Professor: Jackie T. Cohen, PhD  
Office: Allgood Hall E328  E-mail: jacohen@gru.edu  Phone: 706-667-4468  
Messages: Department of Mathematics, Allgood Hall N319  
Office Hours (Tentative): Mon, Tues & Wed 2:30–3:30 pm and by appointment Monday through Friday

Course Description: Designed for students in the MAT program seeking initial certification in early childhood or middle grades, this course focuses on developing a deep understanding of the concepts related to spatial sense, geometry and measurement. Collaboration, critical thinking, hands-on explorations using manipulatives, problem-based inquiry, and technological tools will be used. Prerequisite(s): Completion of MATH 5241 (C or better) and permission of instructor.

Conceptual Framework Standard: Prepared  
Competencies: Candidates who are prepared will:  
P1. Demonstrate strong content...preparation in their respective subject area...  
P3. Possess an understanding of the central concepts, tools of inquiry, and structures of the discipline...  
P5. Demonstrate knowledge about how to use information and technology effectively...

Textbook:  

Course Topics:  
Unit 1 – Geometric Figures – 9th edition: Chapter 9 – 10th edition: Chapter 10  
Unit 3 – Chapter 12 – 9th edition: Chapter 11 – 10th edition: Chapter 12

Website for textbook:  
http://highered.mcgraw-hill.com/sites/007351957x/information_center_view0/  
- Once there, on the left hand side you will see “Student Edition” right above the “Instructor Edition.” Students click on the Student Edition.  
- Once there, you will see Course Wide Content resources listed on the left hand side. Below that there is also a drop down menu by chapter with some resources specific to each chapter as well.

Virtual Manipulative Kit available via website for textbook or directly:  
http://highered.mcgraw-hill.com/sites/007351957x/student_view0/virtual_manipulative_kit.html#  

Common Core Curriculum:  
https://www.georgiastandards.org/Common-Core/Pages/Math.aspx

Supplies:  
- Textbook (see above) plus ALL materials and information posted on Desire 2 Learn (D2L)  
- Colored markers or pencils and highlighters are essential for sketching representations.  
- Protractor and compass for sketching  
- Calculator, if you wish.
• Each student is responsible for having his or her own markers or highlighters and calculator during any class; in particular, no sharing will be permitted on tests.

• Some manipulatives will be available during class for in-class activities. Students often prefer to have their own manipulatives for out-of-class practice. There are websites where you can find virtual manipulatives and templates for them. There are also companies/websites where you may order what you cannot find locally. Several websites, including one connected to the textbook (listed above), provide virtual manipulatives.

Technology and Communication:
• You are expected to check your JagMail email account and D2L regularly - at least daily.
• Accessing Desire 2 Learn (D2L) is essential! You can access D2L via LMS.gru.edu. Information, materials, some assignments and your grades during the semester will be posted on Desire 2 Learn.
• If you need help with technology, such as with D2L, check with the Information Technology Student Help Desk in person (University Hall 156) or by phone (706-731-4000) or at http://www.gru.edu/its/
• For some assignments, you will need to access the website for the textbook. If you have the 10th edition you may choose to access the book and materials via CONNECT.

Attendance is essential.
• All students are responsible for all information, announcements, assignments, etc. from every class. All students are responsible for submitting work on time regardless of whether present for the class. Absence is not an excuse for not knowing what needs to be done or for not completing and/or submitting assignments appropriately. Many in-class activities will be difficult to reproduce as a make-up assignment, and your communication with your classmates is an integral part of the course. Often grades will be given for these activities and those who are absent will have zeros.
• MATH 5242 class sessions are interactive, providing many opportunities for you to express your own ideas and to listen to the ideas of your fellow classmates. Much of what you learn in the course takes place by participating, sharing, and interacting with others in pairs, small groups or whole-class discussions. This kind of learning cannot take place if you are absent so regular attendance, punctuality, and full participation are extremely important.
• Attendance will be taken every class day. Please be sure to sign the roll sheet and/or submit any assignment collected that day.
• Every class session is important. However, if you find that you are unable to attend a particular class session or might miss a part of a session (by coming late or leaving early), please contact me as soon as possible. Moreover, you are responsible for anything that occurs during the time you are out of class, including any announcements. Be in touch with a classmate BEFORE the next class. Also, please submit a written summary of what was done in the class you missed.
• Make arrangements to turn in assignments if you are going to be absent. Even if you are absent you are expected to turn the work in when it is due. If I accept a late assignment, it will be assessed a 10% penalty for each day (not class period) it is late. You should ask a classmate to obtain any handouts given out during the class you miss, rather than waiting until you return to class or relying on me to supply you with copies. Often material and information will be posted on D2L so checking that site regularly is important.

