Instructor:
Dr. Le Gruenwald
Office, Phone and Email: 233 DEH, 405-325-3498, ggruenwald@ou.edu
Office Hours: 3:00 PM-4:30 PM Monday, Wednesday

Textbook:
Pang-Ning Tang, Michael Steinback and Vipin Kumar, Introduction to Data Mining, Addison-Wesley, 2006

Reference Materials:
Jiawei Han and Micheline Kamber. Data Mining: Concepts and Techniques, Third Edition, Morgan Kaufman Publishers, 2012
Jure Leskovec, Anand Rajaraman and Jeffrey D. Ullmann, Mining of Massive Datasets, 2014
Additional materials provided by the instructor

Prerequisite:
Graduate standing and permission of instructor

Software:
WEKA and R

Course Website:
http://learn.ou.edu

Course Coverage:
This course covers the process, concepts and techniques in data mining, including advanced techniques that deal with big data. It provides students with the necessary background for the application of data mining to real world problems. The topics to be covered include:
- Introduction to Data Mining
- Understanding and Preprocessing Data
- Data Mining Tools: WEKA and R
- Classification
- Association Analysis
- Cluster Analysis
- Anomaly Detection
- Big Data Mining

Grading:
- Project and Presentation: 40%
- Exam: 30%
- Homework: 30%

ACADEMIC MISCONDUCT: Homework and Exam are individual work; they must be done by you only. Project and Presentation are group work; they must be done by you and your assigned group members only. Plagiarism will result in action as specified in the Academic Integrity Code at OU: http://integrity.ou.edu/files/Academic_Misconduct_Code.pdf. Consult also the following web page for a Student's Guide to Academic Integrity at OU: http://integrity.ou.edu/students_guide.html.

IMPORTANT NOTE: Any student in this course who has a disability that may prevent him or her from fully demonstrating his or her abilities should contact me personally as soon as possible, so that we can discuss accommodations necessary to ensure full participation and facilitate your educational opportunities.