# Math 3403:*Geometric Structures* Syllabus
## Fall 2014

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**Instructor:** Aleyne Means         **Email:** aleyne.means@math.okstate.edu
**Office:** MSCS 421
**Office Hours:** MON & WED: 12:15-1:15    THURS 3:30-4:30 MLSC Tutoring Room

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### Required Textbook and Materials

**Textbook:** Geometric Structures: *An Inquiry-Based Approach for Prospective Elementary and Middle School Teachers* Douglas B. Aichele and John Wolfe.
      **NOTE: This cannot be a USED textbook**

**Manipulatives:** scissors, compass (tip: buy one with a resistance adjuster), protractor, ruler (not needed if your protractor has one on it), glue stick and calculator

<center>**Please bring all required materials to every class.**</center>

### General Course Information

- Geometric Structures is primarily intended for Early Childhood and Elementary Education Majors. It is no longer an upper division A-designated General Education Course. If your major is not mentioned above, you should speak with you advisor to make sure you will receive credit for this course towards your major and/or degree.

- This course is considered "inquiry-based" and is intended to model the National Council of Teachers of Mathematics (NCTM) Curriculum and Professional Standards. For more information on this please refer to Appendix I pages *641-650* in your textbook.

### Class Structure and Study Teams

This is not a traditional lecture style course, instead discussions and daily activities are done in *Study Teams*. This group of peers will be a resource for creative collaboration and understanding course material. All questions regarding the subject matter should be first presented to your group, then presented to other groups, and then to the

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instructor. It is essential that every member of the team bears their share. In fact there will be team projects throughout the semester where your success will depend heavily on how well you work together and collaborate. This requires meeting outside of class periodically throughout the semester. Consulting with a classmate can be very beneficial, but in order to succeed on exams and quizzes you must thoroughly understand the material. All work presented to the instructor must be your own. Work copied from a classmate will be considered Academic Misconduct.

**Grading Scheme**

Four components will be used to determine your final grade:

1. 3 hour exams (75 points each) ......... 225 points

2. Daily activities, homework, quizzes ... 100 points

3. Projects ............................................. 100 points

4. Final Exam...... 150 points

5. **Total ................ 575**

Letter grades will be determined by the following scale:

$$518 - A(90\%)$$
$$460 - B(80\%)$$
$$403 - C(70\%)$$
$$345 - D(60\%)$$

1. **Hour Exams -** 3 one hour exams will be given during the semester. **Absolutely no make-up exams will be given.** If an exam is missed, the proportional percentage score on the final exam will replace the missing exam ONLY IF YOU REQUEST AND RECEIVE APPROVAL FROM ME IN ADVANCE. Exams should only be missed for very serious and unavoidable conflict. If this condition is not satisfied a grade of zero will be recorded for the missed exam. If a second exam is missed it will be an automatic zero.

2. **Daily Activities, Quizzes, Homework -** A homework assignment (usually 5 or 6 activity pages) will be given nearly every class. These pages are due and may be collected for grading the next class period. Some classes I will give a short quiz instead of collecting pages. There will be **approximately** 12 of these

graded activities/quizzes throughout the semester; they will be announced and unannounced. Each will be worth 10 points and your best 10 will be used in determining your final grade. This means if you miss an assignment or daily quiz (up to two) it will be dropped. For this reason, no late work will be accepted and no make-up quizzes will be given.

Another daily activity will include specific groups being responsible for presenting and discussing, in detail, the work prepared for that day. Groups will be assigned sections and then amongst themselves decide who is present during the next class (eventually EVERY group member is required to present).

- If your team is assigned a section and no one is here to present, it will result in an automatic zero daily grade which cannot be dropped *for the entire team.*

- If an individual team member never presents it will result in an automatic zero daily grade *for that individual* which cannot be dropped.

3. **Projects -** There will be 4 projects assigned (each worth 25 points) throughout the semester, these could be individual or group projects and will be discussed in detail when they are assigned. No late or make-up projects will be accepted, and will result in an automatic zero.

4. **Final Exam -** A 150 point comprehensive final exam will be given on:
   This is a University scheduled time and cannot be changed. If there is a conflict let me know immediately.

**Attendance Score (BONUS)** (38 points maximum)

As a future professional and teacher attendance is expected and will be recorded every class. You must be fully participant in the class to be considered present. Ie. If you are texting, working on other homework, reading the paper, etc. you will not be counted present. Since the score is considered extra credit there will be no excused absences.

- You must be present for the entire class period to be counted as such. If you arrive more than 3 minutes late or leave early you may be counted absent.

- You must sign the roll to be counted present. This is YOUR responsibility and cannot be disputed at a later date.

- As mentioned above, this is extra credit so no excused absences will be given. Please do not bring notes or documents to excuse your absence.

- The attendance score is an extra credit score and is meant to reward students. **Thus, it will not lower your overall grade**.

- You will begin the semester with a class attendance count of 31 and two "free absences" for every class period missed (after your free absences) 1 point will be deducted from your attendance score. If a student has no absences 2 points will be added to the attendance score at the end of the semester. To get your attendance score I will multiply 38 by the percentage of days you were in class (for example, if you were in class 26 out of the 31 days of class your percentage will be $28/31 = 90\%$. so your attendance score will be $38 * .90 = 34.2$, rounded to 34).

**Replacing an Exam:** You may use your attendance points to replace a lower exam (barring that it improves your grade) using the following formula:

*half of your lowest exam grade + your attendance points = new exam score*

**Example** Johnny has 5 absences and his lowest exam score is a 45 (out of 75). Would he benefit from exam replacement? If so, what is his new exam score?

## Other Course Business

**Email Guidelines and Office Hours:**
My email and office hours are on page 1, please utilize these if you ever have a question regarding the course. I will also meet by appointment. If you do email me I ask you to put Math 3403, the time that class meets (ie. 12:30 section) in the title and make sure your name is included in the email. If you miss a class, please consult with your group first on any assignments you may have missed.

**University Policies:**
All OSU policies and procedures will be followed during this course. It is your responsibility to know and comply with all OSU policies and deadlines. In this course students are expected to demonstrate complete integrity at all times. See the University policies on academic integrity at the OSU website for more information.

**Special Accomodations for Students:**
If any member of the class feels that he/she has a disability and needs special accomodations, I will work with you and the Office of Disabled Student Services to provide reasonable accommodations to ensure that you have a fair opportunity to perform in this class. Please advise me of such disability and the desired accommodations as soon as possible.

*Any changes to the Syllabus will be communicated to you in class*