



ANTIOCH UNIVERSITY SEATTLE
School of Education

Purpose of the School of Education: The School of Education promotes constructivist pedagogy, critical reflection and a commitment to social justice through transformative education and realized by positive impact on the learner's growth, in school and beyond.

Course Number	EDUC5520
Course Name	Instructional Methods: Science I
Credits	3 Credits
Day & Time:	Mondays, 7:00 PM – 9:30 PM, 10 weeks
Quarter/Year:	Fall 2017
Location:	Antioch University, Seattle Campus
Faculty Member:	Carolyn Colley
Contact Information:	ccolley@antioch.edu
Office Hours:	Email to set up appointment. Happy to meet! ☺

Course Description

Teacher candidates utilize a framework of sets of science teaching practices focused on equity and intellectual engagement. Learning experiences integrate the use of technology, highlight multicultural and sustainability issues present in science education, and apply current assessment practices. Candidates develop practice-based, multicultural lessons that are based on Next Generation Science and Washington State Environmental and Sustainability Standards, with emphasis placed on student learning, assessing student understanding, culturally responsive teaching, and reflective teaching practices.

This course is guided by the following essential questions:

- How do students learn science? Why is it important to reach all learners in science?
- What teaching practices help students learn science in ways that help them revise their understanding over time? How can I facilitate learning as a *process*?
- How can I help *all* students make sense of science ideas through using school, local, and global community resources and lived experiences?

Learning Objectives

- Teacher candidates (TCs) learn how to plan for, instruct, differentiate, and assess K-8 standards-based science instructional plans to meet the needs of diverse learners.
- TCs design lessons that elicit student understandings of a scientific big idea, provide sensemaking opportunities for students, and allow students to apply their understandings.
- Evidence of student learning gathered from multiple sources of assessment and used to modify instruction in-the-moment and for subsequent lessons.
- TCs will design, reflect on, and modify science instruction that uses students' everyday lives as the basis of learning. Family and community contexts are assets and can form and shape science instruction.
- TCs will practice and reflect on discourse strategies that foster productive learning.

Core Learning Experiences for this course:

1. *Three Cycles of Science Teaching Enactments (TEs):*
 - The three teaching enactment cycles each include 3-parts: (1) lesson plan, (2) lesson enactment, and (3) lesson reflection following prompts.
 - Teaching enactment cycle details will be provided in-class week 1 and can be found/referenced on Sakai under 'resources'.
2. *Readings/Videos:* Weekly reading and/or video assignments are noted on the class schedule. Discussions will take place during class and may utilize online discussion groups through Sakai. Candidates should actively read/watch by making notes and writing down questions, thoughts, and reflections to prepare to actively participate in discussions.
3. *Active participation:* Active participation means *being prepared for class, having completed assignments, and engaging in class discussions*. Participating means creating safe spaces, monitoring airtime, listening to and valuing others' ideas and perspectives, voicing concerns respectfully, being sensitive to who gets to speak, assuming "best intentions" and being mindful of impact, and being able to challenge each other.

Course Requirements

1. Adherence to Antioch University Seattle procedures stated in the syllabus and defined in the Antioch University Seattle Catalog: <http://www.antiochseattle.edu/registrar/aus-catalog/>
 - *Attendance:* Students are expected to attend all scheduled classes. Credits may be denied for failure to attend classes. (Antioch University Seattle Catalog)
 - *Incomplete policy.* The University expects students to complete all coursework by the end of the quarter. In exceptional circumstances, students may request an exception and negotiate with the instructor for an Incomplete (Inc).
2. Submitting course assignments to instructor(s) and returning course assignments to students:
 - A. *Submitting course assignments to instructor:* Follow all assignment directions. If you have questions about directions, content, and/or where/how to submit an assignment, contact the instructor prior to the due date.
 - i. *Reflection assignments:* Upload to Sakai as a file attachment.
 - ii. *Unit/lesson plan assignments:* Complete in GoogleDocs using the templates provided, and, when ready to turn-in, submit the link to your GoogleDoc in Sakai as a URL. This submission indicates that the assignment is finalized and ready for instructor feedback.
 - B. *Returning course assignments to students:* All feedback on written assignments is electronic. If you have questions about where to locate feedback, about the feedback itself, or want to further discuss an assignment, please contact the instructor.
 - i. If the assignment is submitted as a document attachment in Sakai, the instructor will comment on the document using the 'comments' tool in Microsoft Word, and upload it as a document attachment in a reply to the original Sakai assignment submission. Check in Sakai for instructor feedback within a week of the assignment due date.
 - ii. If the assignment is completed in GoogleDocs, the instructor will post feedback using the 'comments' sticky note tool within the GoogleDocs within one week of the assignment due date. (The instructor may also, for consistency, cross-post feedback the assignment submission in Sakai.)
3. Course Evaluations: Students evaluate all courses during mid-term and at the end of the quarter. The final course evaluation is required for all students in all courses.

