Math 29: Homework, Reading, and Approximate Lecture Topic Schedule

Note that the reading assignments do not necessarily correspond to the lecture topic. Rather they are in preparation for a future homework assignment.

- August 31. **Lecture topic**: Large and small numbers, scaling, units.

- Sept. 2. **Assignment due**: Read the math study skills book and list 10 things you learned in the reading that you think might be helpful to you in this class.
  Lecture topic: Percents and concentrations.

- Sept. 5. **Assignment due**: HW 0 (big and small numbers), read section 1.1-1.3.
  Lecture topic: Percents and concentrations.

- Sept. 7. **Assignment due**: HW 1 (word problems), read sections 1.4-1.5.
  Lecture topic: Mean, error, percent error, deviation, percent deviation.

- Sept. 9. **Assignment due**: HW 2 (word problems, section 1.3), read section 1.7.
  Lecture topic: Estimation and sampling.

- Sept. 12. **Assignment due**: Worksheet 1 (Earth science), read section 1.8.
  Lecture topic: Significant figures.

- Sept. 14. **Assignment due**: HW 3 (percent, mean, error, percent error, deviation, percent deviation, and section 1.5), read section 1.9.
  Lecture topic: Significant figures.

- Sept. 16. **Assignment due**: HW 4 (concentrations, ratios, and estimation), read section 2.1.
  Lecture topic: Exponents and logarithms.

- Sept. 19. **Assignment due**: Worksheet 2 (Blood cells), read sections 2.2 and 4.1.
  Lecture topic: Exponents and logarithms.

- Sept. 21. **Assignment due**: HW 5 (word problems, atomic mass, sections 1.5 and 1.7), read sections 6.1, 6.2, and 6.4.
  Lecture topic: Exponents and logarithms.

- Sept. 23. **Assignment due**: HW 6 (units and sections 2.2 and 4.1), read sections 7.2 and 7.7
  Lecture topic: Exponents and logarithms.

- Sept. 26. **Assignment due**: HW 7 (Applications of linear and quadratic functions, and sections 6.1, 6.2, and 6.4), read section 7.10.
  Lecture topic: Solving equations with logarithms.

- Sept. 28. **Assignment due**: Review Problems.
  Lecture topic: Review

- Sept. 30. Exam 1, no homework due.

- Oct. 3. **Assignment due**: Exam 1 rewrite, read section 7.11.
  Lecture topic: Applications of logs to doubling, half-life, pH.

- Oct. 5. **Assignment due**: Worksheet 3 (Energy), read sections 7.12-7.13.
  Lecture topic: Compound interest.

- Oct. 7. **Assignment due**: HW 8 (Log rules, doubling, half-life, and pH), read section 8.1.
  Lecture topic: Present and Future Value.

- Oct. 10. **Assignment due**: HW 9 (Applications of logs, Section 7.13), read section 5.3.
  Lecture topic: Summation notation and economics.

- Oct. 12. **Assignment due**: Worksheet 4 (Environmental analysis), read section 8.2.
  Lecture topic: Review of Trigonometry.

- Oct. 14. **Assignment due**: HW 10 (Compound interest, PV, FV, summation notation, Sections 7.13 and 5.3). Hand in assignment to Kathy Sheldon in Millikan 2399. No class and no reading assignment.

- Oct. 17. Fall Break

- Oct. 19. **Assignment due**: Worksheet 5 (Steady state systems), read section 8.3.

  Lecture topic: Applications of Trigonometry.

- Oct. 21. **Assignment due**: HW 11 (applications of summation to economics, trig), read section 8.4.

  Lecture topic: Average rates of change.

- Oct. 24. **Assignment due**: Worksheet 6 (Psychology), read section 8.5.

  Lecture topic: Instantaneous rates of change.

- Oct. 26. **Assignment due**: Review Problems.

  Lecture topic: Review

- Oct. 28. Exam 2, no homework due.

- October 31. **Assignment due**: Exam 2 rewrite, read section 8.7.

  Lecture topic: The meaning of the derivative.

- November 2, **Assignment due**: Worksheet 7 (Population growth), read section 8.8.

  Lecture topic: Graphical differentiation.

- Nov. 4. **Assignment due**: HW 12 (Rates of change, Section 8.2), read section 8.10.

  Lecture topic: Differentiation Formulas.

- Nov. 7. **Assignment due**: HW 13 (graphical differentiation, and Sections 8.4 and 8.5), read section 8.11.

  Lecture topic: Marginal cost, marginal revenue, marginal profit.

- Nov. 9. **Assignment due**: Worksheet 8 (Art forgery), read section 8.12.

  Lecture topic: The product and quotient rules.

- Nov. 11. **Assignment due**: HW 14 (The meaning of derivatives, and Sections 8.7 and 8.8), read section 12.2

  Lecture topic: The chain rule.

- Nov. 14. **Assignment due**: HW 15 (Differentiation Rules, the sign of the first derivative, and Sections 8.10 and 12.2), read section 10.1.

  Lecture topic: The sign of the first derivative.

- Nov. 16. **Assignment due**: Worksheet 9 (Economics), read section 11.1.
  Lecture topic: The sign of the second derivative.

- Nov. 18. **Assignment due**: HW 15.5 (Extra chain rule problems), read section 12.3.
  Lecture topic: Optimization.

- Nov. 21. **Assignment due**: HW 16 (The sign of the first and second derivative; Sections 8.12 and 12.3), read section 8.13.
  Lecture topic: Economic Optimization.

- Nov. 23. **Assignment due**: HW 17 (The sign of the second derivative, optimization, and 8.13), read section 8.14.
  Lecture topic: Signed area.

- Nov. 25. Thanksgiving break.

- Nov. 28. No Homework due.
  Lecture topic: Signed area.

- Nov. 30. **Assignment due**: Review Problems, no reading assignment.
  Lecture topic: Review

- Dec. 2. Exam 3. No homework due.

- Dec. 5. **Assignment due**: Exam 3 Rewrite, no reading assignment.

  Lecture topic: Review.

- Dec. 7. **Assignment due**: HW 18 (Optimization and Section 8.13), no reading assignment.
  Lecture topic: Review