

## **Due Dates are an Unavoidable Necessity: A Discussion on Strategic Deadline Policies**

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## **Abstract**

Teaching students about deadlines and maturing in their first-year engineering technology course is a constant battle. Finding the line between discipline and nurture in the classroom is a balancing act. The balancing act is most commonly first encountered when creating the deadline policies. In a first-year engineering technology introduction course, the due date policy has been manipulated to help control the workflow for the instructor while accounting for student feedback. A hard due date was chosen due to the necessity of helping students learn time management, while allowing the instructor to stay on track and post solutions. However, soft due date promotional periods have been experimented with along with redemption opportunities before the final withdrawal date. Due dates and times were changed to account for student feedback and the instructor's work-life balance. There are endless due date policies, and this work presents a few ideas and student feedback. This work is a starting point to open a discussion on how deadlines can be strategically planned to help students succeed and mature while trying to limit the additional load of the instructor.

## **Introduction**

Due dates are an unavoidable necessity in a course, as students will have deadlines once they are in industry. Despite the need, there are numerous strategies that can be applied to try to balance flexibility and structure, such as extensions with or without penalty, open deadlines, or bonus points for submitting work on time [1]. Additionally, being flexible will increase student-instructor satisfaction [1]. Enszer [2] applied “lightly-flexible” deadlines in three required undergraduate chemical engineering courses and found that students with lower letter grades took advantage of the flexibility more, and underclassmen requested more extensions than upperclassmen. However, Hills & Peacock [3] found students claim proactive extensions reduce stress, improve the quality of work, and having to ask for extensions creates a barrier.

Another consideration with allowing late work to be submitted is that it gives students more time than others to do assignments [4]. Also, it prolongs when solutions can be posted [2]. Smyser [4] found that students who submitted work on time performed better on homework than those who took extra time. Additionally, they [4] recognized the need to balance mental health benefits with learning, as homework learning value decreased the later it was turned in.

Studies have looked at the effects of flexible due dates, and this work suggests two more options: an initial soft due date and mid-semester make-up opportunities. Additionally, this work decides to focus on the day and time each week that students and instructors prefer, opening a conversation for strategically setting due dates while accounting for student/instructor workflows and patterns. The research questions asked were 1. Which time and dates do students prefer, 2. Do due date times and dates affect submission rate, and 3. Does giving students a mid-way make-up or initial soft due date improve submission rates?

## **Background**

The study was conducted in a first-year engineering technology course within the first seven semesters that the instructor started teaching the course. The fall semester had three to four sections, while the spring semester only had one. The class sizes ranged from 20 to 30 students per section. The spring section consisted of students starting college late and previous students who did not pass. The course consisted of projects, first-year activities, two exams, project deliverables, pre-recorded lecture quizzes, and homework.

The campus had a large percentage of nontraditional students, commuters, and first-generation students, with most engineering technology students working part-time or even full-time while going to school. This study focuses on course data and survey data from each semester, and the university’s IRB exemption protocol approved the study.

## **Methods**

The due date day and time were changed in the first three semesters, and the hard due date policy was modified as needed each semester. Table 1 demonstrates the semester iterations.

**Table 1: Semester Iterations**

| Semester        | Fall 1                   | Spring 2 | Fall 2   | Spring 2 | Fall 3              | Spring 3            | Fall 4                 |
|-----------------|--------------------------|----------|----------|----------|---------------------|---------------------|------------------------|
| Day             | Friday                   | Friday   | Thursday | Thursday | Thursday            | Thursday            | Thursday               |
| Time            | 8:00 AM                  | 11:59 PM | 11:59 PM | 11:59 PM | 11:59 PM            | 11:59 PM            | 11:59 PM               |
| Late Submission | Three-Week Soft Due Date | None     | None     | None     | Midsemester Make-Up | Midsemester Make-Up | Two-Week Soft Due Date |

In the first fall semester, a textbook was being used, and students were having issues obtaining it, so students were allowed to turn work in late until the Friday after the Labor Day holiday, which created a three-week soft due date. After that adjustment period, a hard due date was enforced. Students had to turn all assignments in by Friday at 8:00 am. The date and time were chosen so the instructor could be able to get all grades and solutions posted by the beginning of the next week. All assignments were set to be turned in at the same time, so students were not confused by multiple due dates, although they were encouraged to turn them in earlier.

