Computer Science

Preregistration Meeting

Dr. Dawn Lawrie

Overview

* Educational Objectives

* Changes to the CS Major and Minor

* Course Offerings Next Year

* Future electives

* Clubs for CS Students

Program Educational Objectives

To educate the next generation of computer professionals and academics who will

1. Embody the best ideals of a liberal Jesuit education as knowledgeable, caring, ethical, well-spoken men and women with critical and reasoned judgment.

2. Practice computer science and software engineering, understand the fundamental principles of computer science, and continue to develop their technical competencies.

3. Pursue advanced education, research and development, and other creative efforts in science and technology.

4. Take on leadership roles in industry, academics and the community.

Student Learning Outcomes

1. Be proficient in computer languages, operating systems, and hardware.

2. Be able to design high quality solutions to problems using today's technology based on well-established principles of software engineering process, understand how to participate effectively as a member of a team, and be able to evaluate those solutions by rigorous means.

3. Understand well the fundamental principles of computer science theory.

4. Be effective at written and oral communication, able to read and write technical papers and documentation and present results.

5. Be knowledgeable of general ethical principles as well as the ethical codes of the computer science discipline and be knowledgeable of the social context of computing.

Motivation for Change

- Computer Science is a rapidly evolving field

- Refocus each of the introductory courses

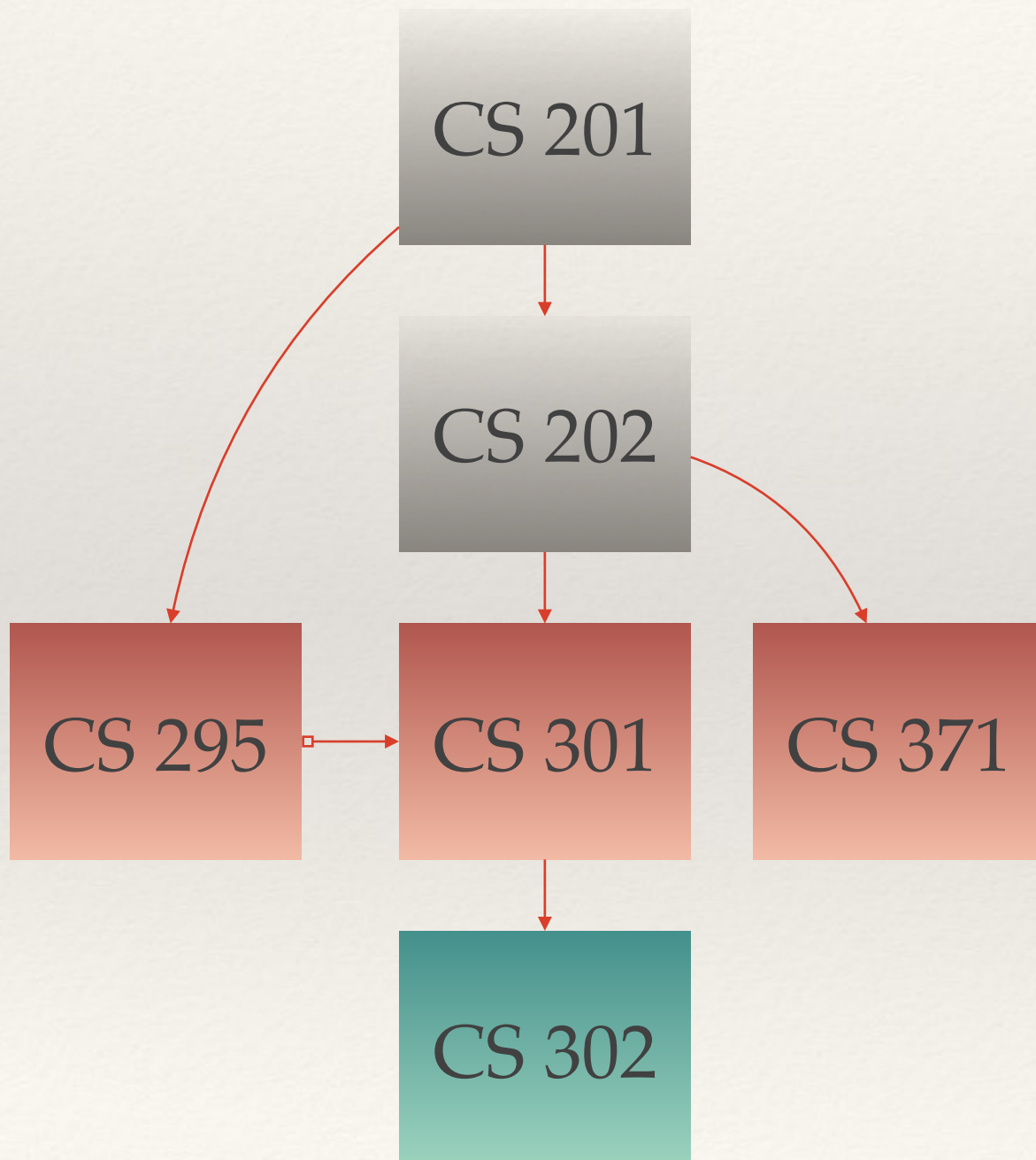- Desired greater flexibility in course sequencing

