MATH 1342
Elementary Statistics

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Notes for Instructors
2006-2007

NEW EDITION:

The new edition looks as if it as some useful new features, so we have changed to it for Fall 2006. However, we are not able to see the entire book until the end of July, which is well after these Math Manual pages had to be sent in, so these Math Manual pages are somewhat incomplete. In particular, the suggested homework is not included. For the updated version, please look at the course instructor website after August 21. By spring 2007, you can look at the online Math Manual website to see the updated version.

COURSE INSTRUCTOR WEBSITE:  http://www.austincc.edu/mparker/1342/tf/instr/
COURSE WEBSITE FOR STUDENTS:  http://www.austincc.edu/mparker/1342/tf/

FOR THE STUDENT:
Required Materials:
- The Basic Practice of Statistics, 4th ed. by David S. Moore (with CD)
- Stats Portal website to accompany this textbook. Includes an electronic version (printable) of the MINITAB Guide to accompany our textbook, which is a required supplement for this course. (See course website for details of the other material available here.)
- ACC Handout on Using MINITAB (You distribute these.)
- Important note: Stats Portal website includes an electronic version of the complete text. (Not really printable – you can only print one page at a time.) Students who are interested in viewing their textbook only in this manner (without a hard-copy book) can just buy access to that, which will cost $47 and can be bought online. More information on that will be available on the course website after the course committee has had an opportunity to look at Stats Portal.
Videotape series: Against All Odds. Available on the web and in the LRS.

Distance Learning sections: Use the same materials and also they must purchase MINITAB to use at home. The package in the bookstore for this section does include everything, including the MINITAB software.

FOR THE INSTRUCTOR:

Moore’s text focuses on statistical literacy. It has considerably more, and more sophisticated, material on descriptive statistics and data analysis than many texts. If you have not taught from one of his texts before, you will want to read the sections carefully because some of the material may be new to you, or at least not what you have come to expect in an elementary statistics text. We believe that this text is readable enough for you to give some assignments for students to
read the material in advance of your lecture or instead of your lecturing. (This is easier in Chapters 1-9 than later in the text.)

SYLLABUS OVERVIEW

Chapters 1 – 11 and 14-24 are required. The author calls the starred material optional, but our committee has chosen to require some of it. See the next section called “Syllabus Details.” For your optional chapter, choose between 12, 13, 25, and 28. It is very important to start Chapter 14 just before or at the midpoint of the semester in order to be able to complete the syllabus.

Do not cover Chapters 12 and 13 until the end of the course, if at all. Some time is allowed at the end of the course for optional chapters and you may decide which ones to cover. As the author of the text identifies, Chapters 12 and 13 cover interesting material that is not needed for the rest of the course. And Chapters 23-29 cover additional topics in inference, where the school may pick and choose. Our syllabus requires that you cover chi-square tests and inference in regression (Chs. 23 and 24). After you have completed all of that, then you may choose what else to cover, including the possibility of spending some time having students present projects to the class, etc. Most teachers choose ANOVA, but some do other things. A new option in this edition is Chapter 28 on Multiple Regression. Talk with members of the course committee if you have suggestions about what additional material we should require.

Most teachers have found that students find the material on inference, beginning in Chapter 14, much more challenging than the earlier material. You can deal with that in various ways. Mary Parker makes the Test 3 questions from hypothesis testing fairly straightforward: showing the p-value on a graph, computing it, and writing a conclusion, saving the more difficult interpretation questions in the homework for Chapters 15, 16, and 17 for Tests 4/5, when the students will have developed more sophistication with the material. She also has a practice test for students covering through the end of Chapter 22, which she will share with you if you ask.

SYLLABUS DETAILS:
The author identifies starred material as optional. Below is a discussion of all the starred material in the assigned chapters of the text as well as some discussion of the new material in this edition.

Chapter 2. IQR and Outliers. This was in the exercises only in the previous edition, and is now in the text. It is useful to help students overcome their tendency to identify the max and min of a dataset as outliers.

Chapter 2. NEW: Organizing a statistical problem. Definitely discuss this.

Chapter 6. Two-way Tables. This entire section is required in our syllabus.

Chapter 9. Experimental Design. Sometimes students confuse random sampling with random assignment to experimental groups. To the extent you can keep these ideas distinct in the students’ minds, that’s good. This is particularly helpful when students will produce data themselves, for projects or in the future. It is often fairly easy to do random assignment to experimental groups, where it is usually more difficult than one would expect to do a simple random sample from a population. This means that students can more easily produce data appropriate for statistical analysis from designing experiments than from designing sampling schemes.

