Cooperative Teamwork: Regular participation in class and in small-team activities is expected. One or more major long-term cooperative projects will be graded based on the presentation and/or work collected from the team. THE longer MAJOR TEAMWORK GRADES CAN NEITHER BE DROPPED NOR MADE UP. Each member’s absence during class periods which have any time devoted to these projects drops your team’s total score by 2% (i.e., your team counts on you). Your overall individual team project grade will be composed of the average score from all separate Teamwork Projects done throughout the semester.

Guidelines For Working Together
1. Agree on what your team must do and how you will get it done.
2. Be courteous and listen carefully to the other team members.
3. Create a team atmosphere that allows team members to be comfortable asking for help when needed.
4. Don’t assume the other members know more/less than you do. Your backgrounds are different and you all have strengths to bring to the table.
6. Focus on the value of all contributions made.
7. Get help via the “order of three”: 1. Look it up, 2. Ask a team member, 3. Ask the instructor.
8. Help double-check the teams’ combined work. Can the team see a general rule about the process or describe a real-world use for what you learned?

I will be assigning you to a specific team for each major project. (These teams will each have 3-5 members.)

1. Once in your assigned team – get the other members phone numbers and email contacts.
2. Also find a time in common you can meet outside class (live or electronically via phone/chat/etc).

NOTE: IF your team wants to/needs to meet on-line, WebCT has a chat facility, or I can set your team up with a discussion board in there.

3. For each separate activity, you each will need to adopt a specific team role:
Standard team roles are: Facilitator (1 member), Recorder (1-2 members), and Questioner (1-2 members).

These roles are explained here:
Facilitator – leads the team, helping direct the activity.
Recorder – writes the information down that gets turned in for the team as a whole. This could also include creating the visual aide for the team’s presentation.
Questioner – asks questions: during the process, to help the team clarify results, and the questioner is on the lookout for errors.

You will be graded individually on the role you adopt as well as your overall effort.
4. **Presentations**: For some projects, findings are to be presented to the whole class. The whole team stands together for this (for support), but not everyone has to speak. Your team will need to decide how it wants to do this.

**Your individual teamwork grade (also see Grading below for how the teams’ grade is calculated):**

**Team Scoring**: Individual accountability is the key to success of the whole team here. Toward that end, to guard against “freeloading”, your participation will be decided by your fellow team members and by your attendance in class. Your entire team will earn between 0% and 100% of the total points possible (number possible/individual* number of team members). I will allocate the total number of points earned by the entire team. Then, as a team, you will help allocate how the points are divided among your members.

You will do this by scoring each other via a scoring rubric and a peer scoring form. Here are some guidelines to keep in mind for this part of the process:
1) No one person can get more than 100% of an individual score.
2) No one can get less than 0%.
3) In case of disputes, i.e., you can’t come to consensus as a team (not just majority), the instructor will act as arbiter.

You will need to grade yourself and each team member fairly based on the items listed when completing the rubric (also see those pages for more details on how you will score yourself and each other).

**Grading**: Your grade will be composed from the parts below (apart from attendance).

**Total possible for the Team = individual total possible * number of assigned team members.**

**Presented Projects:**
1. 50% The mathematics for the situation is correct (graded by the teacher).
2. 25% All data collected and records are clear, neat, and complete (all required parts turned in) – this includes proper use of the English language in the descriptive paragraph (see below) (graded by the teacher).
3. 25% The class report for the problem is well-presented (graded by classmates not in your team and by the teacher).

**Projects w/o Classroom Presentations:**
1. 66 2/3 % The mathematics for the situation is correct (graded by the teacher).
2. 33 1/3 % All data collected and records are clear, neat, and complete (all required parts turned in) – this includes proper use of the English language in the descriptive paragraph (see below) (graded by the teacher).

**Absence** during teamwork times deducts from the above team total possible at a rate of **2%/single absence** (i.e., if 2 members are absent the same day, that’s 4% lost). (Exception – if an assigned team member is pretty much missing during the entire project, I will not hold that against the total team, but that fact must be reflected accurately in that team member’s peer scoring record.)
Projects –
MODELING IN THE REAL WORLD via data collection and analysis and algebraic methods.

This will be done in stages over several class periods (usually over a few weeks) and will take some individual and team time outside class. You will be allowed adequate time for report/results to come in before your team needs to report to the whole class.

1. **Preparation**: All teams will work on a specific problem below *as a team* when (and if) it’s assigned over several days and even weeks. You will need to do some field-work to collect real data, so some time outside class is necessary. Once the data is collected, your team should use the data and an algebraic process to try to find the requested results. NOTE: one goal here is a hands-on and teamwork approach toward helping the entire team toward a deeper understanding of some applications already studied or to be studied.

2. **Paragraph**: For your team’s problem, you must write a paragraph discussing your work and any results in words (at least three sentences). The paragraph must be in formal English (correct grammar and punctuation, no abbreviations). Please feel free to visit the Writing Center for help with this component.

3. **Presentation**: For projects where your instructor states the team will present to the class, your team will plan to present the data collected, the algebraic work, and the results to the whole class once you’ve had a chance to prepare (typically two or more weeks). You will have the choice as a team on format and who speaks. For your team’s presentation, you need to create some sort of visual aide: a poster, an over-head (on film), a handout, or a power-point (with hand-outs). Don’t plan to just write on the board, as this needs to be part of the over-all record turned in (the board may be used in addition to whatever you do create). If using PowerPoint, the instructor must be notified well in advance of your presentation day, to reserve a computer and projector for that purpose. Note: This does not mean once your team has presented, it’s any less responsible for listening to the other presentations. During presentations given by other teams, you will be responsible for grading them per a presentation rubric. (*Absence here counts off the same as any other teamwork activity time in class.*) Also, EVERYONE in the team needs to take note of and review the problems any team worked, since any presented problem *may be used or referred to in some form on any quiz, test, or the final exam.*

4. **What to turn in**
   **Your team must turn in**
   - all the RAW data your team collects (that’s every rough draft from every team member). Include EVERYTHING, no matter how messy, and label that with “field collection”
   - all preparation work (including all scrap-work and any drafts and the algebraic process used, even ones with errors),
   - the organized, polished data and results
   - be sure to include a paragraph in your results (see # 2 above),
   - and the visual aides used in any presentation (if the project required one).
5. **When to turn it all in:**
   - I will periodically check in on your team’s progress with data collection and preparation during class (those DO act as attendance-factor days). See the Timeline below. These check-ins will be announced ahead of time (print off this form for each project and complete the dates as announced for simplest tracking).
   - **All items listed above are due on the due date or at the time of your team’s presentation, if that’s part of the project (last line in the Timeline below).**
   - **IF late/unprepared for the due date/by the assigned presentation day,** your team loses 10% per DAY (not per class meeting, per business day)!

**TIMELINE for project ————————————**

**DATE:**

——— Teams assigned:
  - Exchange contact info
  - Receive preliminary project problem definition and directions.
  - Finds a common meeting time for whole team, if possible (or the majority)

——— Team gets items required (check ones required for that project) to all members:
  - Team Project General Info
  - Team Project (for your course) Problem Set
  - Teams Scoring Rubric
  - Teams Peer Grading Forms
  - Oral Presentation Rubric
  - Presentation Scoring Sheets

——— Team meets and gathers preliminary data by this date.

——— Team meets and works on the mathematics required.

——— Team meets and rehearses presentation (this cannot occur in the classroom, but this is only required for projects which will be presented to the class orally).

——— Project is due = Presentation date (if presenting) (you will have some input in any “presentation date”).