# COSC 499 Requirements Feedback

## Project #1 - Department Mgmt System

### Team 12

1. Have they identified the project purpose and UVP?

Yes, the project purpose/UVP is defined at the start of the video. Key goal is by tracking course and service assignments over time, better allocation of resources can be done that ultimately improves student satisfaction and department outcomes.

1. Are the  measurable project objectives and related success criteria acceptable?

Yes. Success criteria listed were efficient data entry and real-time visualizations and benchmarks. The system itself will not achieve goal #3 which is optimal assignment of instructors, but it will help the Department Head work towards that goal. This distinction is important as it is out of scope to automate any assignments by the system. The system assists the Head which will do the assignments manually.

The measure method stated using user feedback surveys to measure the success of the system. User surveys are useful for validating the design, but your metrics should be more specific. Here are some examples:

* A department staff can record the service hours of all instructors participating in a meeting in less than 3 minutes.
* An instructor can see a dashboard of a summary of service assignments and teaching assignments that should be produced in less than 5 seconds.

1. Have the user groups (and their needs) been properly identified?

User groups specified: instructors, department head. Missing department staff or administrators that will perform the majority of the data entry.

1. Have the user requirements been properly identified?  Are any key items missing from your perspective?

The user requirements for each user group is present. The use case diagram is a good feature. The requirements need to be more thoroughly defined.

1. Have the functional (system) requirements been properly identified?  Are any key items missing from your perspective?

Good. Identified functional requirements in the areas of:

* Authentication
* Visualization
* Modifying data tables
* Manage staff for administrator

1. Has the team addressed the core requirements for the project?

The team has most of the project requirements. There needs to be more clarity on the role of department staff and their use cases.

1. General comments regarding the proposal?

Overall, the video summarized most of the key project requirements.

# Overview of Requirements (Merged from all groups)

UVP: All groups identified the key UVP of better management of teaching/service assignment data and appropriate visualizations/reporting would enable improved department outcomes and student experiences.

The project success criteria and metrics were quite variable between the groups. I am going to adopt Team 6’s four user groups for summarizing user and functional requirements.

1. **Instructors** – should be able to easily use the system and have an overview of their assignments and status in less than 5 minutes.
   1. May login with user id and password.
   2. Support for CWL in future would be beneficial.
   3. Email retrieval for forgotten password.
   4. View only own all data except editing their profile.
   5. Visualizations of their own data with respect to department benchmarks.
      1. Note: Two main types of data: course data and service data. Requires different reporting as service data based on assignments and hours, while course data is based on courses and number of students.
   6. Have ability to see service and course assignments for whole department (with filtering possible by subject/area (e.g. CS, Math)).
2. **Department Head** – should be able to have overview of overall department performance (with capability of drill-down by subject and individual instructor) to enable efficient assignments and identifying high/low performers
   1. Ability to add/edit any data.
   2. Ability to export data of different types into Excel. Note: May have different Excel formats for individual data types (e.g. service role assignments, course assignments).
   3. Primarily focused on reporting and visualization and identifying performance outliers.
3. **Department Staff** – must be able to efficiently add/edit data related to instructors, courses, TAs, and assignments:
   1. Service assignments – primarily entered through user interface
   2. Course assignments – entered through CSV import in a given format. Must be able to support re-import of same data in a given year. For example, import all assignments in July into the system. Re-import assignments in September. Need to have way to easily detect changes and have some form of user approval. Must be able to add/edit/delete in UI as well.
   3. TA assignments – entered through CSV import in a given format. Similar to course assignments.
   4. Course performance data, SEI data: will generally be imported through CSV.
   5. All these CSV imports are done to simplify integration, but some of this data may be accessible using an API to the systems that are storing it.
   6. Must be able to record any department meeting and attendees in less than 3 minutes.
   7. Able to export any data into CSV/Excel.
   8. Stretch goal: Ability to request instructors provide TA reviews and store in system.
4. **System Administrators** – a system administrator can add/edit/delete accounts and perform system maintenance.
   1. A system administrator may be a department head or department staff.
   2. If an account is not active or eligible for login, its data is retained for historical analysis.

Technically, I want to use PostgreSQL rather than MySQL. I do not want any commercial software such as Tableau. All reporting should be web-based charting libraries.

Data modeling requirements:

* Service assignments must have their estimated hours recorded for each month of the year. Record name of service assignment, subject area, description.
* Course assignment data should contain data similar to SISC (number, name, room, instructor, time of day, enrolment).
* Course performance metrics include enrolment at different time points (August 1, after first drop date, etc.). Will also need to import SEI data which is 6 questions on a five point scale.
* Note that courses have an academic year (2024,2025, etc.) and session (summer 1 and 2, winter 1 and 2).