UAB Department of Mathematics

SYLLABUS (Summer 2012)

MA 110 – Finite Mathematics

Semester: **Summer 2012**  Section: OW  Course ID: **land87769**  UAB zip code: **35294**

Instructor: Heather Land  Instructor e-mail: **hland@uab.edu**  phone: 934-2154

Instructor office hours: TR 10am-12pm, other times by appointment

NOTE: All instructor office hours are conducted in the UAB Math Learning Laboratory (MLL), HHB 202 (Heritage Hall).

**REQUIRED meeting times:**

| Class Meeting | Time/Location: 12:40-1:30pm, EB 145 |
| Lab Meeting   | Time/Location: 1:40-2:30pm, HHB 202 (MLL) |

**Attendance policy:** Attendance at every class meeting and lab meeting is **REQUIRED**. Work will be collected or Roll will be taken. There are 14 scheduled class meetings and 14 scheduled lab meetings. Students earn up to 15 Participation Points toward their final grade for each class meeting attended and 5 points for each lab meeting attended. **To earn the Participation Points students must be in the classroom or lab at the start of the meeting and at the end of the meeting.** The following rules apply:

1. Students may not sign the roll for another student. Violation of this policy will result in a grade of F for academic misconduct.
2. **If you come LATE to the class/lab meeting, do not ask to sign the roll or to participate.**
3. Do not sign the roll if you intend to leave the class/lab early.
4. In case of emergency, students may leave the class/lab without the instructor’s permission. Just get the instructor’s attention and leave quietly with minimal disruption to the rest of the class.
5. **NO participation points can be earned if the student is absent,** whether or not the absence is excused. If you are absent on official university business, arrangements must be made IN ADVANCE of the absence.

**Prerequisite:** Undergraduate level MA 096 Minimum Grade of C or Undergraduate level MA 097 Minimum Grade of C or Undergraduate level MA 098 Minimum Grade of C or Undergraduate level MA 102 Minimum Grade of C or (ACT Math Score 20 and High School GPA 2) or ACT Math Score 21 or (SAT Mathematics 480 and High School GPA 2) or SAT Mathematics 500 or MA Screening-Advanced 15.
Aims of Course: Upon successful completion of MA110, a student
- is able to compute using arithmetic and elementary algebra in a variety of problem situations;
- is able to identify the problem and translate verbal descriptions into mathematical form;
- is able to evaluate the reasonableness of quantitative assertions;
- is able to interpret and construct graphs, tables, and schematic representations of mathematical relationships;
- understands elementary probability, and is able to draw conclusions based upon probability;
- is able to select and use appropriately quantitative evidence and inferences;
- is able to communicate results of mathematical investigations in a manner appropriate to the audience;
- is persistent in attempting to solve mathematical problems.

This course is more about developing quantitative reasoning ability than acquiring any specific set of mathematical skills (algebra, arithmetic, etc.). The above learning outcomes are realized in the course in a variety of contexts, including consumer mathematics, voting theory, apportionment, counting, probability, and descriptive and inferential statistics.

Course Structure: This course is primarily computer-based. All homework assignments are on-line and can be completed either on your own computer or using one of the computers in the UAB Math Learning Lab (MLL in 202 Heritage Hall). All quizzes must be completed in the MLL (during MLL hours) anytime BEFORE the scheduled deadline. All tests are also done on the computer, but they must be taken in the MLL according to your class schedule during your lab meeting time. In order to receive credit for homework and quizzes, the work must be done ON or IN ADVANCE of course deadline dates. See the course schedule for the course deadline dates.

Materials: All students are required to purchase the Thinking Mathematically Package UAB, which includes a UAB Math 110 Text (softcover) and MyMathLab ACCESS CODE. The UAB Math 110 Text is a customized text that only contains the chapters that are being covered in the course. (Purchasing the package is usually the least expensive way to get the required materials.)


BE sure to PURCHASE only ONE TEXT and ONE ACCESS CODE.

A basic or scientific calculator will be needed for in class work.