NEW: Commentary: Data Ethics. This looks interesting. Probably this is appropriate for outside reading and not for testing or homework.
Chapter 10. Probability. There is a short subsection on personal probability. It is optional but is easy to include. Use your own judgment about whether to include it.

Chapter 11. Sampling Distributions. The optional material at the end is basic material on control charts. Do include it.

Chapters 12 & 13. Probability. Do not include these until the end of the semester, if at all.

Chapter 16. Inference in Practice. It is probably not realistic to include power computations. We recommend that you include some short discussion of Type I and Type II error, just to help students understand that they are different and have different consequences. This is a very good answer to the question of “How should I choose a significance level?” But don’t get bogged down here – 20 minutes at most. Assign few, if any, problems in the homework and probably no problems on the test on Type I and Type II errors. The required material in the next four chapters is plenty challenging and students will need all the mental energy available to deal with those. Don’t let them bog down here.

Chapter 19. Two-sample inference. Please do include the two starred subsections explaining why to avoid pooled t-procedures and inference about standard deviations. We recommend omitting the subsection on use of the F test for comparing two standard deviations. However, if you are planning to do ANOVA as your optional chapter at the end of the course, you will want to cover the F test here or come back to it later.

Chapters 20 and 21: Proportions. More accurate confidence intervals. These subsections are not listed as optional in this edition as they were in the previous edition. These subsections are rather interesting and do provide some increase in sophistication. If you are really pressed for time and your students are struggling, you may choose to omit these. In that case, you should modify the homework. You could do that by counting this answer correct on appropriate problems: “These data do not fit the conditions needed to give a large-sample confidence interval.”

Chapter 23: Chi-Square tests. The material on the chi-square test and the z-test should be included. It’s short and helps students make connections. The material on goodness-of-fit tests is optional. It’s fairly easy to include if you have about 30 minutes to spare. Use your own judgment about whether to include it.

Chapter 24: Linear Regression. While we haven’t been able to look at this chapter yet, it will probably still be true that there are more problems for the confidence interval for the mean when $x=\_\_$ than there are for forming a prediction interval when $x=\_\_$ so you’ll need to be careful in choosing problems to get some of each.

Supplements
There will be a substantial amount of support material for students on Stats Portal. As of early June, when this Math Manual information is written, we can’t see that. We believe that this will be something that all students will really want / need. Access is free with a new textbook. To buy access separately is $47. This obviously has major implications for the whole used book market. See the websites on the previous page for descriptions of what’s available here, as well as the usual lists of the videotapes, information about the software, and various handouts for students.

PREREQUISITE
Students who completed two years of high school algebra, even a number of years ago, rarely have trouble with the algebra in statistics. See the student handout for more information. Much more relevant is their skill in, and commitment to, reading carefully and doing problems that require
several steps. It is particularly important that they be comfortable with calculator use, particularly with the order of operations and long calculations.

Because of an increase in the number of Early College Start students, we have had some high school students placed into 1342 who were exempt from TSI based on some high school test and haven’t yet taken Algebra II. Those students DO NOT meet the prerequisite and you should tell them not to stay in the course. Those students should finish their high school mathematics through Algebra II before attempting college-level mathematics courses. (The prerequisite statement in the student handout has been reworked to make this clearer.)

**HOMEWORK**

A suggested homework list is provided. Use it, modify it, or create your own assignment. The odd numbered problems have brief answers in the back of the textbook and more extensive answers in the e-book on *Stats Portal*. More information about what answers are available is on the course website. You should require students to do some homework to which they do not have the answers. It is a good idea to grade at least some problems every week. Mary Parker accomplishes this by giving daily take-home quizzes of one or two even-numbered problems. See the course instructor website for a list of specific suggestions.

A new feature of the text is the set of multiple choice questions at the end of each chapter before the other questions. We are not including those in the suggested homework but you should think about using them in class and discussion. You may choose to include them in the homework as well, but don’t cut back substantially on the homework that requires students to write solutions and interpretations.

