# Goals for Math 1030Q

One of the main points of this course is for us to see a new side of mathematics. Our focus will be on discovering and exploring ideas rather than following procedures. In this course, we will

- learn how to think and learn more effectively (in mathematics, in other academic areas, and in life outside academics).
- focus on clear communication (using numbers, pictures, symbols, and words).
- explore some great ideas in mathematics (just like people explore great works of art).
- see some ways that mathematics can be applied in the world.
- improve our quantitative reasoning skills.
- become more confident in our ability to do mathematics.
- gain an increased appreciation for mathematics (hopefully).

**Good News:** We will NOT focus on memorizing formulas, notation, and terminology. These are the things we forget soon after the end of the semester unless we continue to use them. Also, we will NOT focus on final answers. Instead, we will focus on developing strategies that can help lead to a solution and we will focus on explaining our solution once we find one.

# Assessments

**Online Homework: *Online WileyPLUS homework assignments***, one for each section we discuss, will be assigned during the semester. **It is HIGHLY recommended that you keep a journal of all of your written WileyPLUS work.** This will help you get used to showing your work for all problems you attempt (as will be required on the exams, for example). **You will be able to drop your lowest online homework grade.** This is meant to reduce your stress about grades. This also allows you to miss an assignment due to travel, illness, etc. See the schedule below for tentative due dates.

**Written Homework Assignments: *Three written homework assignments*** will be assigned during the semester. See the schedule below for tentative due dates. **For the first written homework assignment (Written Homework Assignment 0), you will receive constructive feedback and will not be graded on correctness.** This will give you a chance to use this constructive feedback to help you improve on future written homework assignments.

**In-Class Quizzes: *Three in-class quizzes*** will be given during the semester. See the schedule below for tentative quiz dates.

**Reading/Writing Assignments: *Five reading/writing assignments*** will be assigned during the first part of the semester. Each assignment will be submitted online using our HuskyCT site. See the schedule below for tentative due dates.

**Group Assignment: *One group assignment***, broken into two parts, will be assigned during the second part of the semester. See the schedule below for tentative due dates.

**Midterm Examinations:** There will be ***two midterm examinations*** (Exam 1 and Exam 2). See the schedule below for the tentative exam dates. These may be in-class examinations or examinations with both in-class and take-home portions. **Note that Option 2 below allows you to drop your lowest midterm exam score and add the weight of this exam to the final exam.** This is meant to reward improvement as the semester progresses.

**Final Examination:** There will be a ***cumulative final examination*** at the end of the semester. The date, time, and location of the final examination are determined by the university and will be announced as soon as they become available.

**Important Note:** To highlight the fact that finding a solution to a problem and clearly communicating a solution to a problem are two separate activities, **scratch work and/or a rough draft of some or all of your solutions will be collected** in addition to a final draft of your solutions for both the Individual Written Homework Assignments and the Group Assignment.

# Grading

**Grading Schemes:** Final course grades will be determined by **Option 1** and **Option 2** below. **Everyone will automatically be given whichever option results in a higher grade.**

| **Option 1** | **Weight** | **Option 2** |
|---|---|---|
| Online Homework<br>(lowest score dropped) | 10% | Online Homework<br>(lowest score dropped) |
| Written Homework | 10% | Written Homework |
| Quizzes | 5% | Quizzes |
| Reading/Writing Assignments | 10% | Reading/Writing Assignments |
| Group Assignment | 15% | Group Assignment |
| Exam 1 | 15% | Exam 1 or Exam 2<br>(lower score dropped) |
| Exam 2 | 15% | |
| Final Exam | 20% | Final Exam |

**Final Grades:** The following grading scale will be used to determine final course grades.

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|---|---|---|---|---|---|---|---|
| **A** | [92, 100] | **B** | [82,88) | **C** | [72, 78) | **D** | [62, 68) |
| **A-** | [90, 92) | **B-** | [80, 82) | **C-** | [70, 72) | **D-** | [60, 62) |
| **B+** | [88, 90) | **C+** | [78, 80) | **D+** | [68, 70) | **F** | [0,60) |

# Tentative Schedule for Math 1030Q

**Chapters/Sections Covered:** Chapter 1 and Sections 2.1, 2.4, 4.1, 4.2, 4.7, 6.1, 6.4, 10.4, and 10.5

| Week | Day | Date | Sections Discussed, Assignment Due Dates, Quiz/Exam Dates, Etc. |
|---|---|---|---|
| 1 | Wednesday | 01/17/18 | Introductions<br>Ch. 1 (Handout 1)<br>**Written Homework Assignment 0 Assigned**<br>**Reading Writing Assignment 1 Assigned** |
| 1 | Friday | 01/19/18 | Syllabus<br>Ch. 1 (Handout 2) |
| 2 | Monday | 01/22/18 | Ch. 1 (Handout 3)<br>**Written Homework Assignment 0 Due** |
| 2 | Wednesday | 01/24/18 | 2.1 (Handout 4)<br>**Reading/Writing Assignment 1 Due in HuskyCT at 11 p.m.**<br>**WileyPLUS Ch. 1 Assignment Due at 11 p.m.**<br>**Reading Writing Assignment 2 Assigned** |

