University of Wisconsin-Stevens Point

College of Professional Studies

School of Business & Economics

Spring 2020 - Version 1 (1/20/2020)

Course: Applied Analytics Project (DAC 101) #41102 – Sentry Edition

Books: None

Class Time: T 10:00-10:50 a.m. Hybrid Course (Room: SCI A110 – change to my office)

Professor: Dr. Kurt A. Pflughoeft (Floog’heft)

Office: CPS 442

Office hours: MT: 2-3 pm, W: 11-12 and by appointment

Contact: [kpflugho@uwsp.edu](mailto:kpflugho@uwsp.edu)

Preferred Prerequisites: DAC 101, 111, 205, 310, CIS 210, Math 255

**Course Description:** Apply data analytics concepts, principles and practices to a comprehensive real-world project.

Week # Dates Topic\* Sentry Meetings (10:00-11:00 a.m.)

1. Jan 21 **Introduction**
2. Jan 28 Individual Meeting
3. Feb 4 **Review Project Plan** Feb 6 Touch-Point
4. Feb 11 **Feedback Session**
5. Feb 18 Individual Meeting .
6. Feb 25 Individual Meeting Feb 20 Quarterly Data Analytics
7. Mar 3 Individual Meeting
8. Mar 10 **Feedback Session** Mar 5 Touch-Point

Mar 17 SPRING BREAK

1. Mar 24 *No Class – Marketing Analytics Conference*
2. Mar 31 Individual Meeting
3. Apr 7 **Feedback Session** Apr 2 Touch-Point
4. Apr 14 Individual Meeting
5. Apr 21 Individual Meeting .
6. Apr 28 Individual Meeting
7. May 5 **Presentation Review** May 7 Student Presentation (-11:30 am)
8. May 12 No FINAL EXAM

**Schedule Footnotes:**

* This schedule is a tentative as it is dependent on events that occur at Sentry. If the syllabus info are updated, I will notify the class via a Canvas Announcement.
* This class is a hybrid one thus much of the communication will occur online. Most of your work should be accomplished at Sentry.
* **Bolded** meeting dates are required in-class meetings.
* Individual Meeting are optional for the student unless the professor initiates the meeting. The time may be used by the student to get advice how to proceed on their project from not only a DA perspective but also an organizational one. The professor may initiate a meeting with regard to one or more students or the class as a whole.
* Sentry Touch-Point meetings are for the professor only to get feedback as to how the student projects are proceeding. Note: the class following the Touch-Point Meeting will be mandatory and is designated as a Feedback Session.

Learning Objectives

By the end of the project, students are expected to be able to:

* Cordially interact with team members and stakeholders.
* Clearly communicate project results to decision-makers.
* Understand concepts and characteristics of project data.
* Understand methodologies & analysis methods applied to project.
* Apply principles and practices in data screening, cleaning, linking, and visualizations
* Create a presentation of your results that can be understood by end-users, managers and other stakeholders (not too much techno-speak)

**Distribution of Points**

Proposal (Project understanding) :10%

Understanding of Data: :20%

Understanding of Methods :20%

Final Presentation :50%

Penalty for missing a required class: 5 percentage points per meeting

**Hints**: You have a great opportunity to do a real-world project under the tutorship of two individuals: Nicole and myself. Nicole is your primary contact and manager; she will be allocating work, noting your progress, securing resources, and providing guidance. I will serve as a consultant/mentor/professor.

You should be able to explain your project, data, methods and results clearly to me.

When you are in doubt as to the best course of action feel free to ask me for my advice – especially with regards to data analysis. Note: as to information that is specific to Sentry, you will need to talk to Nicole. Don’t be afraid to ask questions.

Keep a running ledger of the items you are learning about at Sentry.

