**ERMA 7310**

**Design and Analysis in Education II**

**Fall 2024**

# Instructor: Dr. Natalie Neugebauer Schoettler

**Office Hours and Location:** Thursday, 2-4 pm or by appointment

Haley Center 4086 or via Zoom

**Office Phone:** 334-844-3074

**Cell Phone:** (706) 575-5699 (EMERGENCY ONLY)

**E-mail:** nmn0011@auburn.edu

**Response Time:** I will respond to emails within 48 hours (with the exception of weekends or university-observed holidays).

**Meeting Time and Location:**

**001:** Mondays, 5– 7.50 pm, Haley Center 3430

**002:** Wednesdays, 12-2.50 pm, Haley Center 3430

**Credit Hours:** 3 credit hours

**Required Text:**

Field, A. (2024). Discovering Statistics Using IBM SPSS Statistics (6th ed.). Sage.

ISBN-10: 1529630002; ISBN-13: 978-1529630008

**Recommended Text:**

American Psychological Association. (2020). Publication manual of the American Psychological

Association (7th ed.). American Psychological Association.

A supplemental packet of required readings and resources will also be provided and discussed at the throughout the course.

**Software:**

We will be using IBM SPSS this semester. As an Auburn student, you will have access to SPSS via Virtual Lab as well as the computers in the LRC in Haley Center. If you choose to purchase an individual student license, this is a cost-effective avenue: <https://studentdiscounts.com/>

**Course Description:** This 3 credit-hour course focuses on bivariate and multiple correlation and regression analysis, trend analysis, analysis of covariance, and logistic regression, as they are commonly utilized in educational research.

**Course Objectives**: Students in this course will: (1) gain an understanding of correlation and regression procedures; (2) apply analytical knowledge by analyzing quantitative data; (3) use SPSS to analyze data using correlation and regression procedures; (4) interpret results of correlation and regression procedures and compose a corresponding results section per APA guidelines; and (5) review published research to examine the application of measurement, design, and analysis procedures.

**Grading and Evaluation:**

**List of assignments and a brief overview of points:**

CITI Training 10 points

Assignment 1 20 points

Assignment 2 20 points

Assignment 3 20 points

Assignment 4 20 points

Midterm Exam 40 points

Data Analysis Project 70 points

Topic Paper

Final Paper

Presentation

**Total**  200 points

**Grading Scale:**

A = 180-200 points

B = 160-179 points

C = 140-159 points

F < 140 points

**Extra Credit:** The lowest of the four lab assignments will be dropped (if all assignments have been attempted in full).

**Course Policies:**

**Attendance and Participation:** As graduate students, you are expected to attend each class and to actively participate throughout the course. I realize that situations may arise that are beyond your control, such as funerals, illness, family emergencies, etc. Communication is key. It is your responsibility to reach out in advance to provide documentation, as appropriate, and make other arrangements if you must miss a class meeting. Unexcused absences accounting for 20% or more of class meetings will result in the reduction of a letter grade. Attendance via Zoom will not be permitted. However, a Zoom recording of class may be obtained with appropriate notice and documentation.

**Late Submissions:** All assignments are expected to be received by the start of class, unless otherwise stated in the syllabus. Late work without proper documentation will result in a 10% reduction per day. Late work with proper documentation will be accepted in cases of illness or other emergencies. Please send me an email and we will work something out. If you feel you cannot meet a deadline, please reach out in advance and we can discuss the possibility of an extension.

**Accommodation Statement:** Students who need accommodations are asked to electronically submit their approved accommodations through AU Access and to make an individual appointment with the instructor during the first week of classes – or as soon as possible if accommodations are needed immediately. If you have not established accommodations through the Office of Accessibility, but need accommodations, make an appointment with the Office of Accessibility, 1228 Haley Center, 844-2096 (V/TT). Please refer to the [Office of Accessibility website](http://bulletin.auburn.edu/undergraduate/academicservices/officeofaccessibility/).

**Academic Honesty:**All portions of the Auburn University Student Academic Honesty code (Title XII) found in the [Student Policy eHandbook](http://www.auburn.edu/student_info/student_policies/) will apply to this class. All academic honesty violations or alleged violations of the SGA Code of Laws will be reported to the Office of the Provost, which will then refer the case to the Academic Honesty Committee.

