AA591-001 Analytics Primer
Institute for Advanced Analytics

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Course Webpage: http://moodle.wolfware.ncsu.edu
Class Days: Monday – Thursday, May 22 – June 15

Course Objective and Description:

This course reviews the basic statistical and mathematical knowledge needed in the study of advanced analytics.

This course will cover collecting, analyzing, and interpreting data using statistical techniques. Examine the differences in continuous and categorical data analysis. Review properties of probability and distributions, and make inferences of data using confidence intervals, hypothesis testing, and analysis of variance. Explore relationships between variables with correlation, simple linear regression, and multiple linear regression in detail.

Practice Problems:

There will be practice problems assigned for each section of material covered in the class. These practice problems will not be collected or graded. However, it is strongly recommended students complete the practice problems in preparation of weekly assessments and the final assessment.

Weekly Assessments:

Weekly assessments will take place online every Thursday through Sunday. These assessments will be administered online with a 50-minute time limit. A formula sheet is provided online for you to use.

Students who are unable to take an assessment due to a legitimate unavoidable reason with accordance to university policy may take a make-up assessment if the student provides suitable documentation of the absence. Make-up assessments will be scheduled individually.

Final Assessment:

The final statistics assessment for this course is administered online from Thursday June 15 to Sunday June 18. The assessment will be 2.5 hours at length. The final assessment is closed book and closed notes. A formula sheet is provided online for you to use. If you cannot take the online assessment on these days, please let me know as soon as possible.

Students with Disabilities:

Reasonable accommodations for examinations will be made for students with verifiable disabilities. Any student who feels they may need an accommodation based on the impact of a disability should contact the instructor privately to discuss specific needs. In order to receive these accommodations, students must register with Disability Services for Students at 1900 Student Health Center, Campus Box 7509, 515-7653. For more information on NC State's policy, please see: http://policies.ncsu.edu/regulation/reg-02-20-01

Student Code of Conduct:

The instructor of this course is committed to upholding the University policy on academic integrity, as described in the Code of Student Conduct, which can be found at: http://policies.ncsu.edu/policy/pol-11-35-01 (See especially Section 1 and Sections 7 through 12)

Tentative Course Outline:

Week 1: Data Collection, Probability, Distributions
Week 2: Sampling Distributions, Confidence Interval, Hypothesis Testing, Correlation
Week 3: Simple Linear Regression, Multiple Linear Regression
Week 4: ANOVA, Categorical Data Analysis