

MATH 204
CONCEPTUAL GEOMETRY AND QUANTITATIVE ANALYSIS
SUMMER QUARTER 2017

INSTRUCTOR: Dr. Charles Patterson **OFFICE:** GTMH 332 **CLASSROOM:**
OFFICE HOURS: 1:30-4:30 MTWR / Others by Appointment **PHONE:** 257-3224
E-MAIL: charlesp@latech.edu **COURSE PREREQUISITES:** Math 203

COURSE GOALS: To acquire an understanding of mathematics which is considerably broader and deeper than what you will be expected to teach involving geometry of one, two, and three dimensions, applications to problems in the physical world, probability and data collection in real world situations.

TEXTBOOK: Mathematical Reasoning for Elementary Teacher, by Long and DeTemple, Edition 7, Chapters 9, 10, 11, 12, 13 and Probability

TOOLS: You will need scissors, a compass, a metric ruler, a basic calculator and a protractor.

ATTENDANCE REGULATIONS: Any student that has 3 (10% of the class meetings) unexcused absences will have their final average drop one letter grade. Any student that has 6 (20% of the class meetings) or more unexcused absences will receive a final grade of F regardless of his/her final average. Excuses for absences must be submitted within three class days after return to class. Respectfully pay attention for the entire period. **Please turn off and put away all cellular phones before entering the classroom. No text messaging during class!! No other electronic devices are to be used during class.**

GRADE DETERMINATION: The instructor will schedule 3 tests worth 125 points each. There will be a 50 point Polyhedron Project. There will also be a 25 point homework/participation grade based on assignments, quizzes, and activities.

GRADING SCALE: 90-100 A, 80-89 B, 70-79 C, 60-69 D, 0-59 F

MISSED EXAMS: Make-ups will be allowed for exams only in case of an excused absence. Contact me immediately if you must miss an exam. Make-ups will be another exam or the comprehensive final exam as specified by me.

STUDENTS NEEDING SPECIAL ACCOMMODATIONS: Students needing testing accommodations or classroom accommodations based on a disability are encouraged to discuss the need with me as soon as possible.

HONOR CODE AND ACADEMIC MISCONDUCT: In accordance with the Academic Honor Code, students pledge the following: Being a student of higher standards, I pledge to embody the principles of academic integrity.

EMERGENCY NOTIFICATION SYSTEM: All Louisiana Tech students are strongly encouraged to enroll and update their contact information in the Emergency Notification System. It takes just a few seconds to ensure you're able to receive important text and voice alerts in the event of a campus emergency. For more information on the Emergency Notification System, please visit <http://www.latech.edu/administration/ens.php>. For emergency notifications please visit <http://ert.latech.edu>

Math 204 Assignments 7th Edition

<u>Section</u>	<u>Topic</u>	<u>Page</u>	<u>Homework Problems</u>
9.1	Figures in the Plane	440	1, 5, 6, 15, 17-21, 23, 24, 29-31, 42-45
9.2	Curves and Polygons in the Plane	459	4, 9, 11-13, 18-22, 26, 28-32, 48-50
9.3	Figures in Space	475	1-5, 9, 13a,b, 14, 24, 26, 27, 35-37, 39, 40
10.1	The Measurement Process	502	1, 5, 7a, 8-15, 21, 23-26, 36, 38-40
10.2	Area and Perimeter	517	1, 5-11, 14-18, 22, 24-27, 38-40, 62-63, 68
	Test 1 (Sections 9.1-9.3, 10.1-10.2)		
10.3	The Pythagorean Theorem	530	1-5, 6a,b, 7-11, 16, 17, 27, 28, 39, 41, 42
10.4	Volume	540	1-6, 8-10, 13-15, 19, 21-22, 25, 26
10.5	Surface Area	549	1-10, 12, 16, 17, 23, 25, 31-33
11.1	Rigid Motions	575	2-8, 13, 14, 25, 50, 51
11.2	Patterns and Symmetry	588	1-6, 7a, 9, 11, 12 a,b,c, 13, 23, 24, 33, 40
	Activities		
	Test 2 (Sections 10.3-10.5, 11.1-11.2)		
12.1	Congruent Triangles	626	1-3, 7-8, 11-14, 17, 40-42
12.3	Similar Triangles	654	1-6, 12, 21, 22, 35, 36, 41-43
13.1	Organizing and Collecting Data	678	1-3, 10-12, 18-21, 23, 24, 31, 32, 34-38
13.2	Measuring the Center and Variation of Data	697	1-4, 7, 17, 18, 32, 36-44
	The Basics of Probability		Handout
	Test 3 (Sections 12.1, 12.3, 13.1, 13.2, & Probability)		