



Course analysis: AF2101, Concrete Structures, Fall 24, 50052

Changes made since the previous course offering

During the semester 2025, the schedule was changed to fit the new structure with 2-hour blocks. Due to this, some minor changes in the lectures were made. A new lecture named “Design Examples” was added to complement a few lectures that were shortened from 3 hours to 2 hours.

Compilation of course evaluation results (required)

Below, the number of students in the course and the participants in the course evaluation for the last five years of the course are given in Table 1.

Table 1. Number of students and number of replies on course evaluation from 2020 to 2024.

Year	Number of students	Replies to the survey
2020	80	27
2021	68	17
2022	88	7
2023	87	21
2024	109	15

Course evaluation has been done using the standard format with 12 questions. The questions are listed below. The average score, ranging from 1 - *strongly disagree* to 7 - *strongly agree*, for each year is presented in Table 2.

1. I worked with interesting issues.
4. The course was challenging in a stimulating way.
7. The intended learning outcomes helped me to understand what I was expected to achieve.
10. I was able to learn from concrete examples that I could relate to.
11. Understanding of key concepts had high priority.
12. The course activities helped me to achieve the intended learning outcomes efficiently.
15. I could practice and receive feedback without being graded.
16. The assessment on the course was fair and honest.
17. My background knowledge was sufficient to follow the course.
19. The course activities enabled me to learn in different ways.
21. I was able to learn by collaborating and discussing with others.
22. I was able to get support if I needed it.

Table 2. Average value of response to statements in course evaluation between 2020 and 2024.

Question	2020	2021	2022	2023	2024
1	5.7	6.0	6.7	6.0	6.1
4	5.6	5.8	6.3	5.7	5.1
7	5.2	5.7	6.6	5.6	5.7
10	5.2	5.6	6.4	5.6	5.1
11	5.4	6.1	6.4	6.2	5.1
12	5.6	5.9	6.0	5.9	4.8
15	5.1	6.1	6.4	5.5	4.9
16	5.0	5.2	6.4	5.6	5.3
17	6.3	5.7	6.9	6.2	6.1
19	4.9	5.8	5.7	5.6	5.3
21	5.5	5.7	6.3	6.0	6.4
22	5.7	5.9	6.7	5.9	5.6

Course coordinator's reflections on what has worked well and what can be developed in the course

The course works well, and the majority of students are satisfied with the content and organisation of the course. Based on free-text answers from the course evaluation, some students are unsatisfied with the number of available exercises, which will be addressed in the coming year.

Summary of changes to be introduced for the next course (required)

In the course offered during fall 25, the following changes have been introduced:

- The course has been divided into four distinct themes: Beams and Slabs, Strut-and-Tie Models, Slabs and Pre-Stressed Concrete.
- For each theme, a package of exercises is available. This includes exercises with complete solutions and with partial solutions to address the fact that students were asking for more solved examples.
- The lecture time for pre-stressed concrete has increased.

Brief comment on the results of the examinations

The distribution of grades for the first examination opportunity is shown in Figure 1. Compared to other years, the number of students receiving the grade F increased this year. Still the average outcome for the course evaluation states that most students experienced the exam to be fair, i.e. an average response of 5.3 out of a maximum of 7.0.

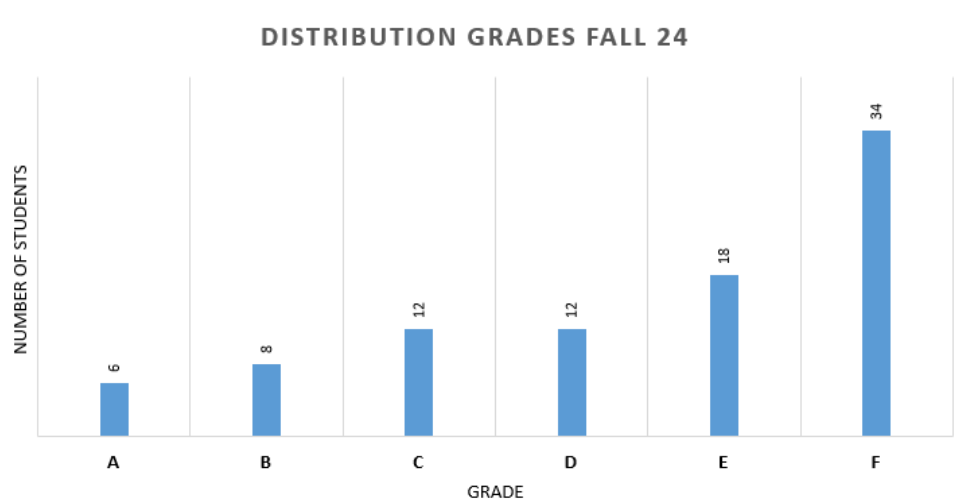


Figure 1. Distribution of grades for Fall 2024.