## Math 1102 – Introduction to Statistical Methods- Fall Course Only

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**Objective:** Math 1102 is a preparatory course for Math 1105 - offered in the fall semester and applied introductory statistics courses - offered in both the fall and spring semesters.

**Description:** Math 1102 prepares students for applied, introductory level statistics courses and finite mathematics. The course introduces basic probability laws, descriptive statistics, linear regression and probability distributions. The probability and statistics content of the course is similar to 1/3 of the content covered in applied, introductory level statistics courses and Math 1105. In addition, Math 1102 includes a variety of topics of algebra, with emphasis on the development of linear, power, exponential and logarithmic functions and their applications to curve fitting.

Class meets two times per week for 50 minutes. There are no recitations. Structure of the class is both lecture and active student participation.

<u>Credit</u>: Math 1102 is a 1-credit course (letter grade only). Individual colleges should determine whether this course can be applied towards their quantitative reasoning requirements.

<u>Text</u>: TBA. Two copies of the textbook and student solution manual will be on reserve in the Malott Hall 4<sup>th</sup> floor library.

**Materials:** Course Packet, graph paper and scientific calculator.

## Homework:

- Before attempting homework, read the section in the textbook.
- Work on the odd-numbered practice exercises (answers provided in the back of the textbook) before attempting the assigned homework.
- Assigned homework, even-numbered exercises, will be collected in packet form on specific dates. Selected problems will be graded.
- Late homework will not be accepted.

<u>Class Attendance</u>: Success in this course depends largely upon consistent in-class attendance and participation.

<u>Office Hours</u>: Visiting the instructor or course assistant on a regular basis, during office hours or by appointment, is advised. It is easier to keep up than to catch up.

<u>Prelims</u>: There will be three, in-class prelims (no final exam). If you cannot be present on the day of a scheduled prelim, you must speak with the instructor well in advance to make arrangements to take the prelim ahead of time.

**Grading:** The following points will be assigned during the course.

Total	400 pts
Prelim 3	100 pts
Prelim 2	100 pts
Prelim 1	100 pts
Homework	100 pts

## **Additional Information:**

Since Math 1102 – Quantitative Methods for the Life Sciences is a preparatory course for Math 1105 and introductory level statistics courses, the course has a unique format:

- 1. Approximately 8-10 office hours are offered per week between the instructor and course assistant. Students are encouraged to attend office hours at least once per week.
- 2. Since the class meets  $\sim$ 27 times during the semester, the course is divided into 3 units (Units I 9 classes, Unit II 9 classes, Unit III 9 classes). Units consist of 7 lectures, 1 review class and 1 in-class prelim.
- 3. Extra credit: Students may earn 4 extra credit points (added to their prelim grade) for composing a help sheet (1-page summary of the topics covered in the unit).
- 4. Students have the opportunity to raise their first 2 prelim grades by correcting errors on the prelims, working out additional problems similar to the ones missed on the prelim and meeting with the instructor or course assistant to demonstrate mastery of the topics/concepts. Additional information will follow.