Changes to the Major/Minor

- New introductory sequence

  - CS201 - Computer Science I

  - CS212 – Object Oriented Data Structures

  - CS312 – Object Oriented Software Design
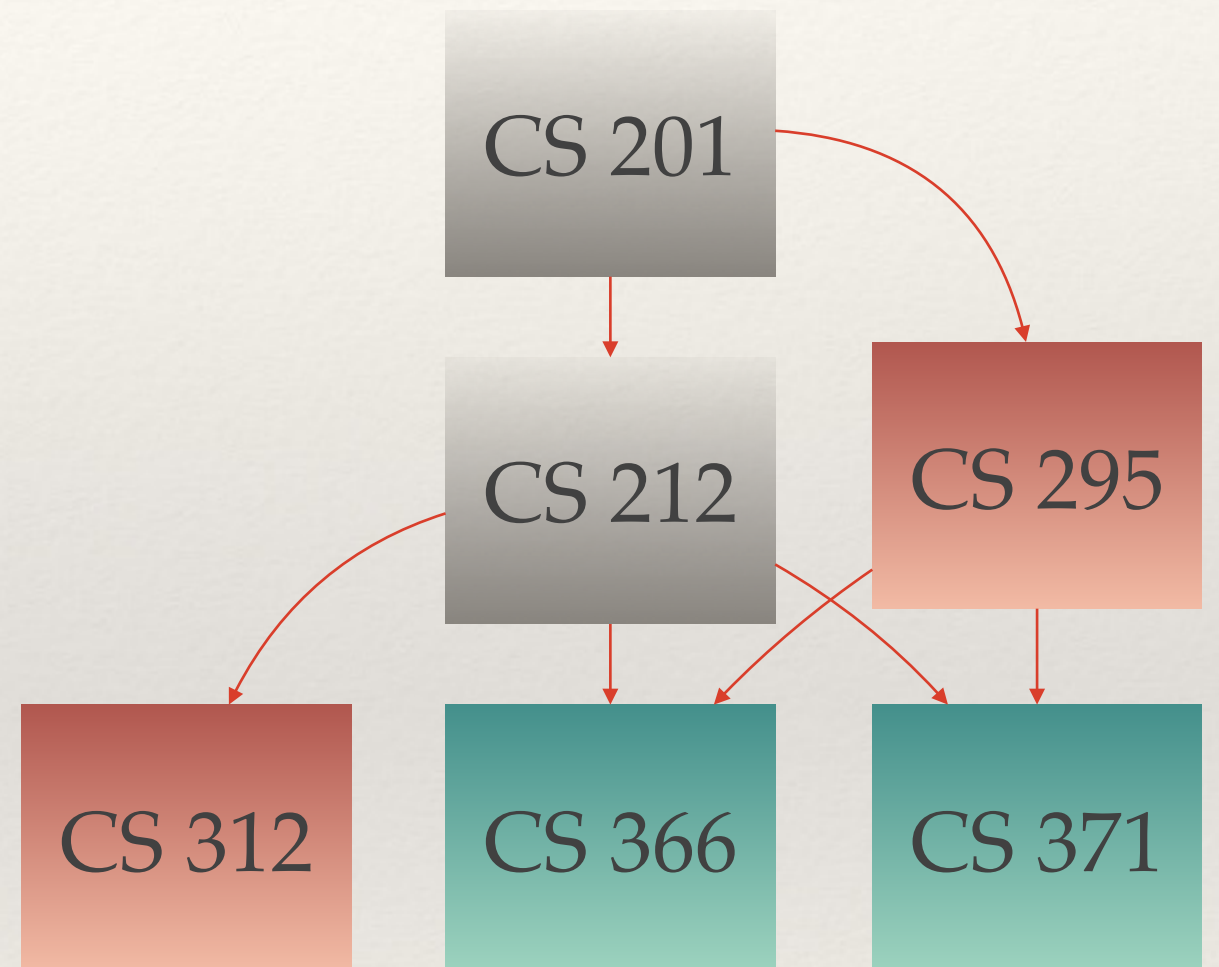
  - CS366 – Introduction to Computer Systems