Required Course Texts & Reading Resources**REQUIRED:**

Michaels, S., Shouse, A., & Schweingruber, H. (2008). *Ready, Set, Science! Putting Research to Work in K-8 Science Classrooms*. Washington, DC: The National Acad. Press. (ISBN-10: 0309106141; ISBN-13: 9780309106146)

NOTE: Free e-book available: http://www.nap.edu/openbook.php?record_id=11882

RECOMMENDED (These are useful but will not be directly used in this course):

Cartier, J.L., Smith, M.S., Stein, M.K., & Ross, D. K. (2013). *5 Practices for Orchestrating Productive Task-Based Discussions in Science*. The National Council of Teachers of Mathematics, Inc. Reston. VA: NSTA Press.

Rosebery, A. S. & Warren B. (2008). *Teaching Science to English Language Learners: Building on Students' Strengths*. NSTA Press: Arlington, Virginia.

Zembaul-Saul, C.L., McNeill, K.L., Hershberger, K. (2012) *What's Your Evidence? Engaging K-5 Children in Constructing Explanations in Science*. Pearson Professional Development. (Hard copy book includes CD-ROM with teaching video examples from multiple elementary grade levels.)

SELECTED WEBSITES to support science teaching and learning (there are many!):

Ambitious Science Teaching - <http://AmbitiousScienceTeaching.org/>

National Science Teachers Association <http://www.nsta.org/>

Center for Science Education <http://cse.edc.org/>

CMHC Writing Resource and Multicultural Resources

David, P., & Blake, A. B. (2016). *Style guidelines for writing academic papers in the social sciences*. Handout from the School of Applied Psychology, Counseling, and Family Therapy. Antioch University Seattle.

Lee, C. C. (Ed.). (2013). *Multicultural issues in counseling: New approaches to diversity* (4th ed.). Alexandria, VA: American Counseling Association.

McGoldrick, M., Giordano, J., & Garcia-Preto, N. (Eds.). (2005). *Ethnicity and family therapy* (3rd ed.). New York, NY: Guilford Press.

Standards (bookmark and/or download to your computer)

- Next Generation Science Standards (NGSS): <http://www.nextgenscience.org/>
- Environmental & Sustainability Education (ESE) Learning Standards:
 - <http://www.k12.wa.us/EnvironmentSustainability/default.aspx>
- Common Core Standards :
 - http://www.corestandards.org/assets/CCSSI_ELA%20Standards.pdf
 - http://www.corestandards.org/assets/CCSSI_Math%20Standards.pdf
- English Language Proficiency: <http://www.k12.wa.us/MigrantBilingual/ELD.aspx>

Class Schedule and Summary of Assignment Due Dates

The schedule, assignments, and course content are subject to change at the discretion of the instructor. The order of weekly assignments is intentional to support your understanding. Work on the assignments in the order provided.

