MA180 and MA418 STATISTICS, Spring 2013

Section 1F  MWF, 1:25 PM to 2:15 PM, Campbell Hall room 301
First day of class: Wednesday January 9, 2013
Last day of class: Wednesday May 1, 2013
Final Exam: Friday, May 10 10:45 AM – 1:15 PM

Instructor  Ajay Mahato
Room 456 Campbell Hall, phone 934-2154
E-mail: amahato@uab.edu

Assistant  Walter Johnson (Mondays 10 AM to 12 noon in Campbell Hall room 459)
Terrance Muthoka (Tuesdays 2 PM to 4 PM in MLL (Heritage Hall Building room 202)

Office Hours  Wednesdays, 2:30 PM until 4:30 PM, in MLL (Heritage Hall Building room 202)

The hard-copy textbook is required.

**Book is packaged with access code.** You should find copies of the text in
the bookstore that are shrink-wrapped with a course access code.
You will need the course access code.

**Book packaged without an access code.** If you purchase a text that is not
shrink-wrapped with an access code, you will have to purchase a stand-alone access code from the publisher at [www.coursecompass.com](http://www.coursecompass.com).
(It is also possible to purchase a stand-alone access code in the bookstore.)

*(Students from Fall semester 2012: If you have previously purchased an access code for this Statistics book, it may be possible to use it again.
Click “Enroll In Another Course” at MyStatLab.)*

The least expensive option is usually the book shrink-wrapped with the access code.

**Why the text**
1. You will have reading assignments in the textbook.
2. You will bring the textbook to class to follow the lectures and sample
problems being worked out from the book.
3. The tests will be open-book.
4. The book contains a tear-out formula card which will be valuable
during homework and testing.
5. Laptop computers are not permitted during lectures.

**On-line book**
Note that an on-line version of the book is available to you by virtue of
purchasing the access code. However, it is much more difficult to use the
on-line version of the book, and to access the table fold-out card that
comes with the book. Also, the on-line version of the book is not available to you during testing.

**Notebook**

Students should purchase a spiral notebook in which to record notes during lectures. You may use this course notebook as a reference aid when taking tests in the course.

**Laptops**

The use of laptop computers is not permitted during course lectures. Rather, students are expected to engage with the instructor and take paper and pencil notes.

**Cell phones**

All cell phones, iPods, iPads, and laptops must be turned off and put away during lectures.

**Calculator**

A good calculator is important. Calculators will be used for in-class work, homework, quizzes, tests, and the final exam. It is strongly recommended that you get a TI-83/84 Plus. This type of calculator is described in the textbook and will be used in class by the instructor.

During testing, about half the problems will have relatively simple mathematics and will be required to be done *by-hand*; that is, without using the sophisticated capabilities of your calculator. About half will be done using your calculator. These problems will be difficult or time-consuming to be done without a good calculator.

Note: you can use a TI-89 or a TI-92, which are even better (more powerful), though a bit more complicated and more expensive. One may be able to survive with a cheaper model, such as the TI-36, but you assume all the difficulties.

If you need help with calculators other than TI-83/84 Plus then you can see your instructor during his office hours, and he will try to help (to the best of his knowledge). Calculators other than TI-83/84 Plus will not be discussed in class. Generally, students must take individual responsibility for knowing how to operate their calculators. Note that often you can use *Google* to search for instructions on using your calculator. Be sure your calculator batteries are good before each test.

**Tests**

There will be three 50-minute tests and a 2½ hour final exam. (Note that the in-term tests must be turned-in after 50 minutes of test time.) The final exam will be comprehensive. The exams are open-textbook and open-spiral-notebooks. You can use your calculator during testing, but not laptops.

**Make-ups**

There are no make-ups for missed homework and quiz assignments. This is because they can and should be completed ahead of time.
A missed test can be excused for a serious, verifiable circumstance, and only if the student provides adequate written documentation. To appeal a missed test, go to the Math Department office in Campbell Hall room 452 and complete the appeal form. Appeals must be received no later than one week after the missed test, by 5:00 pm on that day. If the appeal is approved, your instructor will schedule a make-up time and place.