Course Sequencing

What to take next year?

Enrolled in	Sign up for in Fall	Sign up for in Spring
CS 201 F15 or S16	CS212 and CS295	CS 366 and CS 371
CS 202 S16	CS 312 and CS 295	CS 366 and *CS 371*
CS 202 F15 or earlier	CS 301, CS 295, and CS 371	CS 302 and elective

Upper Level Courses 16-17

CS 451
Programming Languages

CS 485
Databases

CS 482
Software Engineering

CS 457
Networks

CS 462
Algorithms

CS 484
Artificial Intelligence

CS 466
Operating Systems

CS 496
Senior Projects

Upper Level Courses 16-17

CS 451
Programming Languages

CS 485
Databases

CS 482
Software Engineering

CS 457
Networks

CS 462
Algorithms

CS 484
Artificial Intelligence

CS 466
Operating Systems

CS 496
Senior Projects

CS 212

CS 295

CS 312

CS 366

CS 371

Upper Level Courses 16-17

CS 451
Programming Languages

CS 485
Databases

CS 482
Software Engineering

CS 457
Networks

CS 462
Algorithms

CS 484
Artificial Intelligence

CS 466
Operating Systems

CS 496
Senior Projects

CS 212

CS 295

CS 312

CS 366

CS 371

+ST210

Upper Level Courses 16-17

CS 202

CS 295

CS 301

CS 302

CS 371

CS 451
Programming Languages

CS 485
Databases

CS 482
Software Engineering

CS 457
Networks

CS 484
Artificial Intelligence

CS 496
Senior Projects
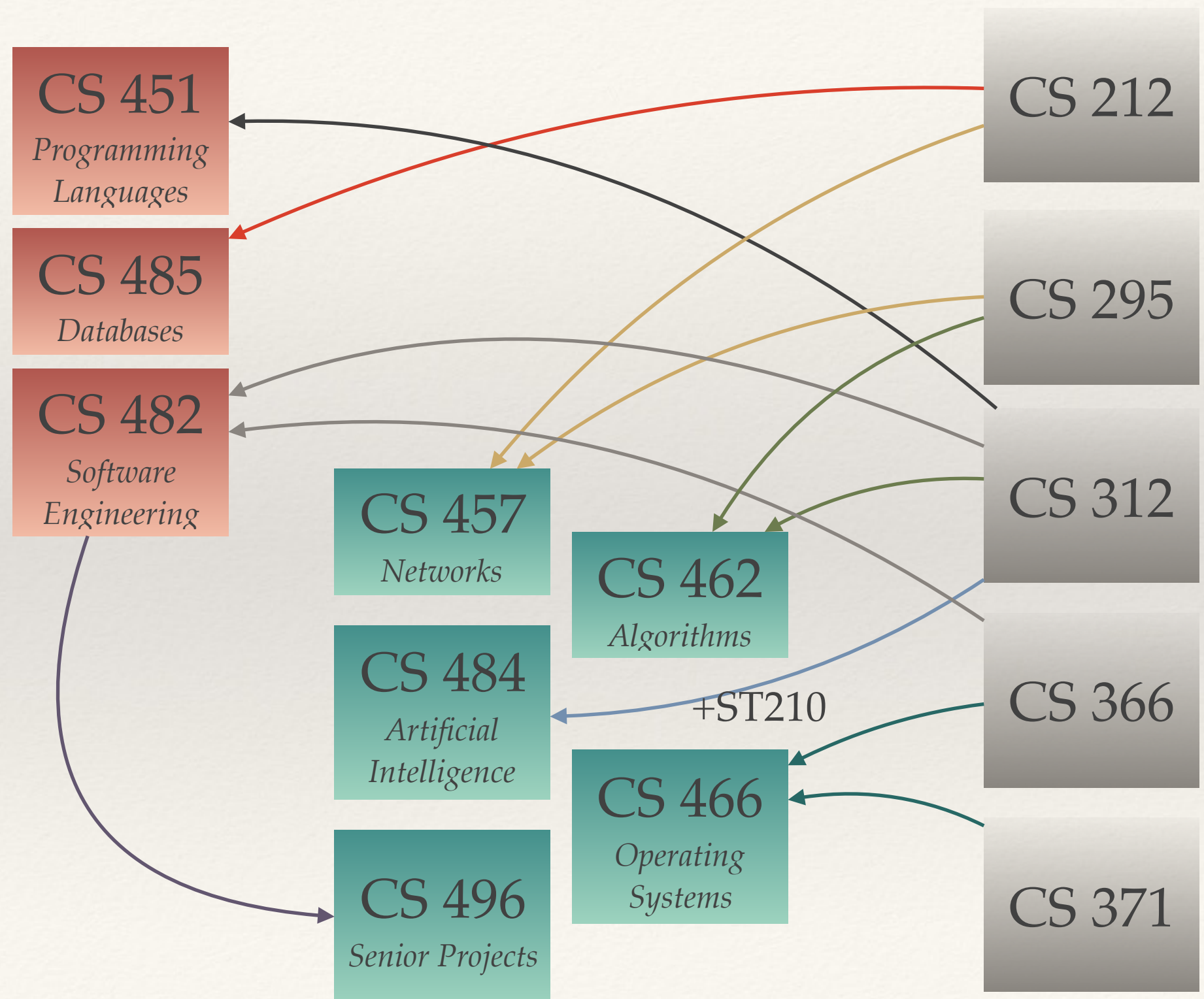
CS 462
Algorithms