Creating a Vision for Science Teaching and Learning		Week 1 – Oct 2 nd
Assignments Due Before Class Today		Session Topic(s)
<ol style="list-style-type: none"> COMPLETE Science & You Survey – Personal Reflection (available in Sakai). Upload to as an assignment submission (attachment) in Sakai before class. Be prepared to discuss. WATCH “How science works” (6 mins) Bring notes about your reactions, comments, and questions. https://safeshare.tv/x/ss597bd4a5549ba READ <i>Ready, Set, Science!</i> (RSS) Ch. 1 “A New Vision in Science Education” (16 pp) http://bit.ly/1pZ8ys9 Compare/contrast the 6-min video above and this reading. 		<ul style="list-style-type: none"> Personal Connection: <i>How did/do you experience science? (Survey)</i> Nature of science: <i>What is science?</i> Student Learning: <i>What are children capable of? Introduction to Ambitious Science Teaching</i> Course expectations, main assignment directions, & syllabus
Planning for Engagement with Important Ideas		Week 2 – Oct 9 th
Assignments Due Before Class Today		Session Topic(s)
<ol style="list-style-type: none"> WATCH “Planning for Engagement with Important Science Ideas” (16 mins) http://bit.ly/1Mf1hzK READ “Planning for Engagement with Important Science Ideas” binder pp 17-28 or http://bit.ly/2eTsquwH DECIDE for your enactments whether to have your peers serve as students or teach to actual students. WATCH about the Next Generation Science Standards: NGSS Overview (7 min) https://safeshare.tv/x/ss597bde03bb2db Intro to NGSS (3 min) https://safeshare.tv/x/ss597bde5a536ae How to read NGSS (7 min) https://safeshare.tv/x/ss597bdf79cb526 See also, binder pgs 9-14. 		<ul style="list-style-type: none"> Student learning: <i>How do students influence teachers’ unit plans?</i> Standards: <i>What are NGSS? ESE?</i> Unit planning: <i>Selecting your unit topic(s), standards-alignment;</i> Unit planning: <i>What’s are big science ideas? Why use them?</i> Assessment: <i>What should students know and do by the end of the unit?</i>
Launching a Unit: Eliciting Students’ Ideas		Week 3 – Oct 16 th
Assignments Due Before Class Today		Session Topic(s)
<ol style="list-style-type: none"> DRAFT steps 1-6 in the GoogleDoc science unit plan. <ul style="list-style-type: none"> Use orange pages in your binder to help you. Come ready with stuck-points and questions. You do not need to upload anything to Sakai...yet. READ “Teaching Practice set: Eliciting students’ ideas and adapting instruction” green binder pp 42-53 also online at http://bit.ly/2w7rQPv WATCH “Eliciting Students’ Ideas” (16 minutes) http://bit.ly/2h9YPQx What talk moves did you hear from the teacher? from students? READ <i>Ready, Set, Science!</i> Ch 5 “Making Thinking Visible: Talk & Argument” http://bit.ly/2jyPMHZ 		<ul style="list-style-type: none"> Unit planning: <i>Q&A feedback on unit planner steps 1-6 (bring draft)</i> Science Teaching: <i>What talk, tasks, and tools elicit observations, ideas, and questions from <u>all</u> students at the start of a unit?</i> Student learning: <i>How is focusing on eliciting and using students’ resources an equitable practice?</i>