**Homework**

The homework exercises and quizzes are done using a computer program named MyStatLab. In order to register for the on-line portion of the course you will need the access code that comes packaged with the text (or that you purchased on-line, if your copy of the text did not include the shrink-wrapped access code). You can use the computers in the UAB Math Learning Laboratory in room 202 of Heritage Hall, computers in the Library’s ETS facility, or you can use your own computer with an Internet connection. Be aware if you are using your own computer, you may have to download the Flash plug-in in order to do the homework assignments. Instructions for downloading the plug-in will be displayed when you access the homework site. The site for registering to do homework and for completing the assignments is [www.coursecompass.com](http://www.coursecompass.com).

**Account**

When you create an account at CourseCompass, you will need to choose a login name, password, and provide your e-mail address. **IMPORTANT:** Your login name MUST be the same as your complete official UAB email address. Example: student@uab.edu. Do not abbreviate. Do not leave out the “@uab.edu” part. Do not use any non-UAB email address (like gmail, aol or uabmc) as your login name. (Though when you supply an email address for your CourseCompass account, you are free to give any email address, such as Google Mail or AOL Mail, etc.) This is a Math Department standard.

*If you choose a different login name (other than your complete official UAB email address), your homework and quiz scores will not be transferred from CourseCompass to the UAB on-line grade database, and the absence of these scores will lower your grade significantly.*

Make up your own password. If you are a returning student, use your existing CourseCompass account, do not create a new account. But if your existing login name is different from your complete official UAB email address, change it.

**Course ID**

You will also need this course ID: mahato04399
Quizzes

Like the homework, quizzes are taken on-line. Each quiz can be taken three times (the highest grade will count). **Do not hit the BACK button on your browser when taking a quiz.** This will end your quiz and you will not be able to get back into it. If you think your computer or network connection is not reliable, you must take your quizzes in the UAB Math Learning Lab. Quizzes have various time limits. They are open-book. Students are strongly advised to not wait until the last minute to complete homework and quizzes. Problems occurring at the last minute are the responsibility of the student. **If your quiz is interrupted for any reason and the system says that you need the instructor’s permission to return to the quiz, email the instructor as soon as possible.**

Due dates

Homework problems can be worked **any number of times** until they are correct. Quizzes can be worked three times (the highest score will count). **There are no extensions of homework and quiz deadline dates,** so plan to complete them ahead of schedule. Homework sets are usually due by 10:00 PM and quizzes on the same day by 11:45 PM. The exact due dates are shown on the last page here, and on the coursecompass web-site.

Participation

Classroom lecture participation is required. At each class meeting (except for tests) there will be a roll to be signed by the students. Points are awarded for on-time attendance with textbook in hand (+1.5). Points are deducted for missed classes (-1.5). If the course instructor accepts a written excuse for an absence, the point deduction will be forgiven but the point credit is not awarded. (Students arriving late get zero points one way or the other. Students without textbooks get zero points one way or the other.)

Course Grade

Based on points earned (not on a percentage)

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework (13 assignments @ 15 points each)</td>
<td>195</td>
</tr>
<tr>
<td>Quizzes (13 quizzes @ 15 points each)</td>
<td>195</td>
</tr>
<tr>
<td>Three tests @ 100 points each</td>
<td>300</td>
</tr>
<tr>
<td>Final exam</td>
<td>310</td>
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<tr>
<td>Total possible points</td>
<td>1000</td>
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</tbody>
</table>

Participation BONUS (ranges from -65 to +65 points)

The BONUS is added to the total points earned.

Letter Grade

Based on points earned

<table>
<thead>
<tr>
<th>Points Range</th>
<th>Grade</th>
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</thead>
<tbody>
<tr>
<td>880 to 1000</td>
<td>A</td>
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<tr>
<td>750 to 879</td>
<td>B</td>
</tr>
<tr>
<td>620 to 749</td>
<td>C</td>
</tr>
<tr>
<td>500 to 619</td>
<td>D</td>
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<tr>
<td>Below 500</td>
<td>F</td>
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</tbody>
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**Note:** 749 points is a C, not a B.
Grade Access  Official student grades are maintained in the Math Department grade database (a.k.a. MADDIE). To access your grade record, go to www.math.uab.edu and click on Check grades. You will need to enter your BlazerID and password. NOTE: You may have to use Internet Explorer, as other browsers may not work with MADDIE properly.

