14 Metrics for Adaptive Course Planning

At most institutions, the course schedule is seemingly never quite fine-tuned enough to support student demand: seats go empty, courses overflow, staff are left scrambling to get instructional resources in place, and students struggle to get into the courses they need to complete their degrees on time. But it doesn't have to be this way. **Institutions that leverage data to inform course planning decisions and monitor registration in real time can proactively plan in a way that supports student progress, maximizes instructional resources, and adapts quickly as needs change.**

Explore this infographic to learn 14 metrics institutions can use to achieve adaptive course planning and understand how unreliable—or unavailable—data in the course planning process impacts staff, faculty, and students. Plus, learn how each set of metrics can improve your course planning process.

Planning Phase

Baseline Review

1. Total number of sections offered per course for the past term

Why does it matter?

Know how many sections were offered in the past term to make informed decisions about adding or canceling sections to accommodate student demand.

Enrollment
(Course- and section-level)

2. Fill rate for the past term
3. Enrollment capacity for the past term

Why does it matter?

Understand how full courses and sections were in relation to the number of seats that were available. If a course or section was over-filled, consider increasing the enrollment capacity before adding an additional section.

Student Progress
(Course- and section-level)

4. Attempted student credit hours by majors and non-majors for the past term
5. Completion rate for the past term
6. Repeats rate for the past term
7. DFW rate for the past term

Why does it matter?

Identify in which courses and sections students struggled to earn credit. Surface opportunities to improve student progress, such as by standardizing materials across all sections of the course.

Student Preferences

8. Courses
9. Course and section times

Why does it matter?

Take student preferences and needs into account to promote timely degree completion and greater student satisfaction. For example, adjusting an early morning course or section time to occur in the afternoon may better align with student preferences.

The Pitfalls of Bad Data

Impact on Staff

Academic leaders typically don't have easy access to the metrics listed to the left, so the Registrar is inundated with individual requests, and it becomes easiest to roll over the previous term's schedule without proper evaluation. This leads to high numbers of both low-fill and high-fill sections, and ultimately, ineffective utilization of space and instructional capacity.

Impact on Students

Poorly planned course offerings can inhibit students' paths to timely degree completion. For example, high-fill sections act as access bottlenecks when student demand for the course exceeds capacity and students are unable to register for the course.

Registration & Adjustment Phases

Academic Unit

10. Total number of sections offered per course
11. Number of unique students registered per course
12. Total section enrollment capacity per course

Why does it matter?

If your academic unit has the resources to monitor these metrics daily during course registration, you can consider the number of sections per course to be flexible. Compare how many unique students your academic unit or course(s) will serve to the total enrollment capacity and adjust the number of sections as necessary. It is typically less resource-intensive to change the enrollment capacity than to add a section to accommodate high student demand.

Course and Section Level

13. Course and section fill rate
14. Course and section fill rate

Why does it matter?

Compare how many seats will be filled to the number of available seats. Make adjustments to accommodate student demand, such as by adding a section or increasing the enrollment capacity for an over-filled course. For under-filled courses, consider removing or canceling a section and reallocating those resources to a high-demand course.

The Pitfalls of Bad Data

Impact on Staff

By the time academic leaders receive course enrollment and registration data, it is typically out-of-date. This results in reactive, rather than proactive, decision-making.

Impact on Students

If courses or sections are added too close to the end of the registration window due to reactive planning, students may miss the chance to enroll in required courses for timely degree completion.