

CLASS TIMES AND LOCATIONS

- Dr. Carter Lecture: Section 501: TR 2:20 – 3:35 pm in BLOC 164
- Dr. Foran Lecture: Section 502: MW 4:10 – 5:25 pm in BLOC 149

INSTRUCTOR INFORMATION

Name	Dr. Tamara Carter	Dr. Alexandra Foran
Email	tcarter@tamu.edu	aliforan@tamu.edu
Office	245A	206B
Office Hours	TR 11-12 & 1-2pm in Blocker 246 and by appt.	MW BLOC 205B 3-4pm and by appt.
Phone	Math Department: 979-845-3261 (There is no phone in our offices, so email is a better way to reach us.)	
Website	math.tamu.edu/~tcarter	math.tamu.edu/~aforan
	Class materials will be posted to eCampus.	

CATALOG DESCRIPTION AND PREREQUISITES

MATH 366: Structures of Math II: Geometry, measurement and coordinate geometry. Designed primarily for elementary teacher certification. Prerequisite: MATH 365 or equivalent with a grade of C or better.

LEARNING OUTCOMES

This course is focused on quantitative literacy in mathematics found in both business and everyday life. Upon successful completion of this course, students will:

- Solve geometry problems, using a core set of problem solving strategies, including find a pattern, make a table, work backwards, guess and check, draw a picture, make a list, write an equation.
- Use logical reasoning to solve problems including perimeter, area, and volume of two-dimensional and three-dimensional geometric figures.
- Gain greater depth of knowledge about underlying geometric concepts and use that knowledge to explain and prove theorems.
- Integrate various mathematical content, solution methods, and strategies, especially geometric constructions, to solve problems.
- Connect mathematics, mathematical ideas and concepts, and applications, through connecting concrete activities to abstract mathematical notation. Examples include transformations of geometric figures and formulas involving linear, area, and volume measure.

REQUIRED MATERIALS

- *TEXTBOOK*: Billstein, Libeskind, & Lott, *A Problem Solving Approach to Mathematics for Elementary School Teachers*, 11th Ed. (Pearson 2013). Note this is NOT the newest edition.
- Straightedge and compass (one with a mechanism controlled by a screw rather than tension is preferable).
- Blank, unlined paper
- *CALCULATOR*: Calculators will not be necessary for exams, but scientific calculators will be allowed.

GRADING POLICIES

The course grading will be based on the tables below. At the end of the semester you will receive the grade you *earned*, according to the scale given. Due to FERPA privacy issues, I cannot discuss grades over email or phone. If you have a question about your grade, please come see me in person.

GRADE BREAKDOWN

Activity	Date	Percentage
Daily Grades	Weekly	10%
Formal Explanation I	02/17/20	10%
Formal Explanation II	03/16/20	10%
Exam I	2/5 or 2/6	20%
Exam II	3/25 or 3/26	20%
Final Exam	See below	30%
TOTAL		100%

GRADING SCALE

Range	Grade
$90 \leq \text{Average} \leq 100$	A
$80 \leq \text{Average} < 90$	B
$70 \leq \text{Average} < 80$	C
$60 \leq \text{Average} < 70$	D
Average < 60	F

GRADE APPEAL POLICY: Students have 1 week upon the return of assignments and exams to notify the instructor of any inaccuracies in their graded work. After 1 week the grade will stand. Students have 1 week from the day assignments are returned to bring any inaccuracies to the instructor's attention. Students should bring all grade disputes to their instructor's office. Due to FERPA privacy issues, grade disputes will not be discussed over email or in the classroom.

DAILY GRADES

To earn full points in this category, you will attend class, have your work completed and on your desk by the beginning of class, present your work to the class or your group when requested, share ideas with classmates, and listen attentively when other people share their ideas. **Please attend and participate in all classes.**

- Most book sections will have a reading assignment to help prepare you for that section of material. This should be completed BEFORE we start that section. We will use those answers as we discuss the material in class. These are marked with RA and a number in your notes.
- Daily Practice Problems are an opportunity for you to practice written explanations (and oral explanations when you are picked to present) prior to the exam. Although I will not grade everyone's explanations, I would be happy to read them and provide feedback if you request it. Feedback works best in person (office hours, after class, or a scheduled appointment), but I will respond via email (using track changes in Word) if you cannot meet in person.
- Homework problems should be completed soon after we finish each section. You can check the answers to most of these problems in the back of your book. You are welcome to use my text to check most other problems. I would be happy to discuss any of the problems with you, and I encourage you to discuss them with each other. These are excellent preparation for the test.