In the second semester, the due date was changed to Friday at 11:59 pm in response to the first semester student feedback. Unfortunately, it strained the instructor's work-life balance. It was not feasible to get everything graded by Monday and meet personal obligations. So a change to Thursday at 11:59 pm was made for the remaining semesters.

In the fall, soft due dates work naturally with the way the schedule hits holidays and breaks. In the spring, that natural break is not there, so a soft due date has not been used. However, Fall 3 had an abnormal number of students join the class late, and an abnormal number of students asking to turn work in late due to extenuating circumstances, so to accommodate everyone, an option was given to turn in any missed work over fall break, which was roughly the halfway point. In spring 3, a number of classes were canceled due to weather and sickness, which potentially resulted in only half of the class attending, so the mid-semester make-up was offered over spring break to give everyone a fresh start and hopefully increase attendance in the second half of the semester.

For all soft due dates and mid-semester makeups, the students had the opportunity to receive full credit. However, when the hard due date was in effect, any work submitted after the due date was an automatic zero unless extenuating circumstances occurred.

Data from each semester was collected from the course learning management software and from a course improvement survey given at the end of the semester. All analysis was done in Excel by analyzing frequencies and average likeness rating, followed by graphing to compare differences or identify trends. Homework submissions were analyzed to represent the submission rates for

each semester, and passing grades (C or better) were counted to represent academic success. Table 2 lists the survey questions analyzed to gain student perceptions of the due date structures.

