BMS 2512: BioStatistics
This course will increase the quantitative component of BMS education. Through assignments and in class problem solving, students will understand how scientific facts are evaluated and tested. Using the fundamentals of math, students will understand the basic concepts of confidence intervals, means, averages and how to distinguish outliers from the population. Students will learn how to treat paired and unpaired data along with how to work with multiple data. This course does not have pre-requisite but requires co-requisite of General Chemistry and fulfills a Pre-Health requirement.

Learning Outcome:
After completing this course, you should be able to:

• Demonstrate the ability to use scientific method to design experiments and interpret data in quantitative and graphical formats.
• Evaluate the validity of scientific information in the media.
• Understand Confidence Intervals, Averages and Means
• Understand Chi Square Analysis, Student’s t-Test, Analysis of Variances (ANOVA)
• Understand Ad Hoc tests for ANOVA
• Separate facts from hypotheses and theories.
• Properly use Microsoft Excel to graph data
• Properly use Microsoft Excel to analyze statistics

Contact:
Taught by BMS staff

For further information regarding the course:
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Brooklyn, New York 11201
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Policies:

- Attendance: no more than 2 excused absences (must be excused (medical) and e-mail must be sent to instructor within 1wk of absence or day of the incident, prior notice preferred if possible).
  - Lateness: no more than 4 (15mins after each class period, beyond this point you will be marked absent). 2 latenesses will constitute an absence.
  - Attendance will affect your grade, so be on time and ready to work.
  - Attendance is mandatory

- Classes will end on the very last day of class and final exam will be cumulative. Please do not expect exams to be scheduled before the last day of class.
  - NO make-ups for missed exams
  - NO extra time for entering exams/quizzes late.
  - NO video recording of the class, however audio recording will be permitted.
  - NO curves will be offered.
  - NO extra credit or work will be offered.

- Please read all the chapters assigned before the meeting of classes.

- Academic Integrity:
  - (All syllabi must have a statement about plagiarism. Feel free to cut and paste the text below into your own syllabus.)
  - Plagiarism is the word-for-word reproduction of another writer’s work or ideas; paraphrasing without proper attribution also constitutes plagiarism. Neither will be tolerated in this class. Please see the discussion of plagiarism in the Student Guide of Academic Integrity (http://core.ls.nyu.edu/page/ls.academicintegrity) for more detailed information. Penalties for plagiarism range from a failing grade for a paper or a course to dismissal from the University.
  - The penalty for plagiarism in this class is a failing grade.

- Students with Disabilities:
  - Students with disabilities who believe that they may need accommodations in this class are encouraged to contact the Moses Center for Students with Disabilities at (212) 998-4980 as soon as possible to better ensure that such accommodations are implemented in a timely fashion. For more information, see the CSD website: http://www.nyu.edu/life/safety-health-wellness/students-with-disabilities.html
  - Moses Students:
    - Members of Student Services must meet with me within the first 2 classes so arrangements can be made. Any students that fail to identify may not be considered for consideration.

- Communication: by e-mail your Professor / State full name, ID# and full course # in all correspondences.

- Office hrs: by appt only, please send the Professor an e-mail so we can schedule an appropriate time for us to meet.

- Final Exam schedules are set by the University and therefore I do not have control over this.
  - Please DO NOT assume that the exam will be before the last possible day of the final exam schedule.
  - Please DO NOT schedule any personal events before the last possible day of the final exam schedule.
  - If you miss the final exam and have carried a passing grade, you WILL receive a grade of an INCOMPLETE until the final is taken.
How to study for the course:
1. Read chapters ahead
2. Learn the vocabulary
3. Take notes in class
4. Reread section of the text that corresponds to the work in class.
5. Rewrite your notes with corresponding section of the text.
6. Reread the notes in the morning before class, along with new work.
7. Get notes from colleagues and compare them to yours.


Texts are NOT available in the bookstore, Used texts are also ok.

Grading:
- Exams (Midterm and Final): 67%
- Assignments: 33%
- Grading
  - A = 96% +; A- = 92 - 96; B+ = 88 – 92; B = 84 – 88; B- = 80 – 84; C+ = 76 – 80; C = 72 – 76; C- = 68 – 72; D+ = 64 – 68; D = 60 – 64; F = <60