Work outside of class is also essential.
• It is expected that each student invest at least 2 hours outside of class for each hour of class time in order to get the full benefit of the course. That is, it is expected that approximately 6 hours be used constructively outside of class time reading, completing homework problems and take-home quizzes, using website practice, etc. each week. A variety of assignments will be made and many resources will be made
available to you in order to enrich your experience. Some homework will be collected or at least checked; zeros will result from not having homework ready as assigned.

Tests (20% each = 60%) and Final Exam (20%)
- We will have 3 major tests during the semester. Each test counts 20% of your course grade. No make-up tests will be given. If you know you will have to miss a test, please see me to make other arrangements. Please note that simply missing a test will result in a grade of zero for that test and reduce your possible course grade by 20% to 80%. TBA whether the Final Exam will be comprehensive or replace the third unit test. Percentages will be adjusted accordingly.

HAP: Homework, Assignments and Participation (20% of course grade)
- Full in-class participation depends on outside-of-class preparation and vice-versa; both contribute to success. Clearly, successful participation in this sort of class depends upon both regular attendance and effective preparation. Furthermore, both in-class participation and out-of-class preparation impact your learning and performance on assessments such as tests and quizzes.
- Assignments may include in-class laboratories and activities, out-of-class reading, projects, reflective writing, reactions to readings, analyses of student work, solutions of problems, and homework of all types. All in-class activities will be based on the assumption that the required homework assignments and readings have been completed. Not every homework assignment will be collected and graded. Most homework assignments will be posted on D2L and/or emailed to you; however, you are responsible for any assignment or other material announced in class.
- Participation: Much of the success of this course depends on your level of interaction and participation throughout the semester. Participation will take a variety of forms: individual, pairs, small groups and full class. It is of utmost importance that you attempt all of the homework problems before class and that you read all of the assigned material so that you can participate in the discussion. Satisfactory participation includes being willing to share your thought processes and also to support your classmates as they participate. Participation will include short in-class or take-home quizzes which will give all of us an opportunity to assess your progress. An absence will reduce your participation score for that unit; for example, if there are 5 class meetings in a unit and a student is absent for one of them, her/his participation score for that unit will be reduced 20 points to at most 80. Be sure to submit a report about what occurred in class for any class that you missed – all or part of the class – before the next class immediately following your absence.

COURSE GRADE: Grading Scale: A: 90 -100/ B: 80 – 89/ C: 70 – 79/D: 60 – 69/F: < 60
<table>
<thead>
<tr>
<th>Tests (Unit Tests 1, 2 and 3)</th>
<th>60% (20% each)</th>
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<tbody>
<tr>
<td>Assignments and Participation (all homework, quizzes, reports following absences, in-class presentations, etc.)</td>
<td>20%</td>
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<tr>
<td>Comprehensive Final Exam</td>
<td>20%</td>
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Withdrawal: Dropping and withdrawing from the class should be initiated by the student by completing a withdrawal form (available from the registrar or online) and having the instructor sign it. In keeping with university policy, I will withdraw any student who has missed 10% of our class meetings (two days of class), unless there are extreme circumstances, presented in writing. Withdrawal from a class by midterm, 4 p.m. on Monday, March 7th, will result in a grade of “W,” while after midterm a withdrawal will result in a “WF” unless documentation is presented by the student that the reason for withdrawal is non academic and the student is passing at the time of withdrawal. (Students receiving financial aid should be aware of the policies concerning Satisfactory Academic Progress.)
PLEASE NOTE: Any student requiring special accommodations should contact Testing and Disability Services located in Galloway Hall (706-737-1469, email: tds@gru.edu) as soon as possible. No accommodations can be granted by individual instructors unless permission to do so is given by that office. These arrangements need to be confirmed each semester.