It is important to encourage the students to do computer homework. (A large percentage of our students use this course to meet a requirement in the UT Business School. They accept it contingent on our use of the software in the course.) However, it is also important to keep students from getting too frustrated. Some tips include: (1) encourage them to work together on computer homework; (2) give them enough flexibility about computer hw due dates that if they are stuck on something one night, they don’t have to spend 3 hours that night figuring it out; (3) encourage them to ask questions about it in class; (4) since printing sometimes doesn’t work smoothly, don’t make a big deal about having pretty printout; (5) remind them that not every piece of a computer hw problem has to be done on the computer; (6) encourage them to think of the computer as a tool to make analysis of large data sets easier or to do messy calculations; (7) in grading, emphasize their written analysis of what they learned from the computer output rather than grading the output itself.

Make it clear to the students that their first obligation in the course is to learn how to think about the data and concepts. Some students will distract themselves from the main points in the course by an overemphasis on the details of dealing with the software.

I (M. Parker) used to ask a test question or two about how to do something in MINITAB, but I have found that less satisfactory recently, since students use a mixture of commands and menus. So now I confine myself to questions that ask them about interpreting output on the tests and then I have them turn in problems done with MINITAB fairly often during the semester. I continue to assign regression problems as take-home quiz/project problems for several weeks after we finish that chapter. See my individual instructor website for details.

**TESTING AND GRADING**
It is important that your tests and other assessments reflect the objectives of the course. In particular, students should be required to communicate their understanding of the results of statistical analyses in writing in the course. While some multiple choice questions can be quite useful, a **majority of the grade in the course should be based on tests with problems where students write out solutions and interpretations.** Projects that require students to use the ideas on other data (possibly data that they collected themselves) are also useful experiences for the students.

In this fourth edition, the authors have included a set of multiple choice questions in each chapter called “Check Your Skills.” The promotional material for the book says “Students can easily review their technical skills with these straightforward multiple choice questions at the end of each chapter.” These are fine questions for that purpose, but are not at the right level to be good test questions.

Since the material in the course is comprehensive, it probably is a good idea to emphasize that to the students and maybe put an important problem from the previous chapters on each test. Ideally, students should review a few key ideas from earlier chapters at each stage. Statistics is not intended to be a memorization course. Feel free to let them use some notes on tests. For most students, preparing those notes contributes strongly to their learning.

We have found that some statistics students assume the course will be easy, don't take the course seriously, and do poorly on the first test. Many of these will become good students if your grading system allows them to "make up" a grade. We encourage you to find a way to do that, by substituting the homework grade, or a later test grade, for a poor grade. Grading on a "curve", or simply adding extra points if many people do poorly on a test, doesn't send the correct message. Providing an extra incentive to do well on later assignments sends a better message. If a test score is below 60, some feel the student should be asked to completely correct that test to raise the score to 60 before the homework substitution could be made.

**FIRST DAY HANDOUT**

A standard first day handout is provided for you to edit and use. Also, you must distribute a handout about using MINITAB. See the course website and follow the links to the MINITAB material. Use that or write similar material for your students. When you submit materials from this course for your evaluation, you must include the enough material to make clear what you required students to do with software and how it was counted in the grade.

**TECHNOLOGY**

**Calculators:**

Students will need to be able to calculate standard deviations while they are doing homework. If they have a computer available, they may use the software or applets that come with the text to do this even if they don’t have MINITAB at home. If not, they must be able to compute the standard deviation on their calculator. Caution students that it is a WASTE OF TIME to compute the standard deviation or correlation coefficient “by hand” without using their calculator function or software. Some students have a tendency to focus on computations rather than thinking and can spend unreasonable amounts of time computing these if you don’t warn them not to do that.

We do not recommend that you require everyone in class to buy the same calculator, because that adds to the student cost and any scientific calculator is adequate. So you can’t give the entire class a specific description in class of how to use their calculators to find the mean and standard deviation of a set of data. We now have a calculator website to help you and your students with this. Find it from our course website.
In this course, it is better to emphasize using computer software instead of a calculator to do correlation and regression. They need to learn to use the software for that in this course and it is quicker than with a calculator since, with a calculator, they must enter the data by hand. We do expect them to be able to compute the regression coefficients if they are given the correlation coefficient and can use their calculator to find the means and standard deviations. The formula for the slope coefficient is important because it emphasizes the connection between the correlation coefficient and the slope coefficient. Students who just punch buttons on a two-variable calculator to find the regression coefficients miss that connection.

