

"Unsupported this"

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1. Competency
2. RCC - Freshman seminar
3. Major of interest
4. Elective

Good schedule"  
(institutional perspective)  
~16 hours, good distribution  
of classes

## 1 INTRODUCTION

One of the most important events for freshmen students is the selection of their initial class schedule. The classes a student will take can shape the rest of their college career. This is where the expectation for what the student will gain from these classes forms. At some colleges this initial class schedule is determined by faculty members. Thus it becomes incredibly important for the faculty to create the best possible schedules for freshmen students.

Studies have shown that high quality academic advising has a large impact on academic performance [1]. The performance of the student can be measured in terms of GPA, future employment opportunities, and satisfaction with the institution. A strong faculty created course schedule can improve academic advising quality by providing strong base classes for the student to build upon.

In addition to academic performance, there have been studies on the effects college orientation has on student persistence in college [2]. A large part of the college orientation process is the initial student registration process. This further increases the importance of creating and maintaining an excellent registration experience for the student. At institutions where the initial class schedule is created by faculty members, creating a strong initial schedule will help improve the registration process for freshmen students. Thus when faculty members create good initial schedules it increases the probability that students will persist in school until graduation.

Strong faculty created academic schedules will also make sure that a student will begin taking classes that will give necessary prerequisites and competencies they need to graduate on time. This will guarantee that every freshmen student is in a class that will give them these required competencies. In addition it makes sure that students have the opportunity to take classes in a major that they have expressed an interest in. This will make sure that the student begins their college career with the best possible course schedule.

In order to make sure that students are receiving the best possible course schedule during their freshmen year there must be some way of determining what makes a course schedule good. To do this freshmen registration data is analyzed. This data is then examined using a custom program to find trends and commonalities in the registration data. This can help us determine what classes are popular among freshmen students and commonalities among the schedules of different students. Using this data can help determine what makes a faculty created schedule strong.

The registration data from 2018-2021 is analyzed and to find trends, the faculty chosen schedule is compared to the students final schedule after the add/drop period. This can help give an idea on how the students choice of classes compare to the faculty choices. Then several statistics can be calculated based on this data which tell how successful the chosen schedule was. Some of these statistics include percentage of students who removed at least one class chosen by the faculty members, average percentage of classes that remained on the students schedule that were in the initial schedule, and the percentage of classes in the final schedule that were within the faculty chosen classes.

In addition to the statistics the data is shown visually using histograms and bar charts. These visual aids allow one to easily analyze the results from the registration data. It becomes trivial to spot popular trends such as credit hours per student or most dropped subject for a student. Some of these charts show items such as total credit hours taken by the faculty schedule and the students schedule, the amount of classes that the student removed from the faculty chosen schedule, the amount of students that dropped classes in each subject, and finally the classes that counted as a competency chosen in the faculty schedule and changed by the student during the add/drop period.

The importance of faculty members creating the best initial schedules for freshmen students is very important. It will help improve the overall registration experience which can help create a better orientation for the freshmen students. This will help improve both student retention thus increasing the number of graduating students and academic performance which will increase the benefits the students receive from their college education.

What does faculty know about students (fresh) don't?

Maybe build list of priorities for reg. (regardless of fac. student)

Highlight can't answer "why"

redundant

This further...

Rework

Student changes

ask

Subjects most commonly dropped by students

1. Good fac. schedule
2. But! Students can change
3. Data set 2017-21
4. Analyze it before/after
5. Histograms, categories