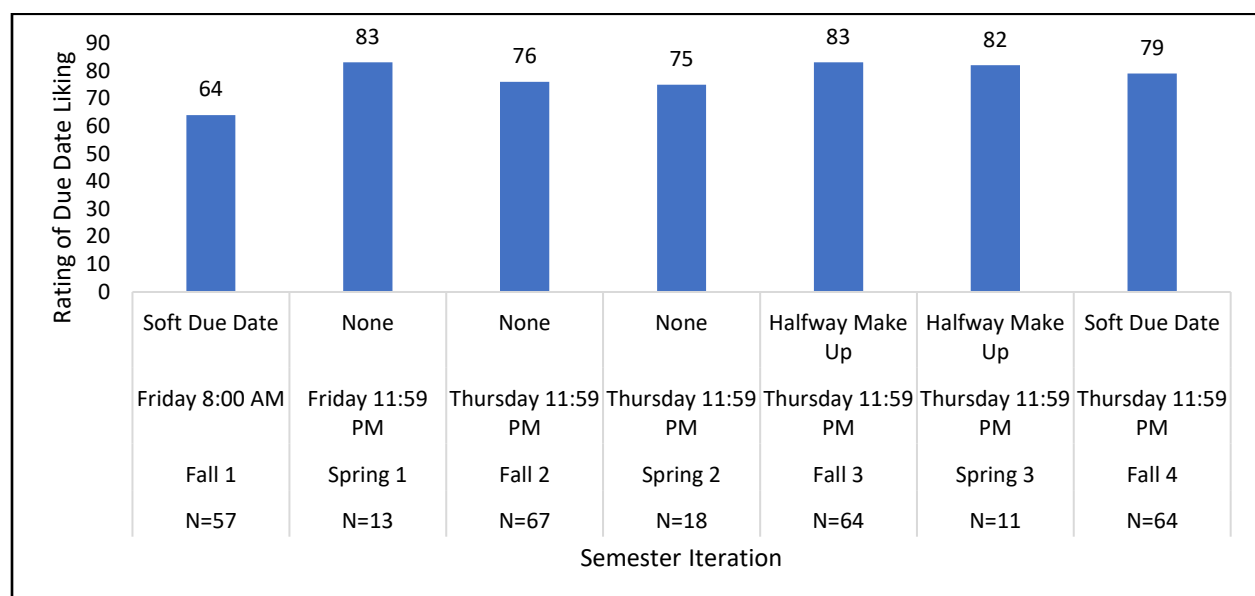
**Table 2: Due Date Survey Questions**

| Question                                                                                                                                                                              | Question Type                                     | Semester                                                                                                                                      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Did the initial soft due date for the first three weeks help you transition to the course before we switched to the hard due date?                                                    | Multiple Choice: Yes, No, I prefer not to answer. | Fall 1                                                                                                                                        |
| On a scale from 1 (hated it) to 100 (loved it). How did you like having everything due every Day at a time? Put 0 for I prefer not to answer.                                         | Slider from 0-100                                 | Every Semester                                                                                                                                |
| How can the due date structure be improved? Or overall, please provide any comments regarding the due date structure. Please type "I prefer not to answer" if you wish not to answer. | Open Ended                                        | Every Semester<br><br>Spring 3, Fall 3, and Fall 4 included a question asking if the soft due date or mid-semester make-up opportunity helped |

The likeness ratings were averaged for each semester, and the frequency of the other two questions was recorded.

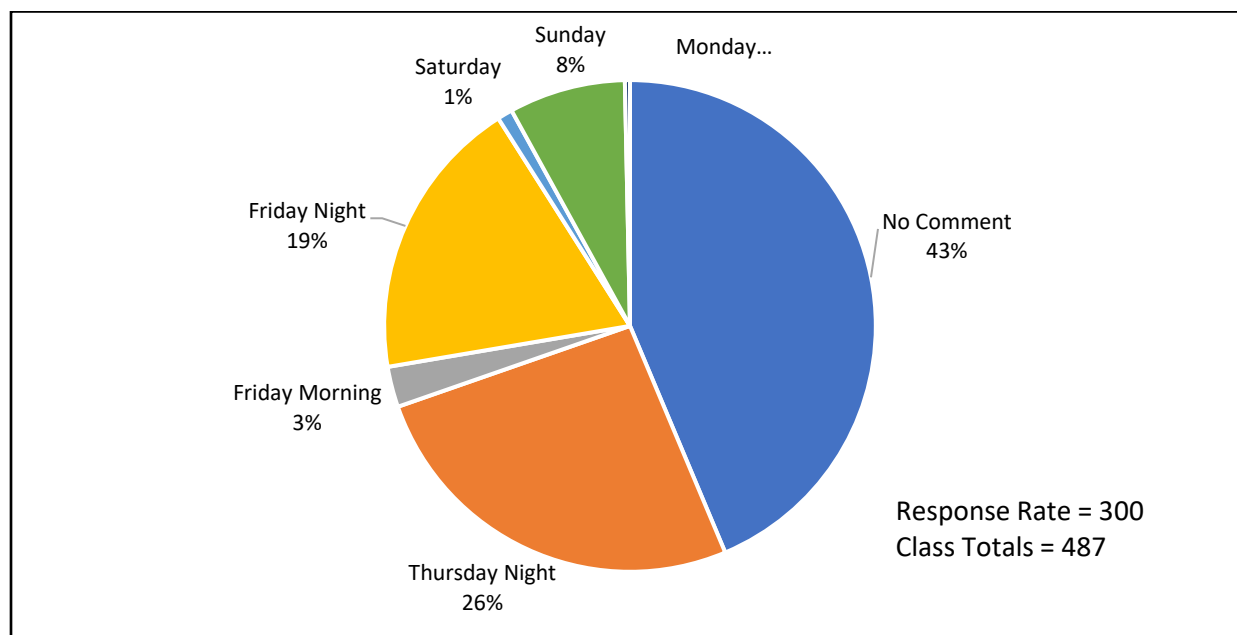
## Results and Discussion

The overall survey response rate from all seven semesters was about 62%. Of those that responded to the survey, the average likeness was favorable for every semester except the Fall 1 when the due date was Friday 8:00 am as shown in Figure 1.



**Figure 1:** Due date likeness rating for each semester.

Students did not like having assignments due at 8:00 am. The majority preferred to have assignments due later in the day, with a large consensus specifically stating 11:59 pm. The preferred days for those who chose to give a response were Thursday, Friday, and Sunday, as can be seen in Figure 2.



