Syllabus: Statistics 1127 (Statistics for Biological Sciences)

Course: STAT 1127
Semester: Spring 2011
Time: Wednesday, 6:10 ~ 8:40pm,
Location: 2020K 15

Instructor: Dr. Thamban Valappil
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Office hours: Wednesday, 5:00-6:00 pm, 8:40-9:40 pm (by appointment only)


COURSE DESCRIPTION
This is an introductory course in statistical sciences applicable to biomedical and related sciences. The topics include introduction to numerical measures of central tendency and variability, frequency distributions & graphical presentations, probability, random variables, properties of basic probability distributions: binomial, poisson, and normal, sampling distributions, estimation, confidence intervals, testing of hypotheses, linear, multiple regression and correlation.

LEARNING OUTCOMES:
At the end of the semester you should be able to
- apply laws of probability
- understand and use various probability distributions
- construct and interpret large-sample and small-sample confidence intervals
- evaluate evidence for and against hypotheses using statistical tests
- find the least-squares equation for simple linear and multiple regressions, evaluate the models and interpret the results

GRADING: Final grade will be based on
- Homework: 30%, *work independently*
- Midterm Examination: 30%, *closed book.*
- Final Examination: 30%, *closed book.*
- Attendance: 10%

NOTE: IN ACCORD WITH UNIVERSITY POLICY, THE FINAL EXAM WILL BE GIVEN DURING THE FINAL EXAM PERIOD AND NOT THE LAST WEEK OF THE SEMESTER

Homework Assignments: Home work problems will be emailed or announced at the end of class. It is due in the following class.
Important Instructions:

- No late homework is acceptable.
- No early or make-up examinations (unless for serious reasons with documentation).
- Attendance is mandatory.
- The date of midterm examination will be announced in the class.
- Stat 1051, 1053, 1104, 1111, and 1127 are related in their subject matter, and credit for only one of the six may be applied toward a degree.

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