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| 2 | Friday | 01/26/18 | 2.1 (Handout 4, Handout 5) |
| 3 | Monday | 01/29/18 | 2.1 (Handout 5) |
| 3 | Wednesday | 01/31/18 | 2.4 (Handout 6)<br>**Reading/Writing Assignment 2 Due in HuskyCT at 11 p.m.**<br>**WileyPLUS Sec. 2.1 Assignment Due at 11 p.m.**<br>**Reading Writing Assignment 3 Assigned** |
| 3 | Friday | 02/02/18 | 2.4 (Handout 6, Handout 7)<br>**Written Homework Assignment 1 Assigned (Ch. 1, 2.1, 2.4)** |
| 4 | Monday | 02/05/18 | 2.4 (Handout 7) |
| 4 | Wednesday | 02/07/18 | 4.1 (Handout 8)<br>**Reading/Writing Assignment 3 Due in HuskyCT at 11 p.m.**<br>**WileyPLUS Sec. 2.4 Assignment Due at 11 p.m.**<br>**Reading Writing Assignment 4 Assigned** |
| 4 | Friday | 02/09/18 | 4.1 (Handout 8)<br>**Quiz 1 (Ch. 1, 2.1, 2.4)**<br>**Written Homework Assignment 1 Due** |
| 5 | Monday | 02/12/18 | 4.1 (Handout 8) |
| 5 | Wednesday | 02/14/18 | 4.2 (Handout 9)<br>**Reading/Writing Assignment 4 Due in HuskyCT at 11 p.m.**<br>**WileyPLUS Sec. 4.1 Assignment Due at 11 p.m.** |
| 5 | Friday | 02/16/18 | 4.2 (Handout 9, Handout 10) |
| 6 | Monday | 02/19/18 | 4.2 (Handout 10) |
| 6 | Wednesday | 02/21/18 | Exam 1 Review (Ch. 1, 2.1, 2.4, 4.1)<br>**WileyPLUS Sec. 4.2 Assignment Due at 11 p.m.** |

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| 6 | Friday | 02/23/18 | **Exam 1 In-Class Part (Ch. 1, 2.1, 2.4, 4.1)**<br><br>**Exam 1 Take-Home Part Assigned** |
| 7 | Monday | 02/26/18 | **Exam 1 Take-Home Part Due**<br><br>4.7 (Handout 11) |
| 7 | Wednesday | 02/28/18 | 4.7 (Handout 11, Handout 12)<br><br>**Reading Writing Assignment 5 Assigned** |
| 7 | Friday | 03/02/18 | 4.7 (Handout 12)<br><br>**Written Homework Assignment 2 Assigned (4.2, 4.7, 6.1)** |
| 8 | Monday | 03/05/18 | 6.1 (Handout 13) |
| 8 | Wednesday | 03/07/18 | 6.1 (Handout 13, Handout 14)<br><br>**Reading/Writing Assignment 5 Due in HuskyCT at 11 p.m. WileyPLUS Sec. 4. Due at 11 p.m.** |
| 8 | Friday | 03/09/18 | 6.1 (Handout 14) |
| | Monday | 03/12/18 | **NO CLASS (Spring Break!!!)** |
| | Wednesday | 03/14/18 | **NO CLASS (Spring Break!!!)** |
| | Friday | 03/16/18 | **NO CLASS (Spring Break!!!)** |
| 9 | Monday | 03/19/18 | 6.4 (Handout 15)<br><br>**WileyPLUS Sec. 6.1 Assignment Due at 11 p.m.**<br><br>**Group Assignment Assigned** |
| 9 | Wednesday | 03/21/18 | 6.4 (Handout 15, Handout 16) |
| 9 | Friday | 03/23/18 | 6.4 (Handout 16)<br><br>**Quiz 2 (4.2, 4.7, 6.1)**<br><br>**Written Homework Assignment 2 Due** |
| 10 | Monday | 03/26/18 | 10.4 (Handout 17)<br><br>**WileyPLUS Sec. 6.4 Assignment Due at 11 p.m.** |

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| 10 | Wednesday | 03/28/18 | 10.4 (Handout 17, Handout 18) |
| 10 | Friday | 03/30/18 | 10.4 (Handout 18) |
| 11 | Monday | 04/02/18 | Exam 2 Review (4.2, 4.7, 6.1, 6.4)<br>**WileyPLUS Sec. 10.4 Assignment Due at 11 p.m.** |
| 11 | Wednesday | 04/04/18 | **Exam 2 In-Class Part (4.2, 4.7, 6.1, 6.4)**<br>**Exam 2 Take-Home Part Assigned** |
| 11 | Friday | 04/06/18 | Class Time for Group Assignment<br>**Exam 2 Take-Home Part Due** |
| 12 | Monday | 04/09/18 | 10.5 (Handout 19)<br>**Group Assignment Part 1 Due** |
| 12 | Wednesday | 04/11/18 | 10.5 (Handout 19, Handout 20) |
| 12 | Friday | 04/13/18 | 10.5 (Handout 20) |
| 13 | Monday | 04/16/18 | Understanding Why Division by Zero is Undefined (Handout 21)<br>**Quiz 3 (10.4, 10.5)**<br>**WileyPLUS Sec. 10.5 Assignment Due at 11 p.m.** |
| 13 | Wednesday | 04/18/18 | Class Time for Group Assignment |
| 13 | Friday | 04/20/18 | Euler's Formula for Planar Graphs (Handout 22)<br>**Group Assignment Part 2 Due** |
| 14 | Monday | 04/23/18 | Final Exam Review "Office Hours" |
| 14 | Wednesday | 04/25/18 | Final Exam Review "Office Hours" |
| 14 | Friday | 04/27/18 | Final Exam Review "Office Hours" |
| 15 | ???day | ??/??/18 | **Final Exam (?:??-?:?? p.m. in ???)** |