**Figure 2:** Distribution of preferred days and times counted from the open-ended survey question.

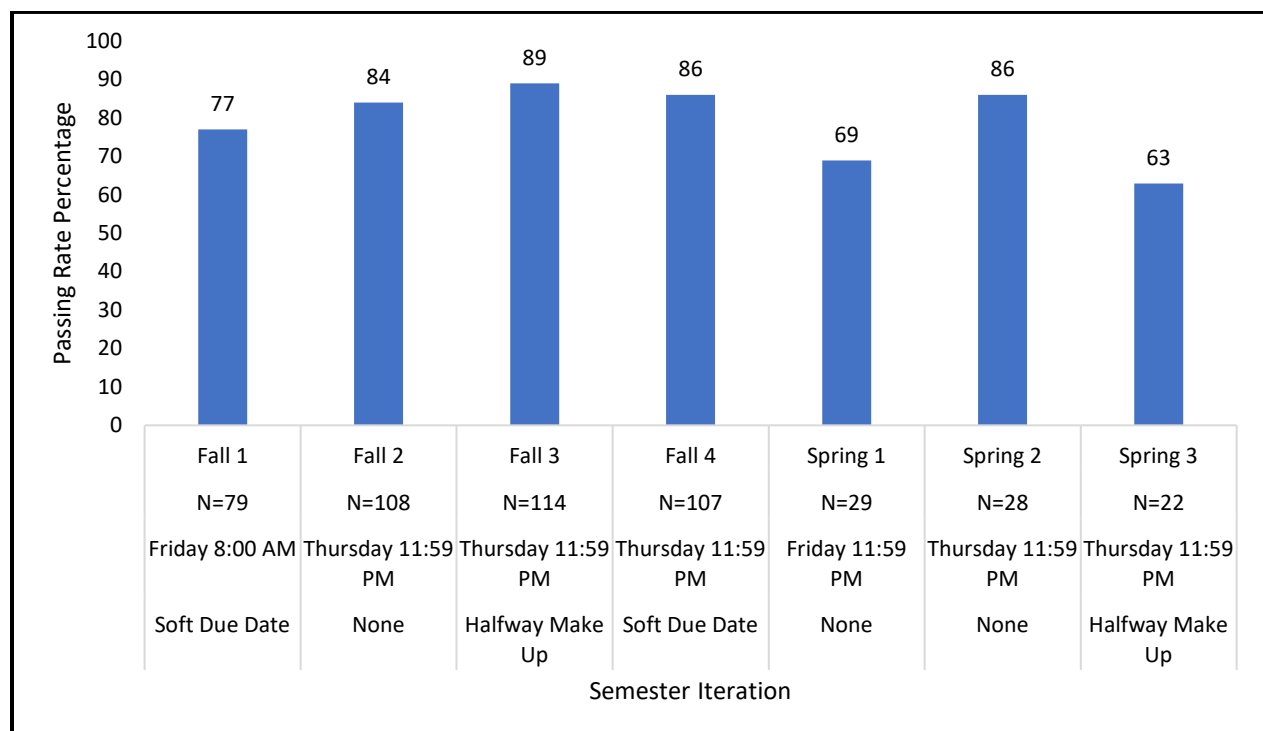
Most students chose not to answer the open-ended question, but of those who did, the majority stated that nothing needed to be changed. Since 75% of the respondents had the Thursday night due date, it was the most preferred. Had more sections had Friday or Sunday night due dates, those would have been preferred. Most students were not passionate about the due dates, but arguments for Thursday were that it was different from other classes and helped them schedule better. It forced them to get work done early and gave them a true weekend. The arguments for Friday night or Sunday night were that it gave them more time, aligned better with other class due dates (these students did not want their class due dates staggered), and worked better with their work/class schedules. Also, some saw the week ending on Friday, while others saw the week ending on Sunday and liked having everything due at their perceived end of the week.