Be sure that your tests do not require students to do computations without the technology they have learned to use. For example, Mary Parker decided not to let her Distance Learning students use graphing calculators in the Testing Center because it is so easy to take out “notes” on the contents of the test by typing them into the calculator. She does not require students to compute standard deviations on a test because those with graphing calculators can’t use their usual technology. She establishes, through homework and quizzes, that the students are able to find the standard deviation and doesn’t think it is necessary to include that on tests.

Computers:

While the Crunch It statistical software comes with the required materials, and it is fine for students to use it at home if they don’t have MINITAB at home, you are required to have the students also learn to use MINITAB and to use it for a reasonable number of problems in the course. Your first-day handout must indicate that the students are required to learn to use MINITAB. The materials you submit for evaluation for this course must indicate how you require and evaluate MINITAB use as part of the course.

MINITAB use is part of the syllabus of the course because there are many important statistical analyses that the inexpensive calculators won’t do, and because we jeopardize the transferability of the course if we do not include it. That transferability is really important. However, MINITAB use is not the most important part of the course. On the first day of class, mention the MINITAB part, but do not focus on it at all. Be sure to have the students doing other statistical work before you start with the MINITAB work. When you plan a lesson that uses a computer for any part, it is absolutely crucial that you have a backup plan for what you will do with the class if there are any problems with the computer. Many teachers find that the computer work goes much more smoothly if you hold several office hours in the computer lab during the first couple of weeks. In 20-45 minutes, students can go through an orientation and do one (or several) of the computer problems in the homework. The notes for the computer homework problems will have more hints for the problems in the first chapters to help students in classes where the teacher prefers to start students doing homework rather than going through an orientation.

We have two versions of MINITAB available. The full version of MINITAB 14 is available, via the network, in all the main-campus classrooms and the ITFD labs and on the Learning Lab computers. There are a limited number of simultaneous users allowed, which we have not exceeded yet. If your students are unable to open MTB 14, then try the old version 12 which should still be available so that it can be used if the network is down or slow or there are no more licenses available for 14. Please be sure that, when you leave the classroom, no copies of MINITAB are left open, because that will tie up the license.
The *Minitab Manual* describes how to use Version 14. There is a relatively complete set of instructions on the course website for using Version 12. (They aren’t really very different.) Each of the statistics instructors should be able to use the networked MINITAB 14 on the ACC computer in your office. If you don’t have that, contact our computer technician at mathlabs@austincc.edu to inquire about getting it set up. The networked version can’t be used at home, but we have a few copies of the student version 14 that we could lend you to use at home if you need that. Please contact Mary Parker, mparker@austincc.edu.

Before you suggest to the students that they try any extra problem on the computer (even if it is one listed in the *Minitab Manual*) please do it yourself first. Many of the problems require the students to learn more detailed commands than are really worth their time. We have tried hard to make sure that those on the Suggested Homework list are reasonable. If you disagree with any of these, please tell us. We need that information to prepare next year’s *Math Manual*.

If you have any problems with the Computer Centers or Learning Labs about MINITAB or any confusion about that, please contact Mary Parker, mparker@austincc.edu, as well as expressing your concern in the lab itself. As with any computer use, problems occur sometimes. But we can solve them.

More options are available for students using MINITAB at home than before. But **do not require them to buy the software**. Students can buy the package for the Distance Learning class which includes the student version of MINITAB and the electronic copy of the *Minitab Manual* and is supposed to cost about $15 more than the textbook alone. Or they can rent the full version for a semester for under $30. (Details available from the computer software link on the course website.)

It is not acceptable to omit the MINITAB work and use some different software package, even though there are manuals available in *StatsPortal* for other packages. At ACC, we have adopted MINITAB and that is what you must use. If you want to discuss the reasons for this, please talk with any members of the course committee. It is true that the 4th edition of our book is pushing “Crunch It” as a free alternative statistics package and it is possible that we may in future years moderate our stance on using MINITAB exclusively if we find Crunch It to be adequate. Give your input to the course committee. But we believe it is very important that have a coordinated approach across all sections of the course, so you are not free to just use whatever you want.

**Multimedia / Videotapes**

While *Against All Odds* videotape series is still available, it is likely that the students will find the multimedia support in *StatsPortal* to be more useful. We understand that it includes parts of that videotape series. Look at the course website for details.
Suggested Homework Guidelines and Exercises, MATH 1342, BPS 4th edition

Which exercises:
The main homework exercises are listed in bold type in the list below. The non-bold exercises at the in brackets at the beginning of each chapter’s list are for those who need immediate practice as they are reading through the chapter. Some of them will probably be covered in the lecture.

