Think about what the next generation needs to know about “greening”.

**College Expectations and University honor Code**

- Students are expected to exhibit professional behaviors and dispositions at all times. See *Graduate School of Education Dispositions for A Career Educator* section below and follow the instructions.
- Students must adhere to the guidelines of the George Mason University Honor Code [See http://oai.gmu.edu/honor-code/].
  - Please note the following.
  - “Plagiarism encompasses the following:
1. Presenting as one's own the words, the work, or the opinions of someone else without proper acknowledgment.

2. Borrowing the sequence of ideas, the arrangement of material, or the pattern of thought of someone else without proper acknowledgment.” (from Mason Honor Code online at http://mason.gmu.edu/~montecin/plagiarism.htm)

   o Paraphrasing involves taking someone else’s ideas and putting them in your own words. When you paraphrase, you need to cite the source using APA format.
   o When material is copied word for word from a source, it is a direct quotation. You must use quotation marks (or block indent the text) and cite the source.
   o Electronic tools (e.g., SafeAssign) may be used to detect plagiarism if necessary.
   o Plagiarism and other forms of academic misconduct are treated seriously and may result in disciplinary actions.

- Students must follow the university policy for Responsible Use of Computing [See http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/]
- 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.
- 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/].
- 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/].
- Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.
- 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/].
- 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/

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

Students are expected to exhibit professional behavior and dispositions. The Virginia Department of Education and the National Council for Accreditation of Teacher Education promote standards of professional competence and dispositions. Dispositions are values, commitments, and professional ethics that influence behaviors toward students, families, colleagues, and all members of the learning community. The Graduate School of Education expects students, faculty, and staff to exhibit professional dispositions through a:

I. Commitment to the profession
   - Promoting exemplary practice
   - Excellence in teaching and learning
   - Advancing the profession
   - Engagement in partnerships

II. Commitment to honoring professional ethical standards
   - Fairness
   - Honesty
   - Integrity
   - Trustworthiness
   - Confidentiality
   - Respect for colleagues and students

III. Commitment to key elements of professional practice
   - Belief that all individuals have the potential for growth and learning
   - Persistence in helping individuals succeed
   - High standards
   - Safe and supportive learning environments
   - Systematic planning
   - Intrinsic motivation
   - Reciprocal, active learning
   - Critical thinking
   - Thoughtful, responsive listening
   - Active, supportive interactions
   - Technology-supported learning
   - Research-based practice
   - Respect for diverse talents, abilities, and perspectives
   - Authentic and relevant learning

IV. Commitment to being a member of a learning community
   - Professional dialogue
   - Self-improvement
   - Collective improvement
   - Reflective practice
   - Continuous, integrated assessment
   - Responsibility
   - Flexibility
   - Collaboration
   - Continuous, lifelong learning

V. Commitment to democratic values and social justice
   - Understanding systemic issues that prevent full participation
   - Awareness of practices that sustain unequal treatment or unequal voice
   - Advocate for practices that promote equity and access
   - Respects the opinion and dignity of others
   - Sensitive to community and cultural norms
   - Appreciates and integrates multiple perspectives

Go to the following website, download sign and provide the following document agreeing to demonstrate the above professional dispositions:
http://cehd.gmu.edu/assets/docs/cehd/Dispositions%20for%20a%20Career%20Educator.pdf
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
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 the 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 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:

<table>
<thead>
<tr>
<th>Spring internship application:</th>
<th>Fall internship application:</th>
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<tbody>
<tr>
<td>• Traditional: September 15</td>
<td>• Traditional: February 15</td>
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<tr>
<td>• On-the Job: November 1</td>
<td>• On-the Job: May 1</td>
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