Grade Review  Students are asked to review all grades for accuracy immediately after they are posted. Mid-term tests should be picked up from the instructor as soon as possible, but no later than the date of the next test. Tests that are not picked up on this schedule are not eligible for review. All questions involving homework grades, quiz grades, test grades and participation bonus points must be resolved before the final exam. Once the final exam is taken the course is complete, and no further review of in-term grades is permitted.

MA418  MA418 students must also submit a pass/fail project before the end of the semester. Information regarding the project will be distributed later in the semester. In support of developing writing skills, the project will include a report describing their observations, presenting logical analysis, and making conclusions.

Final Exam  The final exam is Friday May 10th, from 10:45 AM until 1:15 PM. The exam is comprehensive.

Email  Information about the course (changes to assignments, reminders, schedules, etc.) will be distributed to students using their blazerID email address. Each student is required to access their UAB email account frequently, as these communications represent official university business. This is a requirement for all UAB students. For UAB email account assistance, send an email to userservices@uab.edu, or call 934-3540.

Withdrawal  The last day to withdraw from the course with a grade of “W” is March 28, 2013. The permission of the instructor is not required.

Aims of the course  This course supports the development of quantitative literacy. Upon successful completion of the course, a student can
- handle given data sets, construct and interpret tables, graphs, and schematic representations of mathematical relations;
- identify the problem and translate verbal descriptions into mathematical form,
- compute statistics and evaluate significance of empirical observations;
- draw conclusions based upon probability laws and empirical data
- test hypotheses and validate a model based upon empirical evidence
- communicate results in a manner appropriate to the audience using visual aids (graphs, charts, schemata).
Spring Term 2013

Course ID for on-line work: mahato04399

Test and Exam Schedule for MA180 and MA418, Section 1F:

**Test #1:** Monday February 18, in class. Test covers Chapters 3-6.
**Test #2:** Friday March 29, in class. Test covers Chapters 7-8.
**Test #3:** Monday April 29, in class. Test covers Chapters 9-11.
**Final Exam:** Friday May 10, in class, 10:45 AM until 1:15 PM

<table>
<thead>
<tr>
<th>Read Book Sections</th>
<th>Class meetings</th>
<th>Assignment number</th>
<th>Homework and quiz deadlines</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2 – 3.4</td>
<td>January 9, 11, 14, 16, 18</td>
<td>1</td>
<td>January 20</td>
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<tr>
<td>4.2 – 4.4</td>
<td>January 23, 25</td>
<td>2</td>
<td>January 27</td>
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<tr>
<td>5.2 – 5.4</td>
<td>January 28, 30, February 1</td>
<td>3</td>
<td>February 3</td>
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<tr>
<td>6.2,6.3,6.5,6.6</td>
<td>February 4, 6, 8, 11, 13</td>
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<td>February 17</td>
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<td>February 18</td>
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<td>7.2 – 7.3</td>
<td>February 15, 20, 22</td>
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<td>February 24</td>
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<td>7.4 – 7.5</td>
<td>February 25, 27, March 1</td>
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<td>March 3</td>
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<tr>
<td>8.2 – 8.3</td>
<td>March 4, 6, 8</td>
<td>7</td>
<td>March 10</td>
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<tr>
<td>8.4 – 8.6</td>
<td>March 11, 13, 15, 25, 27</td>
<td>8</td>
<td>March 27</td>
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<td>March 29</td>
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<tr>
<td>9.2 – 9.3</td>
<td>April 1, 3, 5</td>
<td>9</td>
<td>April 7</td>
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<td>9.4 – 9.5</td>
<td>April 8, 10, 12</td>
<td>10</td>
<td>April 14</td>
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<td>10.2 – 10.3</td>
<td>April 15, 17, 19, 22</td>
<td>11</td>
<td>April 21</td>
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<td>11.2</td>
<td>April 24, 26</td>
<td>12</td>
<td>April 28</td>
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<td></td>
<td>April 29</td>
<td></td>
<td>Test # 3 chapters 9 - 11</td>
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<td>Review work</td>
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<td>13</td>
<td>May 1</td>
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<td></td>
<td>May 1</td>
<td></td>
<td>Review in class for final exam</td>
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<td></td>
<td>May 10</td>
<td></td>
<td>Final Exam, comprehensive, 10:45 AM</td>
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