Getting Started: The first thing you must do is REGISTER for your on-line course materials. You cannot complete any Homework or Quizzes until you have registered in MyMathLab. You must have a MyMathLab ACCESS CODE (part of the bundled materials, but may also be purchased as a stand-alone item or online).
If you do not have a MyMathLab ACCESS CODE by the first lab meeting, you can set up temporary access to the online materials, but you MUST CHANGE TO PERMANENT ACCESS within 17 days (directions are given after you log in to your Pearson account).

There will be NO EXTENSIONS for temporary access. There will be NO EXTENSIONS for missed homework or quiz deadlines due to failure to change to permanent access or failure to purchase required materials.

Registering for a Course in MyMathLab
Go to http://pearsonmylabandmastering.com and click the Register button for students. Follow the instructions provided. To register, you will need the following:

1. The Pearson CourseID for this particular section of MA 110, which is land87769

2. A Pearson account*. If you already have an account for math, English, or History you should sign in. If you don’t have an account, create one. The SIGN IN Name for your account MUST BE your BlazerID followed by @uab.edu. If you already have a Pearson account and the Sign In Name is not your blazerID@uab.edu, please contact the instructor for directions on how to change it after you have registered. *Every student at UAB is required to have an @uab.edu email address for official university and instructor communications, and for registration in this course. The Math Department standard for the required student login name is your complete UAB email address; for example, imastudent@uab.edu.

3. Student Access. MyMathLab Student Access Kit (8 ½ by 10 inch cardboard package with a code inside) This is bundled with your text or can be purchased alone. You may also purchase student access ONLINE with a credit card.

4. The UAB zip code, which is 35294.

Math Help. Tutoring assistance is available in the Math Learning Lab (MLL) located in 202 Heritage Hall. The hours of operation are posted outside and can also be viewed on-line at www.uab.edu/mathematics under Student Resources. If you have technical problems with your computer or your quiz while you are in the lab, always ask a tutor for assistance. Calculator policy. Scientific calculators may be used in class and for homework and quizzes, but students may NOT use personal calculators during testing. Note that all tests for this course are administered in the MLL during your scheduled lab meeting times, and there is an on-screen calculator available for your use when testing. Your instructor will not assist you with the on-screen calculator during a test, so it would be to your advantage if you familiarized yourself with the use of the on-screen calculator in the Math Learning Lab BEFORE you have to take a test.
**Course Grades:** Students earn their grade in the course by accumulating points. There is a maximum of 1000 points available. Student letter grades are awarded as follows. Students who use **Internet Explorer or Safari** can go to [info.math.uab.edu](http://info.math.uab.edu) to review the status of their grades in the course. Note that grades are awarded by TOTAL POINTS EARNED, not by percentages.

<table>
<thead>
<tr>
<th>Grade Element</th>
<th>Points</th>
<th>Quantity</th>
<th>Total Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>5</td>
<td>14</td>
<td>70</td>
</tr>
<tr>
<td>Participation Pts</td>
<td>15</td>
<td>14</td>
<td>210</td>
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<tr>
<td>Quizzes</td>
<td>5</td>
<td>14</td>
<td>70</td>
</tr>
<tr>
<td>Lab attendance</td>
<td>5</td>
<td>14</td>
<td>70</td>
</tr>
<tr>
<td>Tests</td>
<td>145</td>
<td>4</td>
<td>580</td>
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<tr>
<td><strong>Total points</strong></td>
<td></td>
<td></td>
<td><strong>1000</strong></td>
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<table>
<thead>
<tr>
<th>Points Earned</th>
<th>Course Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>880-1000</td>
<td>A</td>
</tr>
<tr>
<td>750-879</td>
<td>B</td>
</tr>
<tr>
<td>620-749</td>
<td>C</td>
</tr>
<tr>
<td>500-619</td>
<td>D</td>
</tr>
<tr>
<td><strong>Below 500</strong></td>
<td><strong>F</strong></td>
</tr>
</tbody>
</table>

**Homework:** There are 14 homework assignments. Each homework is worth 5 points. Homework may be completed at home or in the MLL. **An unlimited number of attempts can be made on each homework question.** If a question is marked incorrect, click on **Similar Exercise** at the bottom and correctly answer a new question for full credit (before the deadline). **You can go in and out of the homework as many times as you like before the deadline (all of your work is automatically saved).** You earn points for homework completed ON or BEFORE the due date. After the due date, you can review homework assignments, but you cannot change your score.

