

## MATH-2620 (3 Credit hrs)

**INSTRUCTOR** : Dr. ANDREAS LAZARI - Nevins Hall 2214 (333-7154)

**OFFICE HOURS** : Monday, Tuesday, Wednesday, Thursday 11:00am-11:50am  
**ANY OTHER TIME - BY APPOINTMENT**

**Course Description** : Prerequisite: MATH 1101, MATH 1111, or MATH 1113. An introductory course in statistics. Topics include descriptive statistics; basic notions of probability, random variables, probability distributions, simple random sampling, and sampling distributions; confidence intervals and hypothesis tests; and regression. The application of statistical methodology and the use of computer software are emphasized.

**TEXT** : FUNDAMENTAL OF STATISTICS PKG-(VSU Custom edition)by SULLIVAN/SKU: 9781256109716

**TECHNOLOGY** : TI-83 or TI-84 Calculator(Required)

**EXAMS** : ALL EXAMS ARE 1 CLASS PERIOD IN LENGTH. THE FINAL EXAM WILL BE COMPREHENSIVE.

**PROJECTS** : Three projects. The projects are done in groups(usually three students). I usually assign groups the day after the first test. If you are not in class that day you will not have a group, which means you will not be able to do the first project. (The last project is presented in class-Power Point presentation is required)

<b>EVALUATION</b>	:	PROJECTS	50	
		EXAM #1	100	(Chapters: 1, 2, 3)
		EXAM #2	100	(Chapters: 5, 6, 7.1, 7.2, 7.3)
		EXAM #3	100	(Chapters: 8, 9, 10)
		FINAL EXAM (Comprehensive)	100	(Chapters: 2,3,5,6,7,8,9,10,11,4)

<b>GRADES</b>	:	A	405 - 450.00	90 - 100.0%
		B	360 - 404.99	80 - 89.99%
		C	315 - 359.99	70 - 79.99%
		D	270 - 314.99	60 - 69.99%
		F	0 - 269.99	0 - 59.99%

### VSU GENERAL EDUCATION OUTCOMES

3. Students will use computer and information technology when appropriate.
4. Students will express themselves clearly, logically, and precisely in writing and in speaking, and they will demonstrate competence in reading and listening.
5. Students will demonstrate knowledge of scientific and mathematical principles and proficiency in laboratory practices.
7. Students will demonstrate the ability to analyze, to evaluate, and to make inferences from oral, written, and visual materials.
8. Students will demonstrate understanding of the physical universe and the nature of science, and they will use scientific methods and/or mathematical reasoning and concepts to solve problems.

### **Student Learning Outcomes:**

- Students will produce and interpret descriptive statistics, graphically, numerically, and in tabular format. (3,4,5,7,8)
- Students will calculate and interpret probability using union and intersection rules.(5,7,8)
- Students will explain the concepts of random variable and distribution. (3,4,5)
- Students will use technology to calculate probabilities with the normal and binomial distributions. (3,5)
- Students will produce a confidence interval estimate from a given sample. (3,5,7,8)
- Students will explain the rationale of hypothesis testing. (3,4,5,8)
- Students will carry out - with the aid of technology -a variety of hypothesis tests, including Z-tests and t-tests and interpret the meaning of the results.(3,7,8)
- Students will use correlation analysis to determine the strength of a linear relationship between bivariate data and apply linear regression to describe this relationship. (3,5,7,8)

All of these objectives will be assessed quantitatively via homework and tests, and qualitatively via class discussion. Additionally, the objectives related to statistics will be assessed via group projects with written reports and presented to the class. (3,4,5,7,8)

### **GENERAL POLICIES:**

1. **There are NO MAKE-UP EXAMS. There are EXCEPTIONS to this rule. For example: HOSPITALIZATION AND DEATH IN THE FAMILY. REQUIRED NOTIFICATION PRIOR TO THE TEST. UPON VERIFICATION I WILL ALLOW YOU TO COUNT YOUR FINAL EXAM TWICE.**
2. Withdraw before midterm and you get **WP** grade.  
Withdraw after midterm for **NO GOOD REASON** and you get **WF** grade.
3. Attendance is expected for every scheduled class meeting. You are expected to come on time and stay for the full period. If you are not in class, you are still responsible for the lecture, any assignments, and any information that was given in class.
4. **CLASS NOTES:** You are responsible for getting the material of the internet (<http://www.valdosta.edu/~alazari>) before class.
5. Cell Phones. No cell phones should be used during class, text messaging or any other form. If you expect an emergency call during class you need to talk to Dr. Lazari. If a cell phone rings, it will be collected and returned to the Student Affairs Office.
6. Students requesting classroom accommodations or modifications because of a documented disability must contact the Access Office for Students with Disabilities located in Farber Hall. The phone numbers are 245-2498 (voice) and 219-1348 (tty).