



Chesapeake Bay Governor's School
For Marine and Environmental Science
Bowling Green Campus

Statistics & Applied Calculus

(MTH 240/MTH 270)

2014-2015

Instructor: Mrs. Jennifer Magruder
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Course Description: This course presumes a mastery of the material covered in Precalculus I & II.

The first semester will focus on both Descriptive and Inferential Statistics, including graphing, probability, statistical tests and Hypothesis Testing. They will earn 3 more RCC credits for MTH 240.

During the second semester, students will cover both differentiation and integration techniques in Applied Calculus. They will earn 3 RCC credits for MTH 270.

Upon successful completion of the year, students will have completed the applied math track, as well as learned the statistics needed for their senior research project.

Texts:

1st Semester: *Elementary Statistics*, 11th Edition; Triola: Addison-Wesley; 2010

2nd Semester: *Applied Calculus* by Shana Calaway; a free online text; as well as *Calculus* by Larson, Hostetler and Edwards, 8th edition

Required Materials

- ☺ graphing calculator (TI-83 preferred)
- ☺ pencils with big erasers (you can learn a lot from mistakes)
- ☺ LOOSE notebook paper (so that homework can be easily turned in)
- ☺ 1 ½ inch "3 -ring" binder for storing tests, quizzes, notes, homework and worksheets. (This notebook will be graded for organization.)

Attendance: Class attendance is, of course, required. Be reminded of the CBGS policy in the Handbook which you signed. Absences and tardies will be reported daily to your home school and to parents on interims and grade reports.

Make-up work policy: I will not be using class time to remind you of any work that you have missed. That will be your responsibility and yours alone. Keep your grade sheet in your binder up to date so you know what work you are missing. Missed tests and quizzes will be made up on the next day that you attend math class.

Turning in work: Unless otherwise noted, class work and tests are due at the end of the class period in which they were assigned. Homework (including papers, labs, and other projects) are due at the beginning of class on the due date. In general, most assignments can be emailed to me, but when specified, hard copies must be brought in. If you do not have email access, bring it in on a USB drive, but make sure it is on my computer before class starts. When submitting assignments electronically, all files must be labeled as lastname_firstname_assignment and the subject line of emails must include the assignment name. Attachments or emails that do not fit these criteria will not be read, assignments can be resubmitted, but will be considered late. As always, please come to me with any issues you have.

Honor Code: Students are expected to follow the rules and procedures as outlined in the Student Honor Code. Please refer to the Student Handbook if you need guidelines. Failure to do so may result in dismissal from the course. Tests, quizzes, and other work as requested will be pledged.

Course Expectations and Information:

1. **Be Prepared:** Class time will be used often to build on the basics that you cover in your homework. This is called a Flipped Classroom. Your homework will lay down the basics for you and you will do simple problems to show your comprehension at home. This opens up class time for us to work on more challenging applications of what you are learning in your homework. In other words, less lectures, more doing, thinking, and asking questions in class. An added benefit of a flipped classroom is that students can learn at their own rate and reach new heights as they are ready. The key to remember is; “Whatever you learn, learn it well.”

So HOMEWORK will be essential to your survival. No joke! If you have not done your homework, then you will do it in class while the rest of the students move on to more challenging (and point earning) work. You cannot build a skyscraper until the 1st floor is done. Always do your own homework. Copying others work will only make your skyscraper collapse.

2. **Class Participation:** You MUST ask questions about concepts that you feel need better clarification. Do not worry about anyone’s reaction, ask. Be engaged from the beginning and stay that way. Remember, use your CBGS teachers...it makes class more interesting, engaging, and valuable!
3. **Notebook:** As mentioned earlier, you will want a 3-ring binder. All materials I give you (quizzes, tests, worksheets, handouts ...) will be three-hole punched and

need to be kept in your binders. BE ORGANIZED. Because organization is a key math skill, I will be grading your notebook organization throughout the year. Keep all homework, notes, test, quizzes, labs and in class work IN THE RINGS in your binder (not stuffed in a folder!)

4. Assessments: Tests and quizzes will be given with notice. Work must be shown in order to earn credit. “In mathematical thinking, the process is more valuable than the destination.” Multiple choice questions will not happen in this class. ☺
5. Grading: I use a “total points” system. Every assignment (quiz, test, classwork, Homework, Math Lab, etc....) will be given a number of points it is worth. Each student will keep a grade sheet in front of his or her binder. It is the students’ responsibility to keep this current. You should know your current grade at all times.
6. Cell Phones: Don’t touch or look at your cell phone in class. It is a distraction, and we are covering complicated material that requires your focus. First offense: your cell phone will be confiscated and returned at the end of the class period. Repeat offenders will be referred to the CBGS Handbook Cell Phone policy.
7. Tips on how to survive this college level course:
 - ☺ Do not fall behind.
 - ☺ Do all homework.
 - ☺ Ask questions.
 - ☺ Form a study group or just do homework with a partner.
 - ☺ Be organized!!
 - ☺ Schedule your time and use it effectively!
 - ☺ Be self-motivated!

Inclement Weather and School Closings Policy

- Closing of the Chesapeake Bay Governor’s School is determined by the site (Rappahannock Comm. College-Glenns, Rappahannock Comm. College-Warsaw, or Caroline County School Board). For example: Essex County Schools may be closed due to weather but RCC-Warsaw is open; therefore CBGS will be in session.
- If a school system is closed due to inclement weather and the CBGS is open, students from the closed school system may attend pending the safety of the roads and permission from parents.
- There may be an emergency in which the CBGS is closed and the particular school system is open. Students shall report to their respective school instead of going to CBGS.
- If there is a one-hour delay for the CBGS site (RCC- Glenns/Warsaw and Caroline), CBGS will open one hour late.
- If there is a two-hour delay for the CBGS site, CBGS will be closed and students are to report to their home high school.

- If the home high school opens one hour late, and CBGS opens on time, students from the home high school are to report to CBGS, one hour late.

CBGS Statement on Safety:

What to know and do to be prepared for emergencies at CBGS: -Bowling Green:

- Know the safe evacuation route from each of your classrooms. Emergency evacuation routes are posted in campus classrooms.
- Listen for and follow instructions from CBGS/RCC or other designated authorities.
- Know where to go for additional emergency information.
- Report suspicious activities and object

Statement on Americans with Disabilities Act:

Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 require Schools to provide an 'academic adjustment' and/or a 'reasonable accommodation' to any qualified individual with a physical or mental disability who self-identifies as having such. Students should contact/ inform CBGS faculty for appropriate academic adjustments or accommodations.