

# Math 206-01

## Final Exam Information

The final exam is Wednesday, May 13, 10am–11:50am, in Room 2625. Special office hours during finals week:

- Monday, May 11: 9:00am–10:00am
- Wednesday, May 13: 9:00am–10:00am & 12:00pm–1:00pm
- Thursday, May 14: 9:00am–10:00am

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## Skills Checklist

1. List the sample space for an experiment and identify events.
2. Know the difference between theoretical and experimental probabilities.
3. Determine the theoretical probability of an event.
4. Understand and use the properties of probability.
5. Determine probabilities geometrically.
6. Draw tree diagrams and determine probabilities in multistage experiments.
7. Determine odds and expected values.
8. Draw and/or interpret statistical graphs.
9. Compute and interpret the mean, median, and mode of a data set.
10. Solve problems involving means and sums of data values.
11. Compute and interpret the range and standard deviation of a data set.
12. Draw and interpret a box plot.
13. Solve application problems involving the normal distribution.
14. Understand the terms and notions of elementary geometry
15. Measure angles and convert from degrees/minutes/seconds to degrees.
16. Know the definitions and properties of special common polygons.
17. Determine the sum of the measures of the interior and exterior angles of polygons.
18. Understand the consequences of parallel lines being cut by transversals. Know the names of the angles formed.
19. Know and be able to work with the congruence properties SSS, ASA, SAS, and AAS.

20. Be able to carry out basic constructions:
  - (a) Construct circles of given radius
  - (b) Copy angles
  - (c) Construct triangles given three sides
  - (d) Construct triangles given two sides and an included angle
  - (e) Construct a line parallel to a given line
  - (f) Bisect an angle
  - (g) Bisect a line segment
  - (h) Construct a perpendicular bisector
  - (i) Construct a line perpendicular to a given line
21. Know and be able to work with the similarity property AAA. Solve application problems involving similar triangles.
22. Understand units of linear measure, convert between different units, and find the perimeter or circumference of a figure.
23. Understand and use the Pythagorean Theorem. Use the Pythagorean Theorem in applications and in constructions.
24. Understand units of area measure and convert between different units.
25. Compute areas of polygons and circles.