



Rightsize Course and Section Offerings

AREA

- **Strategy 1:** Cancel Non-Critical Low-Enrollment sections
- **Strategy 2:** Cancel or Reduce Frequency of Section Offerings
- **Strategy 3:** Consolidate Unnecessary Sections

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Rightsize Course and Section Offerings

Enhancing Course Efficiencies According to Enrollment Scenarios

An overabundance of small and under-filled sections that are not critical to students' degree paths consumes an inordinate amount of instructional resources. These resources could potentially be reallocated to higher demand or priority areas to better serve students and instructional staff. The strategies outlined in this portion of the playbook walk you through APS analyses to uncover course section inefficiencies to plan for fall 2021 and beyond.

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Download the Course Planning Excel Workbook to input your institution's data according to the steps outlined in each strategy.

Pework

Do Your Max Caps Paint an Accurate Picture of Course Capacity?

When analyzing data on past course and section offerings, conducting fill rate analyses¹ helps surface mismatches between instructional resource use and student demand. Fill rate analyses depend on two elements: an accurate count of the number of students enrolled in a course or section and the maximum possible enrollment capacity (max cap). At many institutions, though, max caps are unreliable indicators of true capacity.

Typical Root Causes of Inaccurate Max Caps

Lack of, or poorly enforced, policy to set caps



Example: Caps set to size of desired room

Use of max caps as an instructor's enrollment management tool



Example: Caps changed to zero to close courses and stop enrollment

Consider Your Max Cap Guidelines for Fall 2021

Before digging into your institution's course and section data, consider the state of your institution's max caps. Do you have a policy in place to ensure caps are set consistently and fill rate analyses are accurate?

☐ Yes



Do minimum and maximum enrollment guidelines require adjustment to sufficiently support social distancing? [Read our Expert Insight about space planning and reconfiguration \(#2 in the featured checklist\).](#)

☐ No



Read our [Maximum Capacity Toolkit](#) to learn how to create an effective policy.

1) Fill Rate: The percentage of seats that are filled in a course or section at the last posted enrollment date. Course Enrollment divided by Max Cap.

Strategy 1: Cancel Non-Critical Low-Enrollment Sections

Single section and low-enrolled courses require instructional resources that could potentially be more efficiently used elsewhere. Full-time instructors can be reassigned to high-demand and necessary courses to support student progress priorities.

- Using the **Course Type** and **Course Division** filters on the Courses tab in the APS Analytics dashboard, structure your analysis by using the following (or similar) groupings:

Low enrollment is expected:

- ✓ Graduate courses (particularly seminars)
- ✓ Individual instruction courses (including theses, research experiences, etc.) where enrollment is expected to be one or two students

Low enrollment is unexpected:

- ✗ Undergraduate or lower-level lecture courses where low enrollment is likely not pedagogically justified. Alternatively, look at sections with high total capacities.

- Review each small section offered in Fall 2020. Categorize each section based on its contribution to institutional mission and student path to degree. Cancel non-critical sections for Fall 2021.

Key report: # of Classes with Size <10

Location: APS Analytics dashboard, Courses tab

Goal: Identify the number of sections with low enrollment in 2019-20 AY that can be canceled

Class Capacity Utilization				Median Class Size	Median Class Capacity	Median Class Fill Rate	% of Classes with Size <10
				21	30	90%	23.2%
Academic Year	Term	Department Name	Course Code	Course Name	Course Ref No	Total Enrollment	Total Capacity
2018-19	Fall	French	FREN616	Masked FIN616	14130	9	102
		Computer Science	CS471	Masked CS471	21164	7	60
		Economics	ECON625	Masked ECON6	10734	7	55
		Leadership	LE360	Masked EET360	16889	3	50
		Education	LE415	Masked EET415	16893	3	50
			LE365W	Masked EET365	16891	4	50
			LE350	Masked EET350	16888	5	50
		Computer Science	CS776	Masked CS776	18225	9	50
		French	FREN454	Masked FIN454	12599	8	45
			FREN450	Masked FIN450	11576	9	45

Questions for Consideration

Very small sections can be offered for a variety of compelling reasons. As always, a conversation with the department chair or instructor is warranted before assuming a section can be canceled. Ask:

1. Is this section critical to students' degree paths?
2. Will offering this section allow a student to graduate on time?
3. Is this section scheduled to serve a key demographic population, such as students with full-time jobs?
4. Do we have reason to expect demand for this section to increase this year (e.g., because a new program is getting off the ground)?