**POLICIES**

**Academic Standards -** UW-Stevens Point values a safe, honest, respectful, and inviting learning environment. In order to ensure that each student has the opportunity to succeed, we have developed a set of expectations for all students and instructors. This set of expectations is known as the Community Rights and Responsibilities document, and it is intended to help establish a positive living and learning environment at UWSP. Click here for more information: <http://www.uwsp.edu/dos/Pages/AcademicMisconduct.aspx> Academic integrity is central to the mission of higher education in general and UWSP in particular. Academic dishonesty (cheating, plagiarism, etc.) is taken very seriously. Don’t do it! The minimum penalty for a violation of academic integrity is a failure (zero) for the assignment. For more information, see the “Student Academic Standards and Disciplinary Procedures” section of the Community Rights and Responsibilities document, UWSP Chapter 14. This can be accessed at: [http://www.uwsp.edu/dos/Documents/CommunityRights.pdf - page=11](http://www.uwsp.edu/dos/Documents/CommunityRights.pdf%20-%20page=11)

**ADA Statement** - The Americans with Disabilities Act (ADA) is a federal law requiring educational institutions to provide reasonable accommodations for students with disabilities. For more information about UWSP’s policies, check here: <http://www.uwsp.edu/disability/Pages/faculty/lawAndPolicy.aspx>. If you have a disability and require classroom and/or exam accommodations, please register with the Disability and Assistive Technology Center at the beginning of the course and then contact me. I am happy to help in any way that I can. For more information, please visit the Disability and Assistive Technology Center, located on the 6th floor of the Learning Resource Center (the Library). You can also find more information here: <http://www.uwsp.edu/disability/Pages/default.aspx>.

**Canvas –** announcements, additional materials and point grades are located here.

**Grade Policy -** The following scale can always be used to estimate your grade

Percentage breakdown for semester grades (weighted point totals)

A = 93-100% B- = 80-82.99% D+ = 67-69.99%

A- = 90-92.99% C+ = 77-79.99% D = 63-66.99%

B+ = 87-89.99% C = 73-76.99% D- = 60-62.99%

B = 83-86.99% C- = 70-72.99% F = < 60%

\*Instructor reserves the right to implement a curve which is beneficial to the students.

**Announcements** – Always check the news item on Canvas to find the latest announcements concerning the class.

**Data** – in all likelihood, you will need to work on your Sentry project at Sentry on Sentry computers. If you are thinking about working with their data offsite (not a great idea), you must get written permission from Sentry.

**Software** – Sentry utilizes SAS software which is largely a command-level language. If you know R well, the transition to SAS is relatively easy. There is also a version of SAS which is called Enterprise Guide which is similar to the workflows that are developed in Knime. (Note: SAS Enterprise Miner has workflow capabilities as well but supports data mining/machine learning – much like Knime does.) SAS 9.4 may be available through the university - [https://www.uwsp.edu/infotech/Pages/SoftwareSupport/Available-Software.aspx](https://www3.uwsp.edu/infotech/Pages/SoftwareSupport/Available-Software.aspx) There are many SAS on-line tutorials/videos including Linkedin Learning.

Other Software – Students have used some other software in the past including: Excel, VBA and Tableau.

**University Emergency Preparedness** –

In the event of a medical emergency call 9-1-1 or use Red Emergency Phones. Offer assistance if trained and willing to do so. Guide emergency responders to victims.

In the event of a tornado warning, proceed to the lowest level interior room without window exposure. See [www.uwsp.edu/rmgt/Pages/em/procedures/other/floor-plans.aspx](http://www.uwsp.edu/rmgt/Pages/em/procedures/other/floor-plans.aspx) for floor plans showing severe weather shelters on campus. Avoid widespan structures (gyms, pools or large classrooms.)

In the event of a fire alarm, evacuate the building in a calm manner. Stay 200 yards away from the building. Notify instructor or emergency command personnel of any missing individuals.

Active Shooter – RUN/ESCAPE, hide, fight. If trapped hide, lock doors, turn off lights, spread out and remain quiet. Call 9-1-1 when it is safe to do so. Follow the instructions of emergency responders.

See UW-Stevens Point Emergency plan at [https://www.uwsp.edu/rmgt](https://www3.uwsp.edu/rmgt)