Checking answers and showing your work:
Most of the assigned exercises have short answers in the back of the book, and more complete answers in StatsPortal. You may be tempted to read the exercise, read the answer, and then decide whether it makes sense to you. That is not a good strategy to learn the material. In order to be able to do problems like these on tests, you must practice doing them yourself. Use the textbook examples when you want to read a solution and the exercises to practice solving them yourself. Work the exercise yourself completely, or at least write a question about what you don’t understand before you look at the answer.

Check Your Skills questions:
These short multiple-choice questions at the end of each chapter before the exercises are provided so that you can quickly determine whether you have seen the basic ideas in the chapter. Before you start the homework, use these to give yourself a quick overview of the material. If you miss any, review that section of the chapter before starting the exercises.

Technology:
Exercises with a (T) require some form of technology (statistical calculator, applet, Crunch It software, or Minitab) to do some part of the problem. Problems with (M) have some part for which you are required to use Minitab, specifically. You may use Minitab on additional exercises if you wish. Most, but not all, of those exercises are also given in the Minitab Manual, with more explicit directions about how to use Minitab to do them. Please look there before you start using Minitab for a problem. Most, but not all, of the exercises which require Minitab have data files available so that you don’t have to type in the data. When you start using Minitab, you should definitely learn to find those datafiles so that you don’t waste time typing in a lot of data. However, sometimes you will need to use Minitab for an exercise for which there is not a data file. For those exercises, either the dataset is so small it is easy to type in, or no dataset is needed. See the examples of similar exercises in the Minitab Manual.

On the problems requiring technology, as on all homework, you should spend as much time and thought answering questions about what the results mean as you spend calculating. Your answers should reflect this. During the tests, you will not have computer access and may not even be allowed to use a graphing calculator. Test questions will be adjusted to reflect the tools you have available at that time. Ask your instructor in advance what you will be allowed to use on each test.

The electronic textbook in StatsPortal has links to the datasets for many of the exercises that use technology. You should be able to find the datasets without that, but you may find it convenient to use these links most of the time.

The actual homework problem list will be available by August 21 at
http://www.austincc.edu/mparker/1342/tf/Instr/
**First-Day Handout for Students**  
**MATH 1342 Elementary Statistics**  
**Session:** Fall 2006 / Spring 2007 / Summer 2007

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**Course Description:** A first course in statistics for students in business; nursing; allied health; or the social, physical, or behavioral sciences; or for any student requiring knowledge of the fundamental procedures for data organization and analysis. Topics include frequency distributions, graphing, measures of location and variation, the binomial and normal distributions, z-scores, t-test, chi-square test, F-test, hypothesis testing, analysis of variance, regression, and correlation. Skills: S  
**Prerequisites:** A satisfactory score on the ACC Mathematics Assessment Test. A second option is an appropriate secondary school course (Algebra II) and completion of any TSI-mandated mathematics remediation.

**Statement of Prerequisite Requirements:** Students who satisfied the TSI math requirement by passing the THEA, COMPASS, or ASSET, or by ACC courses have satisfied the math prerequisite requirement for this course. Students should also have college-level reading skills. A student who is exempt from TSI or satisfied the TSI requirement in another way must also pass one of those tests unless she has passed high school Algebra II to satisfy the prerequisite.

Students in MATH 1342 will be expected to:  
1. understand material from the text after reading it.  
2. do homework using fairly complicated formulas after seeing one example  
3. do some, but not much, algebraic manipulation of formulas

**Required Materials:** One package includes both text and **StatsPortal:** ISBN 0716760630  
- *The Basic Practice of Statistics*, 4th ed., by David S. Moore  
- **Stats Portal** website to accompany this textbook. Includes the required **MINITAB Guide** to accompany our text and other supplements, including the text as an e-book with links to detailed answers to the exercises, tutorials, applets, and more.

**Optional materials:** MINITAB software.  
A package that includes the required materials PLUS the student edition of MINITAB version 14 is available for about $15-$20 more than the regular package. ISBN 0716795019

**Required Technology:** (More information – http://www.austincc.edu/mparker/1342/tf)  
1. Scientific calculator  
2. Access to MINITAB computer software. For classroom sections, **you are not required to buy this.** It is available in the computer labs. Your instructor will give you a handout about using MINITAB. If you buy a copy, please see the appropriate section of the above website for information in installing it and making the textbook data available to it.  
3. Internet access to use the supplements in **StatsPortal.** Internet access is provided in several computer labs at ACC.
**Instructional Methodology:** This course is taught in the classroom as a lecture/discussion course.