Classroom Policies - All of us can do a better job of teaching and learning if we are prepared and fully engaged in the process! I want everyone to succeed, and I pledge to work with each of you in constructive ways to make that happen.
• Appropriate behavior is required at all times.
• It is a campus that food and drink are not allowed in the classrooms. Furthermore, food and drink interfere with group activities and the use of manipulatives. I will be somewhat flexible only with capped bottles of water, which are stored in your bag. Absolutely no food can be permitted.
• Be courteous to your fellow students and your instructor. Arrive on time ready to be fully engaged in learning. No cell phones, mp3’s, laptops, etc. during class; if it could make noise and has an on/off switch, turn it off. Please do not use your phone as a calculator.
• Have necessary materials with you so you can participate in class. Cooperate with the proscribed setting for class activities – individual or group work, with or without manipulatives, etc.
• It is distracting to me and disruptive to the class activities if you leave the classroom during the class period. Thus, I ask you to refrain from "taking a break" except for an emergency.
• Visitors, including children, are not permitted without my prior permission.
• Remember: You are expected to check your JagMail at least daily and your D2L account regularly.
• Ask questions and stay in touch. If you must be absent, contact someone in the class to find out what occurred so you will be ready for the next class. Keep me informed of unusual circumstances.
• Academic honesty: Cheating will not be tolerated. This pertains not only to in-class work but to outside assignments as well. Any assignment that you submit as your own should be a report of YOUR thinking. Any student who is caught cheating will face serious consequences. You should read the statement on academic honesty in the University catalog.

<table>
<thead>
<tr>
<th>Class Meeting</th>
<th>Primary Topics</th>
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<tbody>
<tr>
<td>Tues, Jan 12</td>
<td>Introduction; Common Core Curriculum; Plane Figures</td>
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<tr>
<td>Tues, Jan 19</td>
<td>Polygons and Tessellations</td>
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<td>Tues, Jan 26</td>
<td>Space Figures</td>
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<td>Tues, Feb 2</td>
<td>Symmetric Figures</td>
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<td>Tues, Feb 9</td>
<td><strong>Test 1</strong> (Unit 1 – Geometric Figures – 9e: Chapter 9 – 10e: Chapter 10)</td>
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<td>Tues, Feb 16</td>
<td>Systems of Measurement</td>
</tr>
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<td>Tues, Feb 23</td>
<td>Area and Perimeter</td>
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<td>Tues, Mar 1</td>
<td>Surface Area</td>
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Please note: GRU Midterm is Monday, October 12th. There is not a Midterm Exam in this class.

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<tr>
<td>Tues, Mar 8</td>
<td>Volume</td>
</tr>
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<td>Tues, Mar 15</td>
<td><strong>Test 2</strong> (Unit 2 – Measurement – 9e: Chapter 10 – 10e: Chapter 11)</td>
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<td>Tues, Mar 22</td>
<td>Congruence and Constructions</td>
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<td>Tues, Mar 29</td>
<td>Congruence Mappings</td>
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<td>Tues, Apr 5</td>
<td>Spring Break – No Class</td>
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<td>Tues, Apr 12</td>
<td>Similarity Mappings</td>
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<tr>
<td>Tues, Apr 19</td>
<td><strong>Test 3</strong> (Unit 3 – Chapter 12 – 9e: Chapter 11 – 10e: Chapter 12)</td>
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<tr>
<td>Tues, Apr 26</td>
<td>Last Day of Class</td>
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**Final Exam**: Cumulative (includes all three units) – TBA
Thursday, May 5th 8-10 pm or Monday, May 9th 8-10 pm