Part I: General information

Instructor: Karen Strande  Office: Math Science 444  Classroom: 12:30 and 2:00 T/Th (HSCI 029)
Contact: via email at karen.strande@okstate.edu or call math department office at 744-5688.
Office Hours: T/Th 3:30 pm or by appointment

Links:
1. The website at online.okstate.edu (sometimes called d2l) will have all information, assignments, extra handouts, and grades
2. math.okstate.edu/geoset/ will have extra help as well as copies of old exams

OSU has compiled useful information that applies to all classes at
https://academicaffairs.okstate.edu

This website includes add/drop/withdrawal dates, university holidays, accommodations for students with disabilities, academic resources, and much more. You are responsible for reading this information and having any questions answered.

Please contact me privately during the first week of the course if you need accommodations as the result of a disability.

Part 2: Course Description

From OSU catalog:
Prerequisite(s): 1483, 1493 or 1513. Foundations of geometry for prospective early childhood and elementary educators. Linear and angular measure, polygons and polyhedra, similarity and congruence, geometric constructions, motion and transformations. Class format emphasizes student investigation and discovery, discussion and presentation, and working with mathematical tools. This course, together with MATH 3603, prepares students for CIED 3153 and 4153 and/or HDFS 3223.

From the instructor:
The content and instructional delivery of this course models the current professional thinking and standards endorsed by the National Council of Teachers of Mathematics (NCTM). Please be aware that:

1. MATH 3403 is specifically designed for prospective elementary/early childhood/middle level teachers; if you are pursuing a major different from one of these, your advisor will work with you to select a course more appropriate and valuable to your studies.
2. MATH 3403 is a content mathematics class much like other MATH-prefixed courses you have taken; the pedagogical issues related teaching this content in the school setting is addressed in detail in one of the methods courses that you will be taking as part of your program.
3. The value of this course will depend mostly on you, i.e., your involvement, effort, and creativity.
4. This course uses a nontraditional approach to learning, which may cause some discomfort on the student’s part – at least initially. Unlike a traditionally taught course, where a geometric concept or formula would be presented during a lecture and the student is expected to simply learn it, you will have the opportunity to “discover” geometric concepts for yourself. The hope is that this approach will help solidify the ideas for the long-term. This can actually be “fun”, even for the reluctant math student. It is my hope that through this course you will gain confidence in your mathematical abilities, and gain a passion and desire to
Impart this to your prospective elementary students in the future. I also hope that you will consider using some of these same strategies for teaching geometric concepts with your own students, so that they may make their own discoveries as well. This format will not work for you without your participation and willingness to try. The value of the content, but more importantly, the value of the way you learn the content, depends on your effort, having an open mind, and working well with others.

Part 3: Required book and materials

• Geometric Structures – An Inquiry-based Textbook for Prospective Elementary Teachers by Douglas B. Aichele and John Wolfe. Note: You may not buy a used textbook nor may you rent a textbook.

• Scissors, compass, protractor, ruler, mirror, and scientific calculator (no internet capabilities) are required. Other helpful supplies are tracing paper and colored pencils. You may need other materials for special projects, and those will be announced in class as needed. You should bring paper, pencil, textbook, and materials to every class.

Part 4: Course evaluation

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<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Daily work (Journals, quizzes, etc.)</td>
<td>25%</td>
</tr>
<tr>
<td>Projects</td>
<td>15%</td>
</tr>
<tr>
<td>Unit Exams (3 in total)</td>
<td>36%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20%</td>
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<tr>
<td>Attendance</td>
<td>4%</td>
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Your grades will be kept up to date on the online gradebook. The semester grade will be determined by the final accumulated percentages as follows:

• 90-100% A
• 80-89% B
• 70-79% C
• 60-69% D

Daily Work. Daily Work consists of Assignments, Quizzes, journal writing, and participation in class. Your Assignments can be done with a Study Team, but all work must be your own. Students must be present for the entire class period to receive credit for any daily grade. Accommodations for absence will be considered on an individual basis. The best idea is to follow the due dates and be timely. I will drop the lowest two grades in this category at the end of the semester.

Study Team Information. Learning from your classmates is a proven ingredient for success. We believe in this and have arranged the course delivery accordingly. The first couple of classes will be used for you to grow to know each other better. At the beginning of the third class, you will pick your own teams of
Math 3403-22412  
Geometric Structures  

Fall, 2018

Note: Using a false excuse is a violation of academic integrity and will be dealt with accordingly. As a future teacher, your academic integrity standards should be very high.