TEACHING ENACTMENT: Eliciting Students' Ideas		Week 4 – Oct 23 rd
Assignments Due Before Class Today	Session Topic(s)	
<ol style="list-style-type: none"> 1. COMPLETE & TURN-IN steps 1-6 of unit planner. Submit link to GoogleDoc in Sakai. 2. WATCH – Example eliciting ideas lesson, edited, step by step (13 min) https://safeshare.tv/x/ss597be3d5012d4 3. WATCH – “Scaffolds for making students initial ideas public” (10 min) http://bit.ly/1UbiT1e 4. COMPLETE & TURN-IN eliciting students' ideas lesson plan using the GoogleDoc template provided. Turn-in by submitting link to GoogleDoc in Sakai. 5. PREPARE & REHEARSE for TE1 to elicit students' ideas. Bring any copies or materials you need. 	<p>TEACHING ENACTMENTS (See <i>Teaching Enactment directions</i>)</p> <p><i>Lesson Purpose:</i> Elicit students' initial ideas about your unit phenomenon</p> <p><i>Must-haves: Launching a Unit</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Introduce puzzling phenomenon <input type="checkbox"/> Design and provide model scaffold <input type="checkbox"/> Use talk to prompt, probe, elicit, and follow-up on student thinking <input type="checkbox"/> Generate list of observations, initial ideas/hypotheses, and questions 	
Supporting On-going Changes in Student Thinking		Week 5 – Oct 30 th
Assignments Due Before Class Today	Session Topic(s)	
<ol style="list-style-type: none"> 1. COMPLETE & TURN-IN TEI reflection. Follow reflection directions. Upload as an attachment in Sakai. 2. WATCH “Supporting ongoing sensemaking” (21 min) http://bit.ly/2w7o0Wk 3. READ “Supporting on-going changes in thinking,” blue binder pgs 68-83, also online at http://bit.ly/1LCXxH3 4. SKIM RSS Ch 6 “Learning from Sci Investigations” http://bit.ly/2v81Hmh & Ch 7 “Making Thinking Visible: Models & Reps” http://bit.ly/1Rfpi7H 5. SKIM “Why focus on science and engineering practices not inquiry?” (2pp) http://bit.ly/2khQla9 	<ul style="list-style-type: none"> • Science Teaching Practice: <i>Supporting on-going changes in students' thinking</i> • Science Teaching: <i>When/why provide new information versus letting students 'discover'?</i> • Student learning: <i>What talk, task, and tools help students understand and make sense of data/results?</i> 	
Supporting On-going Changes in Student Thinking		Week 6 – Nov 6 th
Assignments Due Before Class Today	Session Topic(s)	
<ol style="list-style-type: none"> 1. OUTLINE 3 activities for your unit using the chart in Part II of your unit plan GoogleDoc. (See binder pgs 69-70 for activity selection tips.) 2. READ “How to use direct (or “just-in-time”) instruction in your science classroom” blue binder pgs 88-94, also online at http://bit.ly/2jkTu9t 3. READ <i>Literacy for Science</i> Ch 3 “The language of science text and talk” (11 pp) http://bit.ly/22GnWeK 4. WATCH <i>Everyday vs Science Meaning</i> – Teaching Vocabulary (10 min) https://safeshare.tv/x/4rOXWfGE2fM 	<ul style="list-style-type: none"> • Unit Planning: <i>What concepts help students explain data from investigations?</i> • Assessment: <i>How do we know if students are learning?</i> • Academic language: <i>What language demands are in your lesson? What scaffolds can you provide?</i> • Student Voice: <i>How can students reflect on their own understanding?</i> 	

