Instructor:	Cynthia Francisco
Office:	MSCS 513
Office Hours:	Tuesday 10:30-12:00, Thursday 9:30-10:30, and by appointment, in MSCS 513

E-mail:	**cynthia.francisco@okstate.edu**
Expected Response Time:	You can expect a response from me typically within 24 hours on weekdays and within 48 hours on weekends. For content questions, consider posting on the Facebook group.

Course Web Page: online.okstate.edu

Facebook Group (recommended): There is an optional Facebook group for this course; go to https://www.facebook.com/groups/Math3403FranciscoFall2017/ or search for Math 3403 Francisco, Fall 2017. This group is a closed group (searchable, but posts are only seen within the group), but I may change it to a secret group once everyone has had a chance to join (not searchable). I will post help and hints as questions come up. If you can give any input to help your fellow students, please do, but please do not post full solutions.

Course Prerequisites: Math 1483, Math 1493, or Math 1513

Required Textbook and Supplies.
- **Textbook:** *Geometric Structures – An Inquiry Based Approach for Prospective Elementary and Middle School Teachers* by Doug Aichele and John Wolfe. Since this book is more like a workbook than a traditional textbook, you must have your own copy, and it must be in new condition so that you can write on the pages and submit your work.
- **Supplies:** Scissors, compass, protractor, ruler, mira (or equivalent), and scientific calculator. You may NOT use a calculator with a QWERTY keyboard, an internet connection, or symbolic manipulation capability.

Course Goals: In this course, I hope that all of you gain skills in geometric thinking and the confidence to apply your geometric thinking to new situations. As a future teacher, you will not only need an understanding of the foundations of geometry, but you will need the flexibility to apply your knowledge in unexpected ways. Sometimes students will sometimes approach a problem in a way that you didn't expect, and you will need to evaluate their solution. Often students will need to hear alternate explanations of a difficult concept and a variety of activities to explore the topic from multiple perspectives. Different curricula may approach topics in ways that you have never seen, and you will be expected to teach your students material that may look new to you. I hope that, when you are faced with these challenges, you will pause and think critically. If a student asks a tough question, I hope you will say, "Hmm, let me think about that one," and follow through. When you do, you will pass on to your students the confidence that they too can think about geometry.

Course Structure and Philosophy: In keeping with the goal of producing geometric thinkers, this course is designed to get you actively thinking as much as possible! We will spend much of our class time doing investigations in small groups, sharing what we've learned, and tying it all together. You may feel frustrated sometimes because I'll be asking you to try something that you haven't seen done before, but you will not be left to do it alone! You will work with your classmates and help each other think geometrically. I will always be a major part of this process as well. As an instructor, my role will be to facilitate your active learning. Sometimes I will act as a coach, giving you little pointers to get you moving in the right direction. Sometimes I will model geometric thinking by sharing how I approached one of our problems. Sometimes I will help the class summarize what we've learned. I will, of course, also be available for help outside of class if you have additional questions.

What I expect of my students: In class, I expect that you will all be engaged in the current activity and that you will help each other, both in small groups and by sometimes sharing your thinking with the class. If you are not meeting these expectations in class, you may not get your some or all of your attendance credit for that class meeting.

Grading: Your course grade will be based on exams, projects, and other assignments. There will be three hourly exams and a cumulative final exam. You will show what you know in many ways other than exams, however, and the grading scheme reflects that balance.

- **Assignments/Quizzes/Other:** During every class, you will work on or be assigned several activities (often 4-6 activity pages). Those assignments will be due at the next class, and I will often collect some of the assignments without any advance notice. Those grades will be combined with grades on periodic quizzes and any other classwork or miscellaneous other graded work. **I will drop the lowest two assignments and the lowest one quiz.**
- **Projects:** We will have projects during the semester, which will be an opportunity for you to apply or synthesize what you've learned to create something. I will give you details on each project when I assign it.
- **Attendance:** I will also calculate an attendance score based on the percentage of classes that you attend. (If you are not meeting the expectations above for class participation, you may lose some or all of your attendance credit for the day.) **If you absolutely must miss class, you need to provide documentation and have your absence approved in advance whenever possible.** Below is the grading scheme I will use to calculate your course grade.

Grading Scheme	
3 hour exams	10% each
Final exam	20%
Assignments/Quizzes/Other	28%
Projects	20%
Attendance	2%

Earning 90% guarantees an A for the semester, 80% a B, 70% a C, and 60% a D. I reserve the right to use discretion if you are on the borderline between two grades.

Conflicts: Make-up exams will be given only for **serious, unavoidable, documented** conflicts, and only if I approve your request **in advance unless absolutely impossible**. You must provide documentation as soon as possible, or you forfeit your right to a make-up exam. If a make-up exam is approved, you will need to make arrangements with me to take the make-up exam as soon as possible.

Exam Dates: Our exams will be held on the following dates; mark your calendar.

Exam 1	Thursday, September 21
Exam 2	Thursday, October 19
Exam 3	Thursday, November 16
Final Exam	Thursday, 12/14, 10:00-11:50am

Academic Honesty: Don't cheat. Don't copy off of other students, allow other students to copy your work, have someone else do your work, or present work you find in printed or electronic sources as your own. **You should be working together, but you should write your solutions independently, without looking at what someone else has produced.** See the OSU Fall 2017 Syllabus Attachment for more information. For questions, contact the Office of Academic Affairs, 101 Whitehurst, (405) 744-5627, http://academicintegrity.okstate.edu. I deal with cheating very harshly; don't take any chances.

Special Accommodations for Students: If you have a qualifying disability, you must notify me privately during the first week of classes. See the Syllabus Attachment for more information.

First Assignment – Introductory Email:

Due Friday, September 25

Send me an e-mail at cynthia.francisco@okstate.edu. Write me a **paragraph** (not a list) including your name, year in school, major, hometown, last math class, and anything interesting about yourself you want to tell me, especially your interests in and out of school. If you'd like, attach a picture of yourself. These e-mails let me know something about my students and help me get to know everyone.