**Classroom Etiquette:**

- Arrive on time. If you need to leave early for any reason, please let me know ahead of time. Sit on the outside of the row so that you will not disturb those around you – otherwise, you are to be present for the duration of the class. Remember that arriving late or leaving early will cost you your attendance points for the day.
- No loud or odorous food.
- No laptops, iPads, tablets, etc. Cell phones need to be on silent or turned off AND put away. If there is a serious need to leave your cell phone on or out, such as a family emergency, please notify me before class.

**Drop and Withdrawal Policy.** "Dropping" means you are withdrawing from a specific course but you are still enrolled in at least one other OSU course; the last day to drop a course with an automatic grade of "W" is . "Withdrawal" means you are dropping all courses and you are no longer enrolled for the current semester; the last day to withdraw completely from OSU classes with an assigned grade of "W" or "F" is Additional information about "dropping" and "withdrawing" is available on the Fall 2018 Syllabus Attachment. IT IS YOUR RESPONSIBILITY TO KNOW AND COMPLY WITH ALL DEADLINES.

**Incomplete Grade.** The grade of "I" is given to students who satisfactorily completed the majority of the course work and whose work averages "D" or better, but who have been unavoidably prevented from completing the remaining work of the course.

**Academic Dishonesty/Misconduct.** The university has explicit rules governing academic dishonesty and academic misconduct. The policies are detailed in the document "Student Rights and Responsibilities Governing Student Behavior." It is available from the Deans' Offices, the Provost's Office, and various other places around campus. The university policies will be followed in this class. The minimum penalty for an act of academic dishonesty will be the assignment of a grade of 0 on the examination or homework assignment Working with another person or in study groups on problems can be helpful in learning the material. I encourage you to work together in your groups. However, all written work submitted must be your own. Copying someone else’s problem solution or showing your written solution to someone else is prohibited. In order to be successful in learning the material and doing well on the examinations you must think very hard about the problems themselves before discussing them with anyone else.

**Special Accommodations for Students.** If any member of this class feels that he/she has a disability and needs special accommodations of any nature whatsoever, he/she should notify the instructor and request verification of eligibility for accommodations from the Office of Student Disability Services, North Hall 204. Please advise the instructor of such disability as soon as possible, and contact Student Disability Services, to insure timely implementation of appropriate accommodations. Faculty have an obligation to respond when they receive official notice of a disability but are under no obligation to provide retroactive accommodations.

**Any changes in this syllabus will be communicated to you in class and in writing by the instructor.**
approximately four based upon whom you feel you can work and learn the best with. These teams will be changing throughout the semester.

**Assignments.** Generally 4 to 5 activity sets will be given each class. Any chosen assignments will be due at the beginning of the following class period. You will be working in groups during class, and activities not done in class are homework. **Come to class with homework completed.**

**Quizzes/Journals.** Chapter quizzes will be announced. Quizzes cannot be made up. You must be present to take the quizzes. Journal writing will be given with specific prompts. These essays will be collected on a regular basis.

**Projects.** There will be a few projects due during the semester. They will be discussed when they are assigned. Projects will not be accepted late.

**Attendance.** For this course in particular, attendance is very important since much of the learning takes place in group activities during class. As a future teacher, you are expected to conduct yourself professionally. You are expected to attend all classes and participate fully.

1. You must be present for the **entire** class session in order to be counted as present.

2. The instructor has complete discretion in awarding attendance points. If you are sleeping during class, or are otherwise not participating in class (including texting, working on the computer, etc.), **you will be counted as absent.**

3. 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.**

**Exams:** There will be three (3) 60-minute in-class examinations with a maximum possible score of 100 points each and a 200-point comprehensive Final Examination during Final's Week. The time for the Final is not negotiable (except when the OSU Final Exam Overload Policy applies). These exams will test not only your content knowledge but also your ability to explain your thought process. The dates for the exams are as follows and are not expected to change. Put them on your calendar now and plan ahead.

Exam 1: Sept. 20
Exam 2: Oct. 30
Exam 3: Nov. 29  Final Exam: for 12:30 class is 10 am on Tuesday, Dec. 11
For 2 pm class is 2 pm on Tuesday, Dec 11

**Make-Up Exams** will be considered only if the request is made at least 72 hours (3 days) in **advance** for known conflicts that are **documented, valid and unavoidable**; or your request must be made as soon as possible when last minute extenuating circumstances arise (**documentation required**). If this condition is not satisfied, it is understood that the opportunity to receive a make-up exam is voided. In the instance that a make-up exam is appropriate, I will schedule and administer the make-up exam in a timely manner. With rare exceptions all make-up midterm exams must be completed 1 week from the time of the scheduled exam. Bring your student ID to each examination.