TEACHING ENACTMENT: Supporting Changes in Student Thinking Wk 7 – Nov 13 th	
Assignments Due Before Class Today	Session Topic(s)
<ol style="list-style-type: none"> WATCH “Building Scientific Ideas with Interactive Read-alouds” (5 mins) http://bit.ly/2jl0sLN SKIM “Watch-Think-Write and Proven Strategies for Using video in the classroom” http://bit.ly/2jl13wQ COMPLETE & TURN-IN lesson plan for TE2 lesson using GoogleDoc template. Submit link in Sakai. PREPARE & REHEARSE for teaching enactment Bring copies/materials you need for your lesson. 	<p>TEACHING ENACTMENTS <i>(See Teaching Enactment directions)</i> <i>Lesson Purpose:</i> Supporting changes in student thinking using talk, task, and tools where students take new information and use it to explain data <i>Must-haves:</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Just-in-time instruction piece <input type="checkbox"/> Science activity (see binder pg 69) with teacher talk moves/questioning <input type="checkbox"/> Student work sample within lesson <input type="checkbox"/> Add to public record summary table
Pressing for Evidence-based Explanations Week 8 – Nov 20 th	
Assignments Due Before Class Today	Session Topic(s)
<ol style="list-style-type: none"> COMPLETE & TURN-IN TE2 reflection. Follow reflection directions. Upload as an attachment in Sakai. WATCH “Pressing students for evidence-based explanations” (19 min) https://vimeo.com/104469356 READ “Teaching Practice Set: Pressing for evidence-based explanation” light blue binder pgs 109-116 also online at http://bit.ly/2tQCwVW 	<ul style="list-style-type: none"> • Nature of Science: <i>Why focus on evidence-based explanations?</i> • Science Teaching: <i>What lesson steps support students in revising their models and explanations?</i> • Student learning: Revisiting and revising ideas over time.
Pressing for Evidence-based Explanations Week 9 – Nov 27 th	
Assignments Due Before Class Today	Session Topic(s)
<ol style="list-style-type: none"> READ Understanding Language http://stanford.io/1LJdtjT BEGIN drafting lesson plan for TE3 pressing for evidence-based explanations using GoogleDoc template. 	<p>Academic Language: <i>How will you help students construct explanations and engage in scientific argument?</i></p> <p>Assessment: <i>Revisiting rubrics; Evidence of student learning</i></p>
Pressing for Evidence-based Explanations Week 10 – Dec 4 th	
Assignments Due Before Class Today	Session Topic(s)
<ol style="list-style-type: none"> COMPLETE & TURN-IN lesson plan for TE3 pressing for explanations using the GoogleDoc template. Submit link to GoogleDoc in Sakai. REHEARSE/PREPARE for TE3 - Bring copies/materials we need for your lesson. <p>*** TE3 reflection due within 1 week from your enactment. Please follow reflection directions.</p>	<p>TEACHING ENACTMENTS <i>(See Teaching Enactment directions)</i> <i>Lesson Purpose:</i> Students construct explanations of the unit phenomenon using evidence from multiple sources. <i>Must-haves:</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Completed summary table chart with prior activities in the unit <input type="checkbox"/> Model revision/student work sample <input type="checkbox"/> Talk moves that press students to use evidence to back claims.

Rubrics for assignments

Assignment	Expectations not met	Expectations Met	Expectations Met High
Attendance and completion of reading	More than 2 absences, or make-up assignments for absences not completed, or did not meet expectations; Not prepared for class	One-two absence(s) during quarter, and make-up assignment met expectations; prepared for class	No absences during quarter; Prepared for and engaged in class
Teaching Enactment I: Eliciting student ideas with reflection paper	TE I LP not completed according to AUS standards.	TE I LP completed according to AUS and course standards. Lesson elicited student understanding of scientific big idea. Candidate linked assessment to learning objective. Student learning guided lesson. Active participant in peer's lessons and reflection. Lesson reflection complete. Level 1 or 2 on EdTPA rubric distributed in class.	Met requirements. Candidate preplanned back pocket questions and used student responses to inform instruction and direction of lesson. Lesson plan reflection reflected deep knowledge of positive impact on student learning and student voice. Level 3, 4 or 5 on EdTPA rubric distributed in class.
Teaching Enactment II: Sense making opportunities with reflection paper	TE II LP not completed according to AUS standards.	TE II LP completed according to AUS and course standards. Lesson based on elicitation of student understanding obtained in TE I. Lesson provided students with sense making opportunities of the scientific big idea. Candidate linked assessment to learning objective. Student learning guided lesson. Active participant in peer's lessons and reflection. Lesson reflection complete. Level 1 or 2 on EdTPA rubric distributed in class.	Met requirements. Candidate preplanned back pocket questions and used student responses to inform instruction and direction of lesson. Candidate's lesson allowed for student understanding to be exposed through classroom dialogue. Opportunities for students to reflect upon learning objective and self-assessment were provided. Lesson plan reflection reflected deep knowledge of positive impact on student learning and student voice. Level 3, 4 or 5 on EdTPA rubric distributed in class.
Teaching Enactment III: Application of learning with reflection paper	TE III LP not completed according to AUS standards.	TE III LP completed according to AUS and course standards. Students provided with opportunities to apply scientific big idea to a new situation. Candidate linked assessment to learning objective. Active participant in peer's lessons and reflection. Student learning guided lesson. Lesson reflection complete. Growth over three lesson sequence. Level 1 or 2 on EdTPA rubric distributed in class.	Met requirements. Candidate preplanned back pocket questions and used student responses to inform instruction and direction of lesson. Significant growth over three-microteaching lessons--attention to specific instructional practices that pushed candidate to focus on student learning. Lesson plan reflection reflected deep knowledge of positive impact on student learning and student voice. Level 3, 4 or 5 on EdTPA rubric distributed in class.
Overall course outcome	One or more of class assignments or expectations were not met.	All class assignments or expectations were met.	All class assignments or expectations met at a high level.