Other comments for improvement varied from having certain assignments due when they were done, more time on big assignments, and the fairness of the due dates. Some in the Tuesday-Thursday class sections wanted their work due Friday since they started a day later than the Monday-Wednesday class sections. Monday-Wednesday students complained that watching pre-recorded quiz videos before Monday's class was unrealistic. Students were encouraged to watch them before they came, but had till the actual due date to do it. It is important to note that all assignments and videos were posted on Thursday night or Friday morning, so students have a week to do each assignment, except in class notebooks, which were designed to be submitted before they leave class. Many of the complaints for Friday morning were that they wanted a whole day to work on homework and would not wake up before 8:00 am. Also, they would

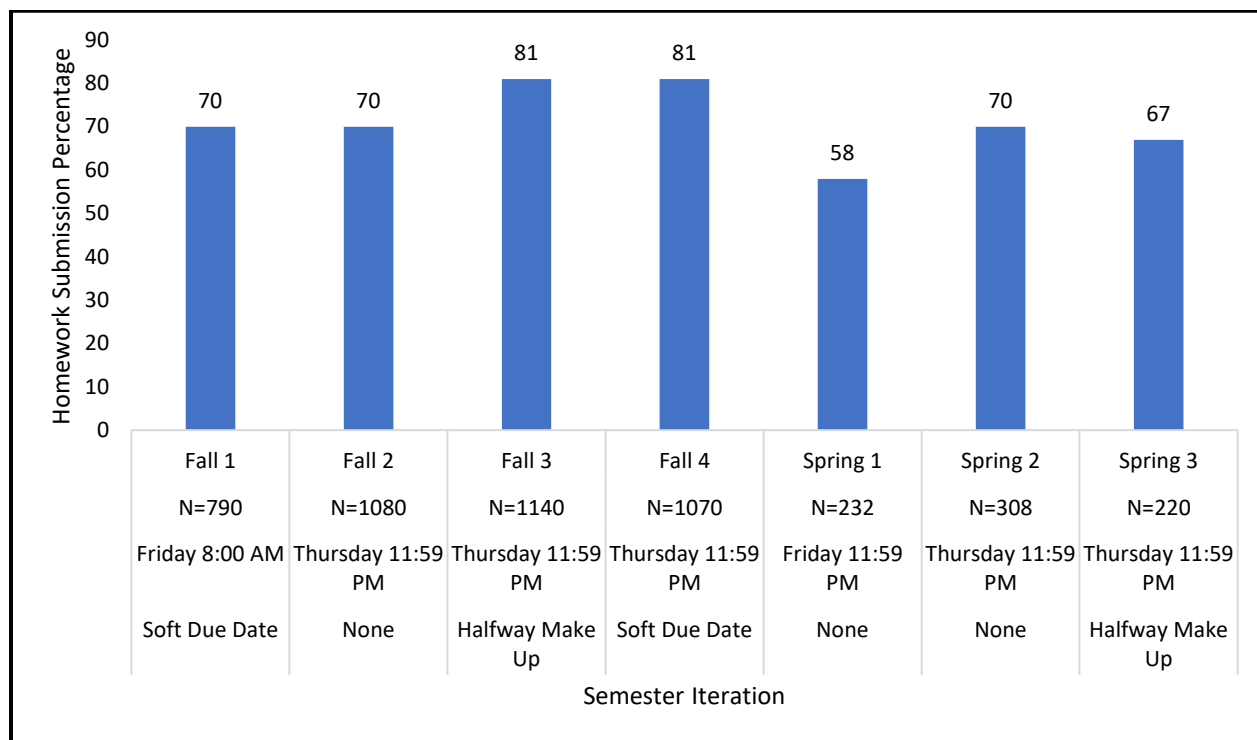
rather Thursday 11:59 pm over Friday 8:00 am because then they would have the night to work, but would not be required to stay up late to get work done. The students who chose Friday morning argued the opposite. Regardless of the argument, situation, or due date, students wanted more time. They did not recognize that they had a week for each assignment, but instead focused on the time they had on the day when it was due. Additionally, even in their first year, they are programmed to have work due at 11:59 pm and prefer it as it is consistent and constant. Any due date that is not Sunday or Friday at 11:59 pm was “awkward” to students, which also explained the low Saturday response rate. It is important to remember that 43% did not want to provide insight, and a majority that did provide insight were fine with whatever the due date was, except Friday 8:00 am.