FORMAL EXPLANATIONS

Explanations (both verbal and written) are vitally important for effective communication of mathematics. Sometimes in your teaching career, you will need to thoroughly explain a topic in writing (to send home to a student who is ill, to send home to explain to parents, or as a replacement for a textbook) at a more complete level than the notes and daily practice problems. You will turn in two formal explanations for this course. I suggest that you start early and work through multiple drafts of the assignment before submitting it.

EXAMS

There will be **three in-class exams** during the semester in our lecture classroom. Everything discussed in class, experienced within an activity or assignment, or found in the homework, reading assignments, or explanations is eligible content for an exam. You will be expected to show all of your work, and many items will require expository writing (such as explanations). No cellphones, tablets, smart watches, or other electronic devices (other than an approved calculator) are allowed. The tentative exam schedule is as follows:

Exam I: February 5 or 6**Exam II:** March 25 or 26**Exam III:** (See Final Exam Schedule)**FINAL EXAM**

The final exam will be **comprehensive** and is **required** for all students. The final exam schedule is as follows:

Section	Regular Class Time	Final Exam Date, Time, and Location
366 - 501	TR 2:20 - 3:35 pm	Tuesday, May 5, 1:00 - 3:00 pm, BLOC 164
366 - 502	MW 4:10 - 5:25 pm	Friday, May 1, 3:30 - 5:30 pm, BLOC 149

(You can refer to <http://registrar.tamu.edu/General/FinalSchedule.aspx> for the University final exam schedule.)

ATTENDANCE AND MAKE-UP POLICIES

The University views class attendance as the responsibility of an individual student. Attendance is essential to complete this course successfully. University rules related to excused and unexcused absences and make-ups are located on-line at <http://student-rules.tamu.edu/rule07>. Please notify me via email **prior** to the date of an absence, if possible. Consistent with Texas A&M Student Rules, in cases where advance notification is not feasible (e.g. accident, or emergency), you must provide notification by the end of the second working day after the absence. This notification should include an explanation of why notice could not be sent prior to the class.

- For injury or illness too severe or contagious to attend class (even if it is less than the 3 days mentioned in rule 7), you must provide confirmation of a visit to a health care professional affirming date and time of visit for the absence to be "excused". The Texas A&M University Explanatory Statement for Absence from Class form will not be accepted in this case.
- Your participation in class is so important that it counts toward your daily grade even when papers are not collected. It is impossible to participate if you are not present. If you miss a class day with an excused absence, no daily grade will be assigned for that day. If you miss class without a university excused absence, you will earn a zero for the daily grade for that day. I realize that there are reasons to miss a class that are not university excused absences, so I will drop one daily grade. Most students use this for a day when they do not feel well but do not visit a doctor.
- It is YOUR responsibility to learn what you missed from class, obtain any notes and assignments, and complete assignments by the regularly scheduled due date. In other words, **missing class on the day work was assigned is not a reason for an extension.**
- It is also your responsibility to schedule a make-up if one is needed. Makeup exams should be taken prior to the next class if feasible. No make-up exams will be administered without prior approval, so contact me as soon as possible if you need to miss a scheduled exam or assignment.
- If class is officially cancelled for any reason, you can expect that the assignments due/taken on the missed class day will be due/taken the next time the class meets. Please also check eCampus for additional information.
- No rule can cover every situation. If you encounter extenuating circumstances, **please communicate with me as soon as possible.**

TENTATIVE COURSE TOPICS AND CALENDAR OF ACTIVITIES

MODULE	TOPIC	SECTIONS
1	Introduction, Linear Measure, Mass & Temperature, Linear Measure, Basic Notions, Curves, Polygons, Symmetry, Translations, Rotations, Reflections, Glide Reflections, Dilations, Exam I (February 5 or 6)	11.2, 14.5 (Part 1), 11.1, 11.3 (Part 1), Chapter 13
2	Symmetry (Part 2), Angles, Area, Pythagorean Theorem and Distance, 3D Geometry, Surface Area, Volume, Exam 2 (March 25 or 26)	11.3 (Part 2), 11.4, Chapter 14
3	Congruence, Congruence Properties, Constructions, Tessellations, Similar Triangles, Similar Figures	Chapter 12
	Final Exam Review (Week of April 27)	

ACADEMIC INTEGRITY

"An Aggie does not lie, cheat, or steal, or tolerate those who do."

Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the TAMU community from the requirements or the processes of the Honor System. For additional information please visit <http://aggiehonor.tamu.edu/>.

Excuses for absences must be substantiated by appropriate documentation. Falsification of documentation is a violation of the Honor Code. In this course, students can discuss non-test assignments. However, it is NOT permissible to copy work from another student. It is NOT permissible to discuss any aspect of any test or examination until ALL students have completed the exam. The penalties for violating this policy will range from an F on an assignment or test to a failing grade in the course.