Antioch University Policies

In addition to the above Course Requirements, Antioch University is committed to building a vibrant and inclusive educational environment that promotes learning and the free exchange of ideas. Our academic and learning communities are based upon the expectation that their members uphold the shared goal of academic excellence through honesty, integrity, and pride in one's own academic efforts and respectful treatment of the academic efforts of others.

All students are expected to comply with Antioch University policies, including the Title IX Sexual Harassment and Sexual Violence Policy and the Student Conduct Policy. Student policies are available on the AUS website under Resources/Student Policies:

<https://www.antioch.edu/seattle/resources/students/student-policies/>

Specific attention should be given to the following:

1. **Attendance:** Students are expected to attend all scheduled classes. Credits may be denied for failure to attend classes.
2. **Plagiarism:** Plagiarism is defined as the presentation of an idea or a product as one's own, when that idea or product is derived from another source and presented without credit to the original source. "Idea or product" includes not only written work but also artworks, images, performances or ideas expressed orally or via any electronic or other medium.
3. **Conduct:** Students are expected to be treated and to treat others with respect. Failure to do so may result in suspension, dismissal, or exclusion from class.
4. **Communication Protocol:** All students must have access to computer technology. AUS maintains computer access in the AUS Library on the third floor and the study center on the second floor.
5. E-mail accounts and addresses are assigned for all Antioch Seattle students. Students are required to check their e-mail accounts at least weekly and are responsible for being aware of information posted as official announcements and through their programs. To comply with students' record confidentiality and security requirements, official e-mail communication with Antioch Seattle, including e-mail between students and instructors, should originate from and be conducted within the Antioch University Seattle e-mail system.
6. **Incompletes:** If a student does not satisfactorily complete the assigned work in a course by the end of the term, he or she will be granted No Credit. If a student is unable to complete the work due to extraordinary extending circumstances, he or she should discuss the matter with the instructor and, if approved, the instructor can assign an incomplete (INC) and set a deadline of no more than thirty (30) days for required submission of all remaining assignments. The incomplete will be calculated in the same way as No Credit is when determining the student's academic standing. Upon satisfactory completion of the INC, it will no longer count against the student's academic standing. If the work is not completed by the deadline and an assessment has not been submitted, a No Credit (NC) will be assigned, not subject to change. To earn credit for a course deemed No Credit or permanently incomplete, the student must reenroll in and repay for the course. Incomplete contracts are not available to non-matriculated or visiting students.
7. Upon withdrawal from Antioch, outstanding incomplete courses are converted to NC (No Credit). An NC is permanent and not subject to change. Students must complete all course and degree requirements prior to or on the last day of classes of a term to be eligible to graduate that term.

Questions about policies may be directed to Shana Hormann, Dean of Students, shormann@antioch.edu or 206.268.4714.

Library Services and Research Support

The AUS Library is here to serve you throughout your academic career. On our physical shelves, you'll find books carefully vetted to help you in your academic pursuits. In addition, you'll also find journals, masters' theses, dissertations, and videos/DVDs. The AUS Library provides computers

including PCs and Macs, a printer/copier, and scanners available for you to use. You may also bring your laptop and connect to the campus wireless system.