**Quizzes:** There are 14 quizzes. Each quiz is worth 5 points. **Quizzes must be taken in the Math Learning Lab** (any time during the scheduled hours of operation). Each quiz can be taken a maximum of two times, and the higher grade attained will count. Once you begin a quiz you have 30 minutes to complete it. You cannot exit the quiz or that will count as one of your attempts. You take the quizzes in the MLL on your own schedule, but you can only earn the quiz points if the quiz is taken ON or BEFORE the due date. You must complete the quiz BY YOURSELF. **You may not obtain assistance from a fellow student or from a tutor,** but you may use your textbook and notes for quizzes. If you have technical problems during a quiz, ask a tutor for assistance.

All quizzes require a **password**, and the passwords are available in the MLL at the front desk. If you have trouble with a quiz password or a computer in the MLL, please see a tutor.
Tests: There are 4 major tests. Each test is worth 145 points. Tests will be taken under the supervision of the instructor in the MLL (202 Heritage Hall) during scheduled computer lab meeting times. Scratch paper will be provided. NO PERSONAL CALCULATORS are allowed. Each test has a 50 minute time limit. Students are required to keep a government issued photo ID on their desks during testing (UAB student ID, driver’s license, etc).

Class Meetings: There are 14 class meetings. For each class meeting that you attend, you can earn up to 15 Participation Points. Class meeting format is group work. An individually written report on the group problem is completed by each student prior to the end of class and turned in for evaluation. Rules and standards for group work, report evaluation, and awarding of participation points will be addressed at the first class meeting.

NO PARTICIPATION POINTS are awarded for LATE ARRIVALS or ABSENCES (excused or unexcused).

MLL Attendance: There are 14 lab meetings. Each lab meeting is worth 5 points. Roll will be taken. Points are earned only if you are ON TIME, if you PARTICIPATE by working in MyMathLab, and if you STAY for the entire meeting (until dismissed). NO POINTS are awarded for an absence (excused or unexcused).

Students can work on their homework, take quizzes, obtain tutoring assistance, and listen to course video lectures in the MLL. (To watch and listen to computer video lectures, students can bring their own headsets or can check out a headset from the MLL.)

When you come into the MLL, you must log on to the course homework system.
To log on, click on the appropriate course box.
Then you will be prompted to enter your BlazerID and password.

Make-up policy: NO MAKE-UPS are allowed. There is no appeal for missed participation points, lab attendance points, homework deadlines, or quiz deadlines. If a test date is missed due to a serious verifiable circumstance, the student may submit an Appeal Form (available in the Math Department Office, 452 Campbell Hall) to the Math Department Appeals Committee. The completed Appeal Form, along with supporting documentation attached, must be submitted within one week to the Math Department Office, 452 Campbell Hall.

The Appeal Form with supporting documents attached must be received no later than ONE WEEK after the missed deadline.

The appeal will be reviewed by the Director of Curriculum, the course instructor, the course coordinator, and the Director of the MLL. The student will receive a prompt reply as to the adjudication of the appeal but should continue working in the course.
**Course Completion:** The course is complete once the student takes Test 4. No other points may be earned after test 4 has been taken. **You must take Test 4 to complete the course.**

**Cell Phones.** Student cell phones must be silenced and put away during all class and lab meetings. In the Math Learning Lab, cell phones should be turned to vibrate mode (or TURNED OFF during TESTING).

**Notebook.** Students are required to have a notebook in which they can record class meeting notes, file this syllabus, file instructor e-mail messages, and file other course related information.