CS 466
Operating Systems
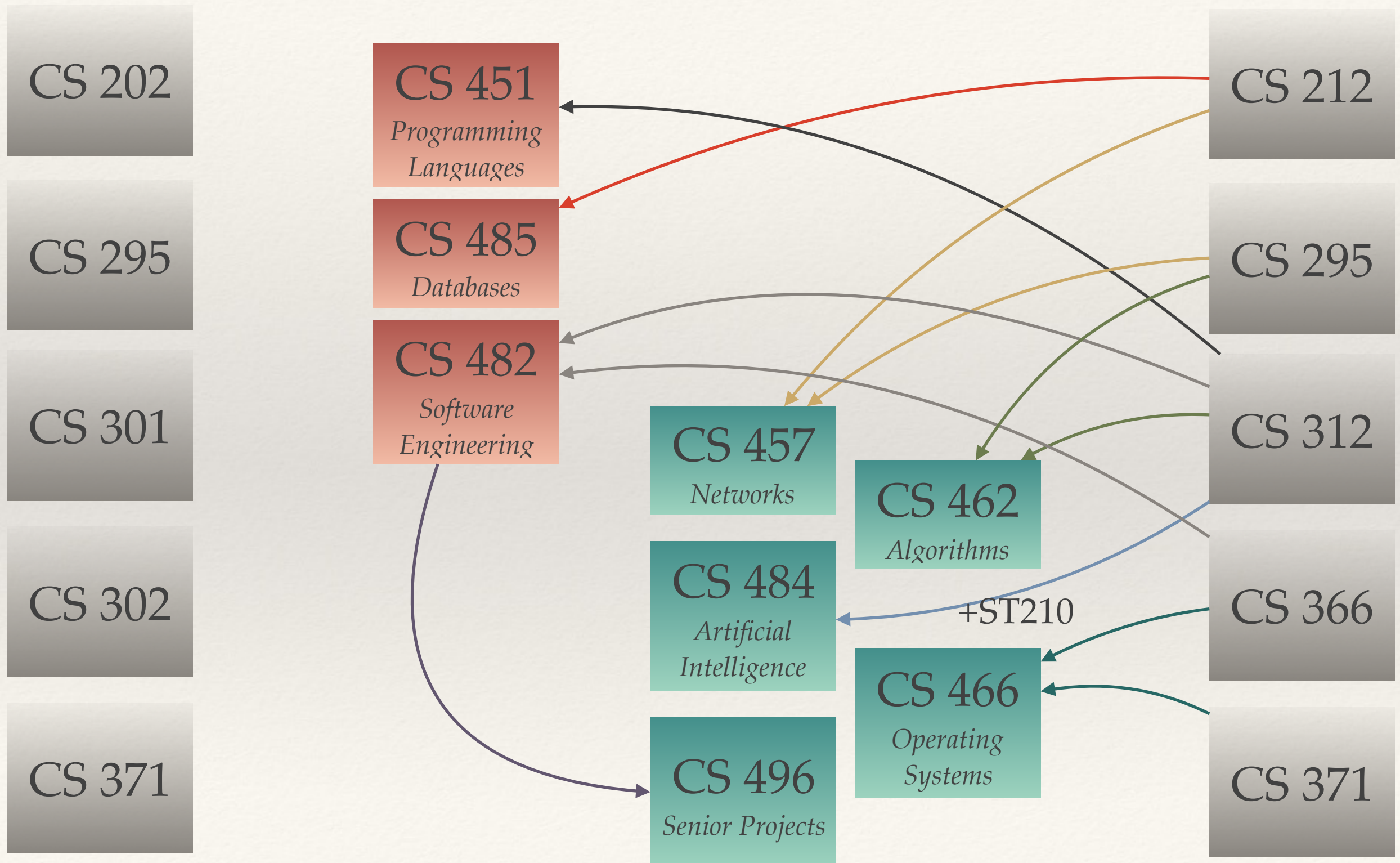
+ST210

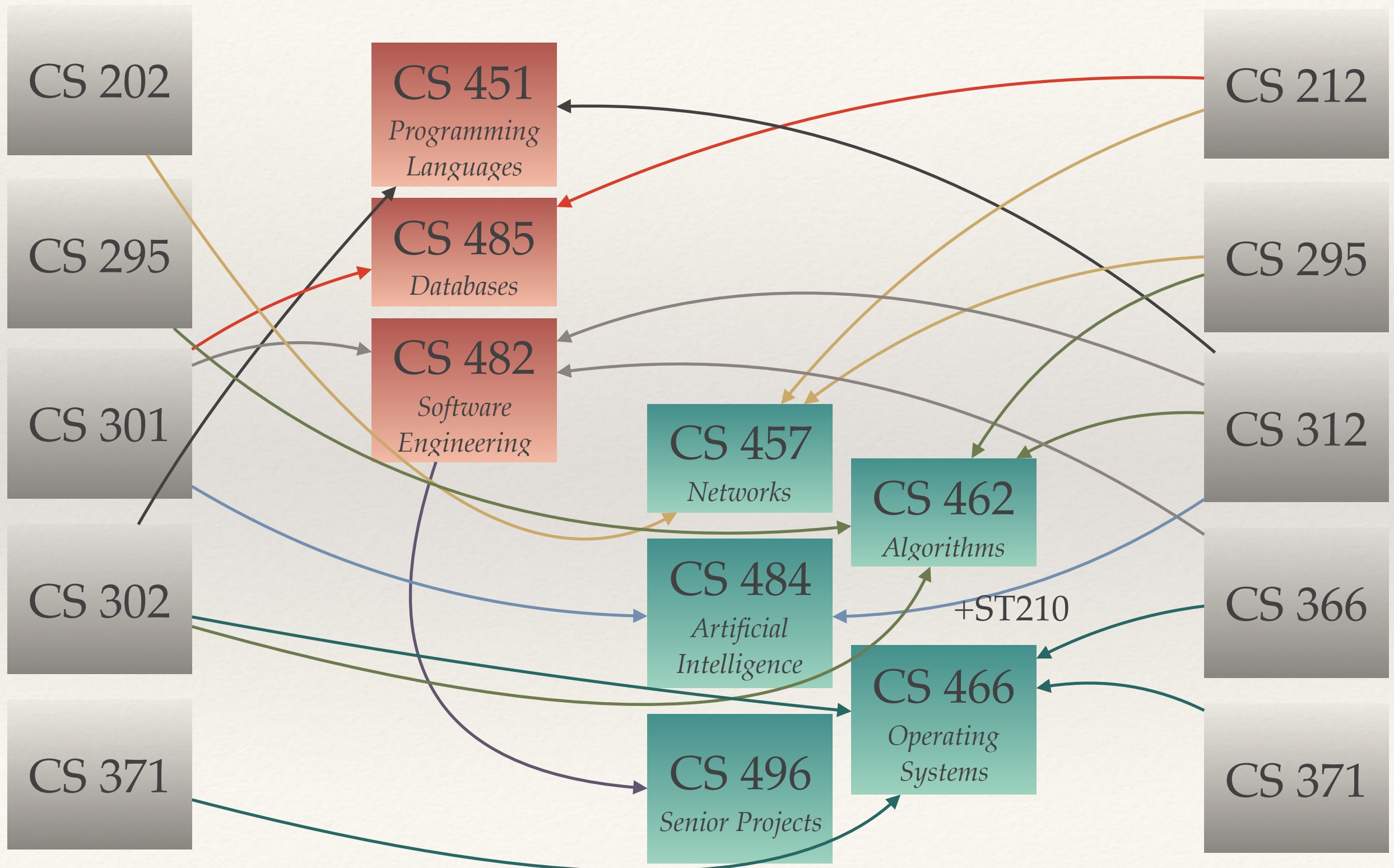CS 212

CS 295

CS 312

CS 366

CS 371

Upper Level Courses 16-17

Upper Level Courses 17-18

CS 455
Graphical User Interfaces

CS 466
Operating Systems

CS 478
Theory of Computation

CS 482
Software Engineering

CS 456
Web Programming

CS 462
Algorithms

CS 451