**Artificial Intelligence:** Artificial intelligence should not be used to complete any assignment unless otherwise specified. Violationsof this guideline will be considered academic misconduct.

**Academic Misconduct:** The Department of Educational Foundations, Leadership, and Technology recognizes university policy regarding academic misconduct. Violations include, but are not limited to plagiarism, unauthorized assistance during examinations, submitting another’s work product as your own, using another’s words as your own without appropriate citation, sharing unauthorized materials with another that contain questions or answers to examinations, altering or attempting to alter assigned grades. In accordance with university policy regarding academic misconduct, students may be assigned several sanctions upon violations of the Student Academic Honesty Code. See the Tiger Cub publication for the current year for specifics regarding academic misconduct as well as student’s rights and responsibilities associated with the Code.

**Classroom Behavior:**The Auburn University [Classroom Behavior Policy](https://sites.auburn.edu/admin/universitypolicies/Policies/PolicyonClassroomBehavior.pdf) is strictly followed in the course; please refer to the above Student Policy eHandbook for details of this policy.

**Co-constructed Expectations:**

*Expectations for instructor:*

* answering emails within 48 hours
* providing feedback within a week
* make time for questions/workshopping
* classroom discussion (based on applied readings)
* Interdisciplinary examples (Nutrition, Hospitality, Kinesiology, Apparel design)
* Creating clear instructions and expectations
* Be on time for class

*Expectations for students:*

* Submit assignment ASAP/on time
* Be on time for class
* Regular attendance
* Be prepared for class (including readings)
* Contribute to class/chime in in discussion
* Ask questions in advance if something is unclear
* COMMUNICATE

**Course Calendar:**

NOTE:  This is a tentative syllabus. Any changes will be announced in class as well as on the Canvas course website. Students are responsible for checking their Auburn email and Canvas accounts regularly.

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| **Class Meetings** | **Content** | **Assignments Due** |
| 01/13/25 (001)  01/15/25 (002) | Syllabus and Course Overview | N/A |
| 01/20/25 (001)  01/22/25 (002) | **MLK Jr. Day (NO CLASS)** | |
| 01/27/25 (001)  01/29/25 (002) | Hypothesis Testing; ERMA 7300 Review | * Salkind Chapter 15 * CITI training due |
| 02/03/25 (001)  02/05/25 (002) | ERMA 7300 Review | * TBD |
| 02/10/25 (001)  02/12/25 (002) | Simple Linear Regression; (Part and Partial) Correlation | * Field Chapter 9 (p. 411-435) * Assignment 1 |
| 02/17/25 (001)  02/19/25 (002) | Multiple Linear Regression | * Field Chapter 9 (p. 436-476) |
| 02/24/25 (001)  02/26/25 (002) | Multiple Linear Regression | * Darlington & Hayes Chapter 3 * Assignment 2 |
| 03/03/25 (001)  03/05/25 (002) | Data Entry; Checking Assumptions | * TBD |
| 03/10/25 (001)  03/12/25 (001) | **Spring Break (NO CLASS)** | |
| 03/17/25 (001)  03/19/25 (002) | **Midterm Exam (NO CLASS)** | |
| 03/24/25 (001)  03/26/25 (002) | ANCOVA | * Field Chapter 13 * Topic Paper |
| 03/31/25 (001)  04/02/25 (002) | Logistic Regression | * Field Chapter 20 * Assignment 3 * Mac Iver & Messel (2013) |
| 04/07/25 (001)  04/09/25 (002) | Curvilinear Regression | * Salkind Chapter 15 |
| 04/14/25 (001)  04/16/25 (002) | Data Analysis Project Workshop | * Assignment 4 |
| 04/21/25 (001)  04/23/25 (002) | Presentations | * Presentation materials |
| 04/28/25 (001)  04/30/25 (002) | Course-Wrap Up | * Final Paper |
| 05/05/25 (001)  05/07/25 (002) | **Final Exam Period (NO CLASS)** | |