To search the library catalog and beyond, please see the AUS Library web page, <http://www.antiochseattle.edu/library>. Both the catalog and our extensive research databases may be searched from off campus. Please call the AUS Library at 206-268-4120 if you need information on how to access the databases.

The Library teaches **workshops** throughout the year that are designed to help you in your research. Students may also make an appointment with the librarian for individual research help. Call or email Beverly Stuart, Library Director, at 206-268-4507 or bstuart@antioch.edu.

Writing Support at Antioch University

Much of your learning is writing intensive, and you will write in a variety of genres, from critical reflections to more formal research papers. Writing for an academic audience can also require one to gain new understandings about style and format. All students are encouraged to seek writing support for their courses throughout their career at Antioch. Students at AUS have multiple venues for **free writing support**:

- **Academic Support Lab (room 323 Library/CTL):** The ASL offers *free* peer-based writing consultations through appointments (schedule directly on line at <https://antiochctl.mywconline>, call: 268-4416 or email: asl.aus@antioch.edu) and drop in hours as well as workshops and resources for successful writing at AUS. ASL tutors are graduate assistant students in various programs at AUS and thus have deep understanding of the types of writing done by AUS students. Check their website for future workshops on topics related to academic writing.
- **The Virtual Writing Center (VWC):** The VWC is located on the AU Drive at antioch.edu/vwc and allows busy AU students to get quality peer-based feedback of their writing within 48 hours. Live conversations with peer e-tutors may also be arranged by emailing vwc@antioch.edu.
- **The Writers' Exchange (WEX): fee-based writing support** The **Writers' Exchange** (WEX) was developed at Antioch University in direct response to the increase demand of graduate students' need for specialized editing support that exceeded the free peer-editing available at the Virtual Writing Center. If you're working on your thesis or dissertation, or just want professional writing support, visit WEX at wex.antioch.edu. All WEX editors are professionals who have been vetted for their range of editing experience and the breadth of their expertise. Our fees are competitive and further discounted for the entire AU community.

Reasonable Accommodation of Students with Disabilities

Antioch University is committed to providing reasonable accommodations to qualified students with disabilities in accordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 2008. Students with disabilities may contact the Disability Support Services office to initiate the process and request accommodations that will enable them to have an equal opportunity to benefit from and participate in the institution's programs and services. Students are encouraged to do this as early in the term as possible, since reasonable accommodations are not retroactive. The Disability Support Services office is available to address questions regarding reasonable accommodations at any point in the term.

Students in need of accommodation should contact Jill Haddaway, Disability Support Services Coordinator: 206-268-4151 or dss.aus@antioch.edu to request reasonable accommodations. The policy may be viewed online at: http://aura.antioch.edu/policies_600_1x/1/

Students are responsible for requesting their faculty members acknowledge an electronic Letter of Accommodation from the DSS office as soon as possible in the quarter. In cases that the disability accommodation of extended time on assignments is granted, each assignment must be discussed and specific due dates agreed upon in advance between student and faculty.

**All assignments align with AUS GTP Program Outcomes and
AUS School of Education's conceptual framework**

Program outcomes:

1. Multicultural Competency and Sensitivity, and a Commitment to Social Justice
2. Reflective Practice
3. Personal Qualities as a Leader
4. Knowledge of the Learner
5. Content Area Expertise
6. Student-centered Curriculum and Instruction
7. Personal Qualities as a Teacher
8. Sensitivity to the Community Context of Teaching and Learning
9. Responsibility to Washington State Standards

Conceptual Framework

- 1) Promotion of constructivist pedagogy
- 2) Promotion of critical reflection
- 3) Promotion of deep commitment to social justice through transformative education
- 4) Promotion of dedication to the learner's growth, in school and beyond

