

# STA 3024 Section 1053

## Introduction to Statistics 2 Summer A 2011

Meeting Time and Location	MTWRF 2nd period (9:30AM-10:45AM) Turlington Hall L011	
Course Website	<a href="http://www.stat.ufl.edu/~akirpich/STA3024">http://www.stat.ufl.edu/~akirpich/STA3024</a>	
Instructor	Alexander Kirpich Griffin-Floyd 101A akirpich@stat.ufl.edu	Office Hours MTR 10:55AM-11:55AM or by appointment
TA	Laura Mori Griffin-Floyd 115A lmori80@stat.ufl.edu	Office Hours T 11:55AM-12:55PM W 10:55AM-11:55AM
TA	Tezcan Orazgat Griffin-Floyd 209 torazgat@stat.ufl.edu	Office Hours W 1:00PM-2:00PM R 1:00PM-2:00PM

### Course Description and Objectives

STA3024 is a second course in statistics that applies tools from STA2023 to develop a variety of statistical methods than can be used to make decisions with data in the real world. This course is intended to be accessible to students without a mathematical background, as no concepts beyond basic algebra are required. The following topics will be covered:

- Multiple regression, with an emphasis on inference
- Analysis of variance (ANOVA) in both one-way and two-way layouts
- Contingency tables and the chi-squared test

It time permits we will also look at:

- Nonparametric methods

Since this course builds directly on material from STA2023 or similar course, concepts from that course will be briefly reviewed as needed. At the same time students are **expected to be already familiar** with the following list of topics: graphical and numerical descriptive measures, simple linear regression, basic probability concepts, random variables, sampling distributions, central limit theorem, confidence intervals and significance tests for parameters associated with a single population and for comparison of two populations. All course material will be the extension of those concepts.

## Textbook

We will use all 15 chapters of *Statistics: The Art and Science of Learning from Data*, by Alan Agresti and Chris Franklin; Prentice Hall, 2008. The first edition (2007) will also work, but the chapters, examples, and homework problems might be numbered differently. All the homework problems will be assigned **based on the second edition**. Please keep that in mind.

## Lecture Notes

I will post the lecture notes for each chapter on the course website before we start them. You can print these out and bring them to class to save yourself some writing. However, the notes posted online will be incomplete, so you will have to come to class to fill in the blank sections. If you miss a day of class, please try to get the notes from a friend (or a stranger) before you try asking me. Obviously you are free to ignore the posted notes if you prefer to take notes a different way.

Be aware that the pre-posted notes will not be a word-for-word transcript of exactly what we discuss in class. You will be responsible for all of the material that we cover in class, whether it is contained in the pre-posted notes or not. (However, you will not be responsible for anything not directly covered in class, like sections of the textbook that we skip.)

## Exams

Three closed-book, multiple-choice, non-cumulative exams will be given during the normal class time. The **tentative** exam dates are the following:

- Monday, May 23rd
- Monday, June 6th
- Friday, June 17th

If you are unable to take an exam due to conflict or illness, you must contact me **as soon as possible** to discuss your options. Valid **documentation** will be required for any make-ups.

## Homework

Six **big** weekly homework assignments will be posted on the course website. The due date for each assignment will be announced when it is posted. Usually it will be **Monday right after the class**. Late assignments **will not** be accepted. Homework turned in not right after the class but on a due date is **considered late**. Every homework will contain

around 25 problems. You need to turn in **all** the problems but only few random ones will be carefully graded every time. Problems have to have computations and explanations **not only the answer**. You may work together and discuss the assignments, but simply blindly copying another student's paper is considered cheating and will be dealt with accordingly.

## Project

I will probably give project for extra 10% of the grade in case someone wants to improve the grade. It will be the analysis of data set using software. This is completely individual work. You may not work together on the project. I will only provide a dataset and you are expected to do analysis using software and prepare nice 2-4 page report like you are in real job environment. The project details and due date will be announced later.

## Grading

Your semester grade will be calculated as follows:

			Points	Percent	Grade	
Source			Points			
Exam 1	100 points	25%	351-400	88-100	A	4.00
Exam 2	100 points	25%	336-350	84-88	A-	3.67
Exam 3	100 points	25%	321-335	80-84	B+	3.33
Homeworks	100 points	25%	306-320	77-80	B	3.00
Extra Project	40 points	10%	291-305	72-77	B-	2.67
Total	440 points	110%	276-290	69-72	C+	2.33
			261-275	65-69	C	2.00
			246-260	61-65	C-	1.67
			231-245	57-61	D	1.00
			0-230	0-57	E	0.00

If grades for the class as a whole are lower than expected at the end of the semester, I might change the grading scale to something more favorable than the scale shown above. If grades for the class as a whole are higher than expected at the end of the semester, the scale will not change.

In compliance with UF Statistics Department policy, I will not give grades of D+ or D-.

## Attendance

Attendance is not required (except on exam days), but it is **very strongly** recommended.

## E-Mail and Office Hours Policies

This is a large class, so I get a lot of emails. I will make every effort to respond to emails. However, please remember the following two things:

- If you have a question that will take longer than a few sentences to answer, or if you have several questions, then you probably need to come and see me in person instead. The best thing is to ask me directly after the class or to come to my office hours. Please do not write complicated emails that are hard to answer shortly and better talk to me after the class. I am always willing to help.
- **Avoid** waiting until the last minute. You will not be the only person with a question at the last day of the office hours before the test and you will not be the only person writing the e-mail to me or other TAs the night before an exam or assignment due date. We will do our best to be helpful at office hours and respond on time to e-mails but we can not make any guarantees here. You need to understand that.

### **Calculators**

For exams and homework assignments, you will need a calculator that can at least do arithmetic and square roots. Any scientific or graphing calculator will work as well. (If it was fine for STA2023, it will be fine for this course.) Please be aware that saving notes into a calculator and accessing them during an exam is considered **cheating** and will be dealt with accordingly.

### **Incomplete Grades**

An incomplete grade will only be given under extraordinarily extenuating circumstances that prevent the student from completing the course requirements. Having a failing grade in the course is not by itself an extraordinarily extenuating circumstance.

### **Students with Disabilities**

Any student requesting accommodation for disabilities must first register with the Dean of Students Office, who will provide documentation to the student, who must then provide this documentation to me privately as soon as possible.

### **Privacy Policies**

Student records are confidential. Only information designated as UF directory information may be released without your written consent. This includes requests from parents or anyone else who contacts me about your performance in the class.

### **Academic Honesty**

All students are required to abide by UF's academic honesty guidelines. For students in this course, the relevant portions can be summarized as follows: **Do not cheat.**