Overview:
ArmchairEd.com currently provides continuing education to educators, using Educational Leadership magazine and premiere published books on cutting-edge educational themes and topics. The program has been operating since Fall, 2000, and has provided continuing education to hundreds of educators.

Course Goals and Objectives:
As a result of these courses, the student will be able to:
1. Stay current on educational themes and topics pertinent to teaching and education
2. Identify current research in education
3. Apply this knowledge to the student’s current educational position

The following published book is currently being used as a text for the ArmchairEd course:


***This course fulfills the Washington State Science, Technology, Engineering and Math Clock hour Continuing Education Requirement

**STEM Lesson Essentials** provides all the tools and strategies you’ll need to design integrated, interdisciplinary STEM (Science, Technology, Engineering, Mathematics) lessons and units that are relevant and exciting to students. The course provides clear definitions of both STEM and STEM literacy, including organizing and delivering instruction by weaving the four disciplines together in intentional ways. The engineering and technology practices can instead be blended into existing math and science lessons in ways that engage students and help them master twenty-first century skills. The course provides five guiding principles for effective STEM instruction, classroom examples of what these principles look like in action, sample activities that put all four STEM fields into practice, and lesson planning templates for STEM units.

Credit Options:
The course will be offered for five credits, based on the length and substance of the book. The five-credit course will include 30 multiple-choice questions and five required essays.
Grading Rubric:
Pass/Fail: Coursework must be passed with 70% criterion.
Letter Grade:  90%:  A grade
              80%  B grade
              70%  C grade
Multiple Choice Test:  50% of overall grade

Five Essays Required
Complete the following five essays:
Essay 1: Use the planning template on p. 139-140 in the text to create an integrated
STEM unit for your class.
Essay 2: Take a unit that you’ve created and have taught in your own classroom. Think of
ways to make it either multidisciplinary or interdisciplinary. In your essay, talk about the
changes you would make to the unit and how you may (or may not) find it improved.
Essay 3: Beginning on p. 173 in STEM Lesson Essentials is a list of resources for
creating STEM curricula. Explore the websites listed and find at least three lessons or activities
that you can use in your classroom. Write three lesson plans that include one or more of the
activities you discovered. With the lesson plan, talk about the rationale for using whatever you
chose and how you expect it to impact your students’ learning.
Essay 4: Using what you’ve learned and research you can do online, make a list of STEM-
related careers. Either with your students or on your own, create a list of individuals in your
community who have STEM-related positions. Create a unit that will make actual connections,
digital or personal, between your students and one or more of those individuals. Report on the
outcome of the connections that your students make
Essay 5: Create your own demonstration of the learning you take from this text. Identify
your topic and describe it in an introductory paragraph. You may choose from the list below or
develop your own.
   Action Research
   Extended learning, including research and developed activities
   Compare/contrast your current education practice to that of the text
   Create forms or systems for use in your classroom including assessment tools
   Plan an ‘event’, meeting or other pertinent program and report/reflect on it
Each chapter ends with a Reflection. You may choose to answer one or more of the Reflection
questions that interest you.
You may combine any of these or develop your own. You may e-mail info@armchaired.com if
you desire specific permission for your topic. The essay must demonstrate knowledge of the
course and text, and direct application to your own educational position.
Essay scoring rubric:
Five essays required
Each essay 25% of overall grade
Single spaced, 10 to 12 size font
Use of introduction and summary statement (even when a unit is developed)
Demonstration of grammar, spelling and writing skill
Demonstration of applied knowledge

➢ You must download the coursework before starting this course.

➢ All essays must be fully completed and the rubric followed to receive a grade. Essays not completed to required length will not be processed and revisions will be required.

➢ Submit all coursework together.