

ArmchairEd Course Syllabus Susan Kane-Ronning, Ph.D., Director Post Office Box 29137 Bellingham, WA 98228-1137

#### 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:

- Stay current on educational themes and topics pertinent to teaching and education
- Identify current research in education
- Apply this knowledge to the student's current educational position

The following published books are currently being used as texts for the ArmchairEd course:

Small, Marian (2019). *Understanding The Math We Teach And How To Teach It.* Stenhouse Publishers: Portsmith, NH. 648 pages.

## **Understanding the Math We Teach and How to Teach It**

This course focuses on the big ideas and practices in mathematics, deepening understanding and content knowledge. Learn how to teach those big ideas using a student-centered, problem-solving approach, and anticipate student thinking and explore effective tools, models, and rich mathematical questions that nudge student thinking forward. *Understanding the Math We Teach* offers a well-founded base of mathematical knowledge, leading to better math instruction that captures students' interest.

### **Credit Options:**

The course will be offered for five credits, based on the length and substance of the books. The five-credit course will include 50 multiple-choice questions and three 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: 25% of overall grade



# Three essays required:

Option 1: From a chapter that best suits the topic and needs of your class, choose at least 3 different activities that are included in that chapter. In your essay, discuss why you chose these activities and why you believe they will be effective teaching tools. Include these activities in lesson plans and discuss how well they worked with students. Were students responsive and engaged during these activities? Do you believe that they increased comprehension of the material? Will you continue to use any of these activities in future lessons? Why or why not?

Option 2: Choose a topic that requires students to build and use spatial reasoning. Plan a sequence of lessons outlining how you will teach this topic. Include concrete details from the text indicating why you have chosen to teach the concepts in this order and how these methods will benefit student understanding.

Option 3: Choose a form of formative assessment (example: exit tickets) in lesson plans for a month. In your essay, speak to the experience and efficacy of monitoring student progress every day. Address the following questions:

- What strategies were used?
- How did students respond?
- What did you learn about your student's comprehension?
- Will you continue daily progress-monitoring at least with some students?
- Did you find you were re-teaching concepts more or less than before?

If formative assessment is already implemented in your lesson planning, describe how it influences your daily instruction and student comprehension by reflecting on your current practices addressing the same questions in your essay as outlined above.

Option 4: In Chapter 10: Fractions, manipulatives can play a crucial role in effectively describing and teaching these concepts. Pick at least 5 appropriate manipulatives you would use with your grade level. Using evidence from the text, discuss how you will implement these to enhance student learning, and why you chose that manipulative. Do you think your students will benefit from using manipulatives? Do you already use them frequently in your teaching practice? Are there times when using manipulatives could negatively impact learning?

Option 5: From a chapter of your choosing, address the common misconceptions that are associated with teaching that topic to your grade level. Include assessment techniques for how you will notice these misconceptions in students early in the learning process and include an action plan for how you will implement strategies to overcome these misconceptions.

### **Essay scoring rubric:**

Three essays required Two essays, each 30% of grade One essay, 15% of 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

You must download the coursework before starting this course.



- > Submit all coursework at the same time.
- > 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.