Online Section: This section is scheduled for Term A as an online course for the MPH program. The course content is identical to the face to face section STA5176, but students in this section have a 4 week review period during which each student can do some reading to refresh her/his memory on some basic statistical ideas. The MPH program has put together some material online to help the MPH students do better in the course. In Mid-June, the instruction will start with Chapter 10 in Zar. I will use the software Elluminate Live to record each week two long lectures in front of other sections of STA4173/STA5176, and I will post the recordings for you to listen to and learn from. I cannot allow you to “attend” the lectures live since there is a limit to how many distant students I can have in an Elluminate section. I will create an elearning course which will host all sections together so that all students can work together in holding discussions on the course material. I always allow a limited amount of sharing of homework solutions. The general rule of thumb is never to post more 50% of any solution. Give tips and hints and assistance with SAS, but do not give out your solutions to other students.

Instructor: Dr. Raid Amin  e-mail : ramin@uwf.edu
Room 116/Bldg. 38, Phone: 474-3014,
Lecture Times: T/R 11:30am-2:10pm
Office Hours: M/T/W/R 10:00-11:30 and by appointment.
Class Meetings: Building 4, Room 336.

Text: Biostatistical Analysis, 5th ed. by Jerrold H. Zar, Publisher : Prentice Hall
My lecture notes are also required. I will post the notes lectures on e-learning in addition to the lecture recordings for students signing up for the Elluminate section for this course.

Prerequisite: You should have successfully passed STA2023 or a similar statistics course. See UWF Catalog for details.

Exams: The exams are proctored in-class, closed book exams. Simple one-page formula sheets are allowed. No examples or solutions are allowed on the formula sheet. The final exam is comprehensive and is designed to reflect any improvements in Performance

Proctor Information: I expect that each student sends me a filled out proctor information form that I will email you when we get closer to the exams. You have the option, if you live close enough from our Pensacola campus, to take the exam with the other sections and with me doing the proctoring. There are certain rules that UWF has set for proctored exams. Students are responsible for any costs associated with such exams.

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Term Exam 1 15 %.
Term Exam 2 15%
Final Exam 30%

**e-learning discussions:** I encourage each student to use elearning.uwf.edu as frequently as possible to communicate with me and with the other students in your class. I will monitor the discussions on a daily basis. Make use of discussion forums to ask questions and to get answers. Please try not to send me emails to ask questions about the course material. Reserve personal emails for confidential and personal issues that you do not want others to know about.

**Internet:** I encourage you to make use of the internet to learn more about the topics we cover in class. Just use [www.google.com](http://www.google.com) with the appropriate key words in each search.

**Grading Scale:** A (91-100), A- (90-91), B+(88-90), B (81-88), B-(80-81), C+(78-80), C (71-78), C-(70-71), D+ (68-70), D (61-68), D- (60-61) F (below 60).

**Honor Policy:** Students are encouraged to discuss the course material with each other, but no help should be given or received for any graded assignments or exams.

**Homework:** The homework is designed to complement the lectures, and is essential for a full grasp of the material. You are encouraged to attempt all homework exercises. I rely on students tutoring each other first, and when all fails, I will certainly will assist you with any problems.

**Project:** Each graduate student will be involved with the analysis of three data sets from the biological sciences, and to analyze the data and then write a report about the results. The software SAS must be used in the analysis of the data.

**Student Mentoring** I expect students to actively mentor each other throughout the summer term.

**Discussions:** It is very important that each student contributes to the class lectures by In-class and online discussions and by active participation throughout the semester.

**Expected Student Outcomes:**

(1) Students will be able to use statistical methods (Analysis of Variance, Regression Analysis, Nonparametric Methods).
(2) Students will be ready to assist faculty members in their department on the statistical analysis of their experiments.

(3) Students will have a basic working knowledge of SAS, enabling them to use SAS manuals to write programs for Analysis of Variance, Regression Analysis, and other statistical methods.

**SAS:** You will be using the Statistical Analysis System (SAS) throughout the course. I will be illustrating in class how to get started with SAS and how to submit programs. My lecture notes have all necessary SAS programs for this course. You will be responsible for submitting programs and understanding the print-outs. This is a major part of this course. SAS can be accessed via e-desktop. Practicing SAS is very important. Save all your SAS work so that you will keep a good documentation for future use. Many SAS assignments will depend on previous SAS programs, so it is saving you plenty of time if you have access to your older SAS programs.

**Material:** This course starts with the comparison of several population means. This is a direct extension of the material that was covered in STA2023 or STA3162C, which included a comparison of two population means. Your text includes all material necessary from STA2023 in its first nine chapters.

- Chapter 10: Analysis of Variance.
- Chapter 11: Multiple Comparisons. Sections 11.1-11.4
- Chapter 13: Data Transformations.
- Chapter 17: Simple Linear Regression.
- Chapter 20: Multiple Regression.
- Chapter 23: Contingency Tables. Sections 22.1, 22.2, 2.3, 22.8, 22.9.
- Chapter 24: Dichotomous Variables. Sections 23.6, 23.7, 23.9, 23.13.

**Withdrawal:** No automatic late withdrawal from this course with a 'W' is possible after the deadline. Refer to the UWF Catalog for details.

**Make-up Exams:** There will be no make-up exams given. Discuss with me any scheduling problems very early in the semester and definitely before exam days. If a student has a approval from me to miss an exam, then the final exam will have more weight for this student.