Programming Languages

CS 486
Graphics

CS 496
Senior Projects

Upper Level Courses 17-18

CS 455
Graphical User Interfaces

CS 466
Operating Systems

CS 478
Theory of Computation

CS 482
Software Engineering

CS 456
Web Programming

CS 462
Algorithms

CS 451
Programming Languages

CS 486
Graphics

CS 496
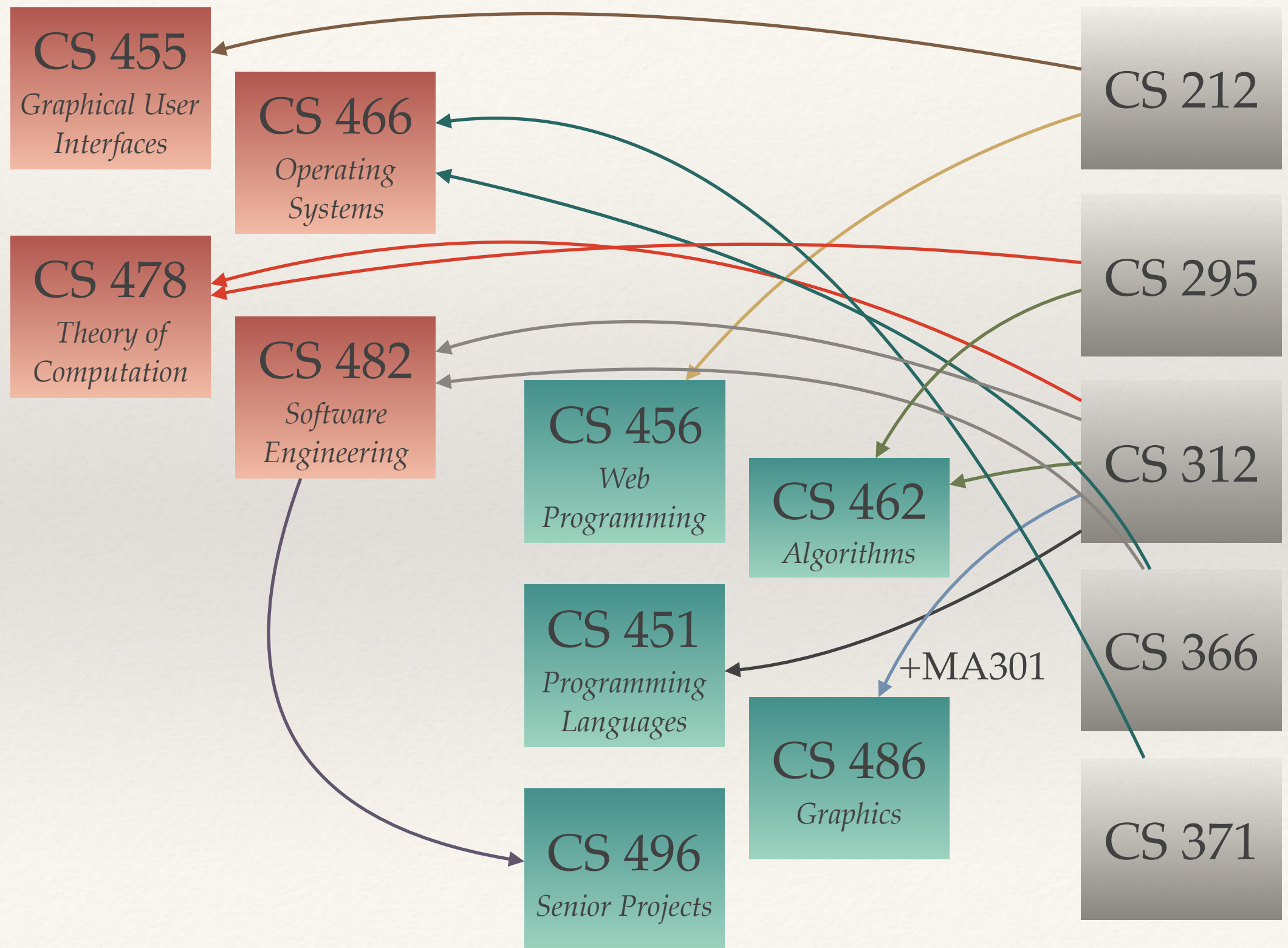*Senior Projects*

CS 212

