

Pre-Syllabus Questions

1. How many hours are we to spend doing our field experience?
2. Is this class supposed to teach us mathematics that we will teach our students or is it supposed to teach us how to teach mathematics?
3. Will we have exams? How many?

Post-Syllabus Questions

1. Exams are not listed in the breakdown of the grading for the class; however, a date is given for a final exam. How does this fit in to the grading for the class?
2. I'm still not 100% sure how to submit assignments. The syllabus didn't seem to coincide with what WebCT shows, so hopefully this one will be okay.
3. Many lesson plans include visuals and additional materials. How are these to be submitted online?
4. Can our portfolio be a hard copy?
5. I have two other portfolios due this semester in addition to two already existing portfolios. Is it okay to compile all of these into one large comprehensive portfolio or do you wish they stay separate for each class?

Principles and Standards Questions

1. Why is it important that students learn mathematics?
 - Many people in today's world of advanced technology believe it is unnecessary to learn math as all real uses of math are now done by a computer. Not only is this idea false it is also a misconstrued observation of technology. Yes it is true that today we have calculators that do simple arithmetic. Instead of having to learn the process of long division, people can simply type a few numbers in a calculator and arrive at the same answer. So has technology hurt math learning? I don't think so. It is because of technology that the need for people interested and knowledgeable in mathematics increases! Who will write the necessary programs to make computers and calculators function properly if they don't have a complex understanding of numbers and their mathematical relationship?
 - Even with technology everywhere around us to do basic and sometimes complex math for us, there are still so many aspects of life that technology can't control completely. What about following a recipe made for 2 when you have a family of 5? What about knowing when to fill up your gas tank to get the best gas mileage possible? How soon do we need to leave Salt Lake City to get to Provo by 5 pm? How will you budget your grocery money when tax isn't figured into the price of a single item? What if you are building your own house or car? The list can go on forever!
 - It is so important for students to learn math. Sometimes we do things without even thinking about the math behind it. For example, when we slow down to below 20 mph so we can make a right turn onto our street and why we slow down to 8 mph when we turn into our own driveway. These are natural instincts and everyone has those basic instincts, but isn't it exciting to help students see the underlying reasons for all of that? Many students are interested in math and

shapes and patterns etc before they even know what it is. It is our job to take advantage of that and help them understand the principles beneath the outward knowledge. In doing so, a greater understanding and desire to learn is present and they are more likely to see the uses and connections in math and every day life.

2. How do you see the Principles and Standards may help you in your work as a teacher?
 - If all the teachers all over will use the principles and standards in their work it will create a cohesive learning environment for our students. The Principles and Standards help teachers focus curricula on the important parts of math and especially on the best ways to help students learn and understand math. The P&S unify a vision for all mathematics teachers and encourages and promotes change. All of this is important for every teacher in every subject. It is our responsibility as educators to educate everyone, no matter the learning type, no matter the previous knowledge, and the P&S provide a framework for making this possible.
3. As you read the Teaching principle what did you find most intriguing and why?
 - It's hard to pick a *most* intriguing topic as I found many that were interesting. Students begin school with a basic knowledge of mathematics. At least in shapes, counting, patterns, etc. It says early on in the Teaching Principle that **“Students learn mathematics through the experiences that teachers provide.”** Since our students come to us with some preconceived notion of math and a basic understanding of certain mathematical concepts, we get to teach them how to relate those two ideas together. It is our responsibility to teach our students what they will learn. If we don't, who will?!
 - **“Effective teaching requires knowing and understanding mathematics, students as learners, and pedagogical strategies.”** Mathematics teachers require a certain amount of knowledge about their subject. This knowledge should be flexible and ever-increasing and especially thorough. This will help us more effectively answer student's questions and provide more interesting and effective ways of teaching the material. Too often we find math teachers reading the text book and offering text book examples to teach the material, but how much better would it be to offer real life experiences as examples and to be able to teach in a way that the text book can't, by bringing next years ideas into this years lessons in a simple way that students can understand. Perhaps this is why I must take foundations of analysis I and II even though I'll never teach them myself; to gain that thorough knowledge of math so I can enhance the learning of my students.
 - **“Effective teaching requires continually seeking improvement.”** Once I graduate and can start teaching, my learning isn't done. If anything it is only time to grow and learn more. I need to find ways of improving my methods and I can do this by working with my peers, being evaluated by my peers and students, etc.