Students appreciated the soft due date, with 54% stating it in the open-ended section or by responding yes in Fall 1. 13% appreciated the mid-semester make-up by stating so in the open-ended question. A small percentage did not like the opportunities. Overall, the soft due date was favored over the mid-semester make-up even when removing Fall 1. It gave students time to adjust to college and get situated while not falling behind. Students in the other semesters did not ask for these opportunities, but they also were not asked about them. Additionally, only 1 percent of all responses asked for late work to be accepted semester-long. Once again, this was not directly asked.

It was expected that flexible structures or students’ preferred due dates would increase submission rates and therefore increase the passing rate percentage. Unfortunately, there was no trend observed between due date structure and passing rate or homework submission rate, as shown in Figures 3 and 4.



**Figure 3:** Passing rate percentage for each semester.



**Figure 4:** Homework submission rate for each semester.

The fall semester is much larger and performs better than the spring semester. The homework submission rate got better each semester in the fall, but this could be due to the instructor performing better and the course being continually improved. Students like the soft due date, but it cannot be said that it results in better submission rates or increases the chance of passing the course. The mid-semester/halfway make-up opportunity also did not improve submission results or passing grades compared to other semesters, but the opportunities were given in response to lower performing semesters, so the question is, how much did they improve that given semester? 5-10% of students took advantage of the opportunity.

### Instructor Perspective

Students appreciate flexibility and always want more time, especially on big assignments. On projects that lasted multiple weeks, students still complained of needing more time despite the previous semester having one week. The Friday morning due date was preferred for work-life balance. The instructor would not wake up to emails at 12:01 am pleading to accept late work or laying out a case of why the student was unable to complete the assignment on time. There were no weekend emails or emergency office hours over the weekend. Also, grading was feasible without sacrificing personal obligations. However, Thursday night, although less time than Friday, 8:00 am was a compromise that students were okay with. The cost was waking up to frantic emails sent late at night or students wanting to meet on Thursday night. Usually, the same few students as well. Having all assignments due on the same day increased the grading workload at once, but students prefer it, and it provides consistency and structure.

The soft due dates delayed getting students into a rhythm, and hard due dates, except for extenuating circumstances, created weekly pleas for accepting late work. Allowing late work created more work and issues when homework solutions were supposed to be reviewed in the first class of each week. This created an internal balance between caring for students and trying to do what is best for them, as accepting late work would create situations of student getting too far behind. Allowing students to make up work halfway helped, but the students who usually need it the most were not the ones taking advantage of the opportunity. The constant battle can lead to apathy for an instructor if they choose to focus on the negative.

## **Conclusions**

In conclusion, students preferred flexibility and liked having everything due at the end of what they perceived to be their week. Students wanted work due at 11:59 pm and the opportunity to make up work.

However, students will always want more time and will still wait till last minute. Flexibility is helpful, but they also appreciated consistency and structure. They saw the week as starting on Monday and ending either Thursday (many do not have a Friday class), Friday, or Sunday. The idea of starting next week's material on the Friday before was considered "crazy" even.

Submission rates and passing percentages were not directly linked to different due date structures. However, the data is limited as incremental increases in grade percentages were not studied. The extra opportunities may help a small percentage in each given semester and could plausibly increase grades from a C to a B, for example, as that was not directly investigated. This could be looked at in future studies. Additionally, demographic data was not readily available, and future work could look deeper into trends for different demographic groups, like nontraditional students.

As an instructor, increased flexibility created more work and negotiations. However, due dates are an effective tool that allows for increased control of when students work on course material. Designing a course and due dates with the student and instructors work flow in mind helped with work-life balance. This helped the instructor's morale.

Finally, this work was limited to the minority who gave their perceptions, and the study was more responsive to situations instead of being randomly designed, further limiting the results. The majority of students did not type out how they felt about due dates, and the majority that did were fine with the given structures as long as the time was 11:59 pm. The contribution for this work is that of encouragement, as it was important to remember to focus on the positive, appease when able, but recognize that not everyone could be pleased when creating due dates and times. A carefully designed study is needed to fully understand if a relationship exists between course structures, such as due dates day and times, and student success.

## References

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- [3] M. Hills and K. Peacock, "Replacing Power with Flexible Structure: Implementing Flexible Deadlines to Improve Student Learning Experiences," *Teaching and Learning Inquiry*, no. 10, 2022.
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