CS 295

CS 312

CS 366

CS 371

Upper Level Courses 17-18

Upper Level Courses 17-18

Upper Level Courses 17-18

CS 202

CS 295

CS 301

CS 302

CS 371

CS 455
Graphical User Interfaces

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CS 496
Senior Projects
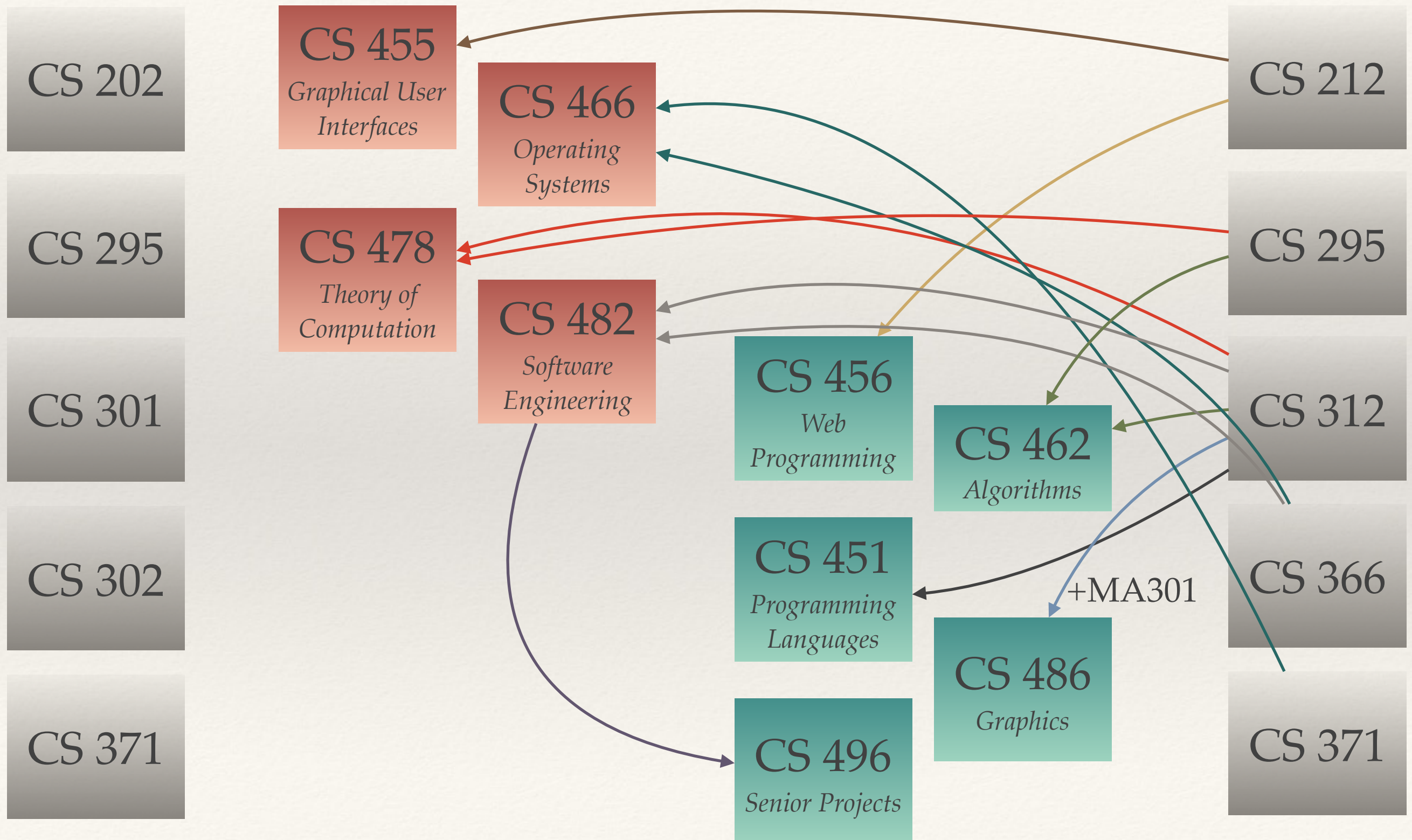
CS 212

CS 295

CS 312

CS 366

CS 371

+MA301

+MA301

Clubs

- ❖ ACM (Association for Computing Machinery)

- ❖ Anime Hounds

- ❖ Greyhound Gamers

- ❖ Robotics Club

- ❖ Society of Women Engineers

- ❖ Tech Startup/Development Club

- ❖ UPE (CS Honors Society - *Invitation Only*)

- ❖ Video Game Design Club

Back to School Night

What: Alumni share experiences their experiences
When: March 21 @ 6 PM
Where: DS121

Pizza, drinks, and snacks