**Disability Support Services (DSS).** DSS approves special accommodations to students who qualify. The UAB DSS office is located on the fifth floor of the Hill University Center, telephone: 934-4205, e-mail: dss@uab.edu. Students who have DSS-approved accommodations should meet individually with the instructor as soon as possible.

**Course Description:** (3 semester hours).
An overview of topics of finite mathematics and applications of mathematics for the liberal arts student. Topics include counting, permutations, combinations, basic probability, conditional probability, descriptive statistics, binomial and normal distributions, statistical inference, and additional selected topics. Students construct models of problems situations, translate verbal descriptions into mathematical form, interpret and create schematic representations of mathematical relationships, use quantitative evidence as a basis for reasoning, argument, and drawiwnng conclusions, and communicate their results to an audience appropriately. Quantitative Literacy is a significant component of this course (QEP).

**Withdrawal:**
The last day for withdrawing from this course (without the payment of full tuition and fees) is **June 11**. The last day to withdraw from this course with a grade of **W** is **July 6**. Students withdraw from a course by completing the appropriate paperwork in the UAB Registrar’s Office in the Hill University Center. The signature of the instructor is not required.
When you create your account in MyMathLab you must use your **BlazerID followed by @uab.edu** as your **SIGN IN name**.  
Example: If your BlazerID is goblazers use **goblazers@uab.edu**

**Class Meeting Structure:**
Class meetings will usually be held on Tues/Thurs from 12:40-1:20pm.  
Lab meetings will usually be held on Tues/Thurs from 1:30-2:20pm.  
See Course Schedule for dates/times.

Ma110 is a 3-hour course.

**TESTS** will be taken under the supervision of the course instructor **during the scheduled lab meeting times** in 202 Heritage Hall.  
Tests are limited to 50 minutes.  
On test days, you must bring a UAB photo ID, driver’s license, or gov’t-issued ID.  
**QUIZZES** must be taken in the MLL. They are limited to 30 minutes.  
**HOMEWORK** can be done in the MLL or at home.

Students receive **PARTICIPATION POINTS** when they attend a COMPLETE class or lab meeting (arriving ON TIME and staying until the end of class or lab).  
**NO Participation Points are awarded for an absence (excused or unexcused)**.

**There are NO MAKE-UPS for missed deadlines for homework and quizzes.**  
This is because the work can and should be done IN ADVANCE of the deadline dates.

**Students are REQUIRED to check their** blazerID@uab.edu **email address**  
for official course communications.

**You must take Test 4 to complete the course with a passing grade**  
(even if you have 620 points prior to taking Test 4).
DEADLINE DATES

Work should be completed BEFORE deadline dates but cannot be completed after deadline dates.

Deadlines for homework, quizzes, and tests are INDEPENDENT of one another.

You do not have to complete homework to take quizzes or tests. (However, it is recommended.)

There are no prerequisites for any of the graded assignments.

You must attempt Test 4 to complete the course.

Quizzes are due by 8:00pm Mon-Thurs, by 5:00pm on Fri.
Homework is due by 11:59pm.

Do NOT wait until the deadline to try to complete your Homework and Quizzes.
All of these assignments can and should be done IN ADVANCE of the deadlines.

<table>
<thead>
<tr>
<th>Homework and Quizzes</th>
<th>Assignment</th>
<th>Sections</th>
<th>Pts</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>HW 1/Q 1</td>
<td>8.1, 8.2</td>
<td>5</td>
<td>6-6</td>
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<tr>
<td>HW 2/Q 2</td>
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<td>5</td>
<td>6-11</td>
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<tr>
<td>HW 3/Q 3</td>
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<td>5</td>
<td>6-13</td>
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<td>HW 4/Q 4</td>
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<table>
<thead>
<tr>
<th>Tests</th>
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<th>Related HW/Quiz Assignments</th>
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<td>7-12</td>
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<tr>
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<td>HW 11-14; Q 11-14</td>
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