

Course Syllabus

DATA 499: Data Science Capstone

- Description:** *Students will undertake a capstone project integrating their applied domain knowledge and general data-science coursework. The project will culminate in a final paper and presentation. Guest speakers may be arranged to present on a variety of topics. Meets jointly with DATA 299 and DATA 399.*
- Credit Hours:** 1
- Frequency:** Offered every semester
- Audience:** Required for the data science major
- Prerequisites:** DATA 399
- Format:** 1 class session (50 minutes) per week
- Textbook:** None
- Technology:** Course materials and grades are maintained in Blackboard, and students should check Blackboard regularly.
- AARC:** The Access and Accommodations Resource Center (AARC) is the campus office that works with students to provide access and accommodations in cases of diagnosed mental or emotional health issues, attentional or learning disabilities, vision or hearing limitations, chronic diseases, or allergies. You can contact the office at aarc@valpo.edu or 219.464.5206. Students who need, or think they may need, accommodations due to a diagnosis, or who think they have a diagnosis, are invited to contact AARC to arrange a confidential discussion with the AARC office. Further, students who are registered with AARC are required to contact their professor(s) if they wish to exercise the accommodations outlined in their letter from the AARC.
- Notice of Cancellation:** In the unlikely event class is cancelled, you will be notified through your Valparaiso University e-mail account.

Student Learning Objectives:

- A. Students will be exposed to a wide variety of data science techniques and applications.
- B. Students will critique articles utilizing data, identifying sources of bias and misinterpretations.
- C. Students will communicate effectively about data science in both written and oral form using both technical and nontechnical language.
- D. Students will complete a capstone project integrating their data science and application domain knowledge.