You are encouraged to work together on the non-test assignments, but do not copy another student's work. Work submitted must represent YOUR work and YOUR understanding of the topics. Copying work done by others, either in class or out of class, is an act of scholastic dishonesty and will be prosecuted to the full extent allowed by University policy. If you use a source (even a free internet source) when completing any work, cite the source.

For your formal explanations, you will work in groups. By submitting that assignment for the group, each group member is claiming that the explanations reflect your own work and your own understanding of the question. You are also claiming that all group members have made valuable contributions to the assignment and have earned the same grade. If you cannot honestly make those claims work with your group members to make those claims true. If you still cannot honestly make those claims, talk to your professor BEFORE you submit the assignment.

AMERICANS WITH DISABILITIES ACT (ADA)

Texas A&M University is committed to providing equitable access to learning opportunities for all students. If you experience barriers to your education due to a disability or think you may have a disability, please contact Disability Resources in the Student Services Building or at (979) 845-1637 or visit <http://disability.tamu.edu>. Disabilities may include, but are not limited to attentional, learning, mental health, sensory, physical, or chronic health conditions. All students are encouraged to discuss their disability related needs with Disability Resources and their instructors as soon as possible.

If you require accommodations, please see me as soon as possible so that we can make sure you have the necessary paperwork in order.

COPYRIGHT OF MATERIALS

All class materials (notes, tests, assignments, etc.) are copyrighted and may not be copied, posted, or reproduced without permission.

TITLE IX AND STATEMENT ON LIMITS TO CONFIDENTIALITY

Texas A&M University and the College of Science are committed to fostering a learning environment that is safe and productive for all. University policies and federal and state laws provide guidance for achieving such an environment. Although class materials are generally considered confidential pursuant to student record policies and laws, University employees – including instructors – cannot maintain confidentiality when it conflicts with their responsibility to report certain issues that jeopardize the health and safety of our community. As the instructor, I must report (per Texas A&M System Regulation 08.01.01) the following information to other University offices if you share it with me, even if you do not want the disclosed information to be shared:

- Allegations of sexual assault, sexual discrimination, or sexual harassment when they involve TAMU students, faculty, or staff, or third parties visiting campus.

These reports may trigger contact from a campus official who will want to talk with you about the incident that you have shared. In many cases, it will be your decision whether or not you wish to speak with that individual. If you would like to talk about these events in a more confidential setting, you are encouraged to make an appointment with the Counseling and Psychological Services (<https://caps.tamu.edu/>).

Students and faculty can report non-emergency behavior that causes them to be concerned at <http://tellsomebody.tamu.edu>.

EXTRA HELP AND PREPARING FOR EXAMS**YOUR PROFESSOR**

Communication is essential. Please communicate with me before class, after class, during office hours, and via email.

YOUR TEXTBOOK

Please review your textbook and complete reading assignments PRIOR to our discussion of that section in class. This provides a framework in your brain for our discussions.

YOUR CLASS NOTES

Please review your notes after each class and ask questions about anything that is not clear. Your notes will be very valuable as you study for exams as well.

YOUR CLASSMATES

It is also important to communicate with your classmates. You will learn more and be able to build on each other's ideas if you discuss the material with other people. Please consider setting a regular time to meet. This is a useful idea to carry into your teaching career as well.

THOUGHTFUL PRACTICE

I strongly recommend that you practice problems from the book. These homework problems, if addressed independently, can provide an "exam-like" experience and provide background for your Formal Explanations. See the homework list posted in eCampus. You will notice that many of these problems are not like problems from the class notes. The goal is for you to have an opportunity to grapple with thought-provoking problems at your own pace. I will be happy to answer questions after you have worked with the problems. These deeper questions (especially the explanation questions) are great preparation for the exams.

OFFICE HOURS

Office hours are a great time and place to work on your homework and communicate with your classmates and professor. I reserve a small classroom for office hours so that you have enough room to work on homework even if you do not need my help that day.

Syllabus adjustments after Spring Break when we went online

Office Hours will be held in Zoom.

Tuesdays and Thursdays from 2:30 to 3:30 PM and by appointment
with meeting ID 569 583 570

Classes will be pre-recorded and links to those classes will be posted in eCampus.

Assignments in eCampus will substitute for the Daily Grades you would have earned in class.

New due dates:

- Exam 2 – Tuesday, April 7, 2020 regular class time for part of the exam. There will also be a signup for individual appointments for Zoom appointments for the remainder of the points on the exam.
- FE2 – Tuesday, April 14, 2020 by 8 am
- Final Exam – Still according to the final exam schedule and the original syllabus. For those of you who rescheduled the final, I will assume that you can take it with your class online unless you let me know otherwise. Part of the final grade will also come from individual Zoom appointments.