Course Number: DSA 688

Semester: Spring 25
Schedule: Ongoing – see emails
Instructor: Joaquin Carbonara PhD
Office Hours: By appointment
Phone: 716 878 6423

Course Name: EXPERIENTIAL LEARNING IN DATA SCIENCE AND ANALYTICS
CRN: 3206
Mode: Ongoing during DSA MS
Email: carbonjo@buffalostate.edu
Office Location: SAMC 379

Course Description: Internship and team project (aka Professional Labs). In the internship, students participate in activities within an industry setting to solve real world data science problems and to learn how to be part of the real-world work environment. In the Professional Lab, students become part of a problem-solving team to learn how to solve real-world data science problem and learn typical roles in a data science team. Offered every semester.

Prerequisite Courses: Graduate standing in DSA MS
Enrollment Restrictions: Try to enroll in DSA 688 the last semester before graduating. Students can enroll in DSA 688, do the internship, and PLab at any time while enrolled in DSA.

Learning Outcomes for this Course: The student must acquire skills in all three areas below over to demonstrate acquisition and retention of understandings and competencies. Acceptable acquisition of required skills may be shown by successful accomplishment of appropriate learning outcomes stated below and by other measures as identified and assessed by faculty supervisor.

1. Communication Skills – students will demonstrate successful accomplishment of *all* of the learning outcomes in this category:

Oral Communication
Students will verbally express ideas clearly and persuasively with clients, supervisors and colleagues and will participate effectively in discussion.

Written Communication
Students will express ideas clearly and persuasively in writing as evidenced by acceptable student accomplishment of two or more of the following:

Student daily internship journal/log
Student/faculty email communication
Student description/rating of internship duties and internship supervisor
Student internship report and oral presentation

2. Cognitive Skills – students will demonstrate successful accomplishment of *at least eight* of the learning outcomes in this category:

Using industry-specific terminology appropriately
Showing understanding of industry customs and practices
Acquiring and evaluating information
Organizing and maintaining information
Interpreting information
Applying knowledge to the task

Understanding and complying with legal regulations
Serving clients and customers
Negotiating and arriving at a decision
Working with diversity
Identifying, understanding and working with systems
Improving and designing systems
Working in cross-cultural and/or multi-national systems and projects
Monitoring and correcting performance
Selecting technology
Using computers/technology to process information
Maintaining and troubleshooting technology

3. Professional Skills – students will demonstrate successful accomplishment of *at least eight* learning outcomes in this category:

Exercising leadership
Behaving professionally
Behaving ethically
Listening effectively
Dressing appropriately
Adapting effectively to changing conditions
Participating as a member of a team
Developing appropriate workplace attitudes
Understanding and managing personal behavior and attitudes
Developing individual responsibility

Course Format

Course Requirements:
Required—Instruction permission

Brightspace: Students have access through Brightspace. Please see: http://3.230.252.179/Internship_instructions/DSA_688_Internship_Forms_Guide.html

Course Schedule: Self paced, based on the student Internship and PLab. Students MUST attend other networking meetings as communicated by email during the semester

Evaluation

Grades: The class is graded based on the completion of the Internship, PLab and Networking sessions.