

HW 3: Design

Student use cases:

- search for class
- add a class
- drop a class
- login to SU online
- email advisor to be added to waitlist

Advisor use case:

- add student to waitlist if class is full based on email

SU Online use case:

- enroll student automatically based on waitlist

On SU Online, students are able to search and register for classes. In order to add a course, students need to meet the prerequisites and the class may not be full. Students may also drop a class they decide not to take before the registration deadline. Students can only take a maximum of 18 credits if undergrad or 12 credits if grad student.

Students must be logged into SU Online before attempting to add or drop, but can search for classes either logged in or not. If the class is full, students must send an email to their advisor with their name, SUID, and the course they want to take; students will be put on a waitlist for the requested course. If space allows, students will be automatically enrolled in the order they are listed on the waitlist.

Probably Classes:

- SU Online
- Student
 - Undergrad
 - Grad
- Course
- Class
- Advisor

Rejected Classes:

- Prerequisites
- Registration deadline

- Credits
- Email
- Name
- SUID
- Waitlist
- Space

Relationships between classes:

- SU Online HAS students (aggregation)
- SU Online HAS courses (aggregation)
- Courses HAS classes (dependency)
- SU Online HAS advisors (aggregation)
- Undergrad IS A Student (inheritance)
- Grad IS A Student (inheritance)

Abstract	
Student	
Undergrad and Grad	
<ul style="list-style-type: none">• search class• drop class• login/logoff to SU Online• email advisor	<ul style="list-style-type: none">• Class• Advisor• SU Online

Undergrad	
Student	
<ul style="list-style-type: none">• add class (depends on 18 credits max limit)	<ul style="list-style-type: none">• Class• Advisor• SU Online

Grad	
Student	
<ul style="list-style-type: none">• add class (depends on 12 credits max limit)	<ul style="list-style-type: none">• Class• Advisor• SU Online

Advisor	
<ul style="list-style-type: none">• add student to waitlist	<ul style="list-style-type: none">• Student• Class

Course

- get course code
- get class list

- Class
- SU Online

Class

- maintain enrolled list
- maintain waitlist

- Course
- Student
- Advisor
- SU Online

SU Online

- enroll student automatically based on waitlist (when space is available)

- Student
- Class