Course assignment alignment with State and University Standards

Standard V (WAC 181-78A-270(1))	edTPA Washington rubric (from Elem. Math TPA)	Course assignments
a. Effective teaching		
(i) Using multiple instructional strategies, including the principles of second language acquisition, to address student academic language ability levels and cultural and linguistic backgrounds	EM10: How does the candidate use knowledge of students' language development to identify a key language demand central to content learning? EM11: How does the candidate support academic language development associated with content learning? EM12: How does the candidate reveal students' understanding and use of academic language associated with content learning?	Teaching Enactment & Reflections
(ii) Applying principles of differentiated instruction, including theories of language acquisition, stages of language, and academic language development, in the integration of subject matter across the content areas of reading, mathematical, scientific, and aesthetic reasoning	EM10: How does the candidate use knowledge of students' language development to identify a key language demand central to content learning? EM11: How does the candidate support academic language development associated with content learning? EM12: How does the candidate reveal students' understanding and use of academic language associated with content learning?	Teaching Enactment & Reflections Readings Class discussion
(iii) Using standards-based assessment that is systematically analyzed using multiple formative, summative, and self-assessment strategies to monitor and improve instruction	EM3: How are the informal and formal assessments selected or designed to provide evidence of student progress toward the standards/learning targets? EM6: How does the candidate demonstrate an understanding of student performance with respect to standards/learning targets? EM8: How does the candidate use conclusions about what students know and are able to do to plan next steps in instruction? EM7: How does the candidate provide students feedback to guide their further learning? EM9: How does the candidate use evidence to evaluate and change teaching practice to meet the varied learning needs?	Teaching Enactment & Reflections
(iv) Implementing classroom/school	EM4: How does the candidate actively engage students	Teaching Enactment

centered instruction, including sheltered instruction that is connected to communities within the classroom and the school, and includes knowledge and skills for working with others	in developing understandings of mathematical concepts?	Readings Class discussion
(v) Planning and/or adapting standards-based curricula that are personalized to the diverse needs of each student	EM2: How does the candidate use knowledge of his/her students to target support for students' development of conceptual understanding, computational/procedural fluency, and mathematical reasoning/problem solving skills?	Lesson planning Teaching Enactment & Reflection Readings Class discussion
(vi) Aligning instruction to the learning standards and outcomes so all students know the learning targets and their progress toward meeting them	EM13: How does the candidate focus student attention on the learning targets? EM14: How does the candidate support students to access resources for learning and to monitor their own learning progress? EM15: How does the candidate use student-voice evidence to identify instructional improvements?	Lesson planning Teaching Enactment & Reflection
(vii) Planning and/or adapting curricula that are standards driven so students develop understanding and problem-solving expertise in the content area(s) using reading, written and oral communication, and technology	EM1: How do the candidate's plans build conceptual understanding, computational/procedural fluency, and mathematical reasoning/problem solving skills? EM4: How does the candidate actively engage students in developing understandings of mathematical concepts? EM5: How does the candidate elicit and monitor students' responses to deepen their understanding of mathematical concepts?	Teaching Enactment
(viii) Preparing students to be responsible citizens for an environmentally sustainable, globally interconnected, and diverse society		Teaching Enactment
(ix) Using technology that is effectively integrated to create technologically proficient learners		Teaching Enactment Discussion Forum
(x) Informing, involving, and collaborating with families/neighborhoods, and communities in each student's educational process, including using information about student cultural identity, achievement and performance	EM2: How does the candidate use knowledge of his/her students to target support for students' development of conceptual understanding, computational/procedural fluency, and mathematical reasoning/problem solving skills?	Teaching Enactment Discussion Forum
b. Professional development		
Developing reflective, collaborative, professional growth-centered practices through regularly evaluating the effects of his/her teaching through feedback and reflection	EM8: How does the candidate use conclusions about what students know and are able to do to plan next steps in instruction EM9: How does the candidate use evidence to evaluate and change teaching practice to meet the varied learning needs?	Teaching Enactment Peer Feedback Lesson planning
c. Teaching as a profession		
(i) Participating collaboratively and professionally in school activities and using appropriate and respectful verbal and written communication	NA	Pre-internships Class discussion
(ii) Demonstrating knowledge of professional, legal, and ethical responsibilities and policies	NA	Pre-internships

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