

Northwest Arkansas Community College
Business and Computer Information Systems Division

Discipline Code

DASC

Course Number

2113

Course Title

Techniques in Data Science (TDS)

Catalog Description

(F) Techniques in Data Science (TDS) (DASC 2113) is an intermediate semester-long data science course that follows an overview of data science in today's world. This class bridges between introduction to data science and upper division data science courses as well as methods courses in other concentrations. This class equips students with essential basic elements of data science, ranging from database systems, data acquisition, storage and query, data cleansing, data wrangling, basic data summarization and visualization, and data estimation and modeling. Students will gain hands-on experience using Python and various packages in Python.

Prerequisites

DASC 1223 –Data Science in Today's World

Credit Hours

3

Contact hours

45

Load hours

3

Semesters Offered

Fall

ACTS Equivalent

None.

Grade Mode

A-F

Learning Outcomes

Students completing DASC 2113 should be able to:

- describe the necessary foundation and context to prepare for more advanced data science topics;
- describe relational database management systems and their use in data acquisition, data storage and data query.
- query, combine and cleanse the data to identify potential issues and resolve inconsistencies, errors and/or issues in the data;
- summarize, visualize, and transform the data to understand it more deeply as well discover data patterns that may inform further analyses;
- employ various mathematical and statistical tools for modeling and estimation of the data;
- use principles and techniques in data science to communicate conclusions and patterns in the data to diverse audiences.

General Education Outcomes Supported

- Students will demonstrate technological fluency.
- Students demonstrate information literacy.

Standard Practices

Topics list

N/A

Learning activities

Assignments and Projects.

This course requires some in class, hands-on work and also additional hands-on work in the virtual or on-campus computer lab.

Assessments

Homework

Projects

Quizzes

Exams

Grading guidelines

A = 90 – 100%

B = 80 – 89%

C = 70 – 79%

D = 60 – 69%

F = 0 – 59%