**Course Rationale:** Students will learn to

1. Determine the aspects of a question, if any, for which statistics can provide relevant information.
2. Analyze statistical studies, particularly regarding appropriate sampling and experimental design.
3. Select and use appropriate statistical analyses to get useful information from data.
4. Communicate knowledge using standard statistical language and also interpret it in non-technical language.

This course meets the Core Curriculum requirement in mathematics. It meets the requirement for an introductory statistics course for students in many majors such as business, health sciences, and social sciences.

**Calendar:**

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<td>Week 6: 9, 10</td>
<td>Week 6: 15, 16, 17</td>
<td>1/2 week: optional chap., Exam</td>
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<td>Week 7: 11, 14</td>
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<td>Week 8: 15</td>
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<td>Week 9: 16, 17</td>
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<td>Week 10: 18, 19</td>
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<td>Week 11: 19, 20</td>
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<td>Week 15: optional chapter</td>
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<td>Week 16: Final Exam</td>
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**Suggested Testing Scheme**

- Test 1: through Chapter 4
- Test 2: through Chapter 9
- Test 3: through Chapter 17 (omitting Chs. 12 & 13)
- Test 4: through Chapter 22
- Test 5: through the end of the course

**Course objectives:** The departmental course objectives will be provided to the students as a part of the first-day handout. Find them at http://www.austincc.edu/mthdept2/tfcourses/obj1342.htm

**Grading policy:** The instructor’s grading criteria will be clearly explained in the first-day handout. The criteria will specify the number of exams and other graded material (homework, assignments, projects, etc.). Guidelines for other graded materials, such as homework or projects, should also be included in the syllabus. This must include an appropriate amount of work using MINITAB. These guidelines must also specifically include:

- Missed exam policy
- Policy about late work
- Class participation expectations

**Additional course policies:**
1. Course policies on the following topics will be included. Recommendations by this course committee and the mathematics department are listed below and may be modified by the instructor.
   - Incomplete Grades
   - Attendance
   - Withdrawals (must include withdrawal date)
   - Reinstatement policy (if the instructor allows this option)
   - Testing Center policies (if the instructor uses the Testing Center)
   - Course-specific support services

2. The following statements will be included and instructors must use the statements provided by the college/mathematics department and found in the front part of this *Manual*. Go to www.austincc.edu/mthdept5/mman06/statements.html Insert full statement for each of the following in your syllabus.
   - Statement on Students with Disabilities
   - Statement on Scholastic Dishonesty
   - Recommended Statement on Scholastic Dishonesty Penalty
   - Statement on Academic Freedom
   - Student Discipline Policy

Suggestions:

- **Incomplete Grades**: Recommended version: “Incomplete grades (I) will be given only in very rare circumstances. Generally, to receive a grade of "I", a student must have taken all examinations, be passing, and after the last date to withdraw, have a personal tragedy occur which prevents course completion.”

- **Attendance Policy**: Following is the mathematics department’s recommended attendance policy for classes that meet two days per week in a 16-week term. Modifications should be made for classes of different lengths. Instructors must include some attendance policy, even if it is that attendance is not required.
  “Attendance is required in this course. Students who miss more than 4 classes may be withdrawn.”

- **Withdrawal Policy** (including the withdrawal deadline for the semester): Recommended version: “It is the student's responsibility to initiate all withdrawals in this course. The instructor may withdraw students for excessive absences (4) but makes no commitment to do this for the student. After the withdrawal date (include specific date), neither the student nor the instructor may initiate a withdrawal.”

- **Reinstatement Policy**: If the instructor chooses to allow reinstatements, he must include a statement about the circumstances under which is it allowed. One possible statement is: “In order to be reinstated, the student must demonstrate that he is caught up with the required work as of the date on which he wishes to be reinstated. This must be done before the official last date to withdraw for the semester.”

- **Testing Center**: Include “ACC Testing Center policies can be found at:
  http://www.austincc.edu/testctr/” Then add any instructor-specific policies on the use of the testing center.

- **Course-specific support services**: Recommended version: “ACC main campuses have Learning Labs which offer free first-come first-serve tutoring in mathematics courses. Students should bring their text, course handouts, and notes when they come to the Learning Lab. The locations, contact information and hours of availability of the Learning Labs are available from http://www.austincc.edu/tutor”