Course Participation (Weekly)

Objective

- This assignment provides an opportunity to demonstrate your abilities across a variety of advanced analytical topics. Overall, the course participation exercises allow the student an opportunity to demonstrate progress (or mastery) of learning objectives 1, 2, 3, 4, 5, and 6:

1) Obtain data and explain data structures and data elements.
2) Scrub data by applying scripting methods, to include debugging, for data manipulation in Python, R, or other languages.
3) Explore data by analyzing using qualitative techniques, including descriptive statistics, summarization, and visualizations.
4) Model relationships between data using the appropriate analytical methodologies matched to the information and the needs of clients and users.
5) Interpret the data, model, analysis, and findings, and communicate the results in a meaningful way.
6) Select an applicable analytical methodology for real problems in areas such as business, science, and engineering.

Instructions

- Data science is a young and fast-moving professional field built on foundations of mathematics and computer science.
- The asynchronous materials provide multiple engagement opportunities each week. Each week will provide questions and activities designed to evaluate comprehension of fundamental analytical principles.
- Maximum points are possible if the student completes the asynchronous questions and activities prior to the weekly group discussion. No credit is given for asynchronous material completed two weeks after the module.
- The total value of course participation is 10 points—1 point for each week.

Additional Instructions

- Don’t forget what you learned in your previous courses; do your own work, document any assistance, and use comments for clarity.

Submission Items

- Each asynchronous session provides multiple checks on learning—multiple choice, short answer, and file upload. Each check on learning must be completed prior to the synchronous session.