Strategy 2: Cancel or Reduce Frequency of Section Offerings

Single sections that are offered in multiple terms per year may not need to be offered as often or at all. However, keep in mind that several courses at your institution serve majors, first-, and second-year students who must complete courses as requirements or pre-requisites. Consider each course's impact on students' degree paths before deciding to reduce the number of offerings. Despite low demand, it may be necessary to offer the course often to adequately support degree progress. If any adjustment is possible, use degree audit information to determine during which term(s) the adjustment to section offerings can be made.

- 1 Review each course that is offered as a single section in multiple terms per year.¹ Assess if the course could be offered less frequently (e.g., in fewer terms or in alternating years).

Key report: Single Section Fill Rates

Location: APS Analytics dashboard, Courses tab

Goal: Identify the number of single-section courses that can be offered less frequently

Sort the '# of Times Course Offered Per Academic Year' column by descending order.

Single Section Fill Rates					
This report includes courses with one or fewer sections offered per term.					
Course Code	Course Name	Total Capacity	Total Enrollment	Fill Rate [%]	# of Times Course
HIST127H	Masked HIST127H	42	21	50.0%	2
KIN120G	Masked HLTH120G	50	48	96.0%	2
MUS107	Masked MUSC107	30	22	73.3%	2
MUS113	Masked MUSC113	35	35	100.0%	2
MUS222	Masked MUSC222	30	12	40.0%	2
THEA173+	Masked THEA173+	40	23	57.5%	2
ART241	Masked ARTS241	18	9	50.0%	1
ART253	Masked ARTS253	12	12	100.0%	1

History 127H could meet student demand with one section, instead of two sections.

 **Guidance:** Analyze enrollments and enrollment caps. Determine if demand could still be met by offering the course in fewer terms (e.g., if the enrollment in multiple terms is less than one term's enrollment cap).

For courses offered only once per year, deciding not to offer the course every year is a more aggressive option. Carefully consider the impact on student progress.

Questions for Consideration

1. Given the possibility of lower enrollment this year, how can you adjust course offerings while supporting student progress? (Note: Partners with Navigate's Academic Planning module can look up how many students have a course selected in their academic plan.)
2. Would slightly adjusting the enrollment cap allow you to meet student demand with fewer sections?
3. Is there an alternative course students can take that will still preserve their academic progress?
4. If you were to stop offering this course in one term, which term is going to affect the fewest students? Consider when other courses commonly taken by students in a given program are taken.
5. Is this the only course taught by a particular instructor?

¹ Multi-section courses are reviewed in Strategy 3.

Strategy 3: Consolidate Unnecessary Sections

One of the largest opportunities to reduce costs is minimizing unnecessary section offerings in multi-section courses. Using historical enrollment data and projections for upcoming terms, consolidate section offerings to match expected demand.

- 1 Calculate enrollment estimates. Start with a set of assumptions about enrollment changes for the next term. Consult with Enrollment Management or Registrar to obtain these estimates. There are two methods to consider:

1. Enrollment projections by student classification (i.e. Incoming class, First-Year, Second-Year)

This will be the simplest method for anticipating needs for most multi-section courses by adjusting enrollments based on the overall change in each year's students by classification.

2. Enrollment projections by student program (i.e. B.S. Nursing)

This method will add more nuance to the analysis for declines in enrollments for specific student programs (e.g., you're expecting 20% incoming Nursing students and want to identify the core requirement courses likely to be impacted like Biology and Chemistry).

This guide focuses on method 1, given it is the most generally applicable. If you're interested in method 2, contact your APS dedicated consultant for a guided demonstration of the analysis.

Example

Woodley University is anticipating a 10% decline in incoming Freshmen, a 5% decline in Sophomores, and no change in its Juniors and Seniors.

Expected Change in Enrollment by Student Classification at Woodley University

Freshmen	Sophomore	Junior	Senior
-10%	-5%	0% (No change)	0% (No Change)

- 2 Using the **Academic Year**, **Term**, **Course Code**, and **Student Classification** filters on the Students tab on the APS Analytics dashboard, select the attributes you wish to investigate.

Time Period
ACADEMIC YEAR
2018-19
TERM
Fall

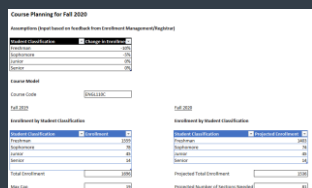
University Attributes*
CAMPUS NAME
All
COLLEGE NAME
All
DEPARTMENT NAME
All

Course Attributes
COURSE DIVISION
All
COURSE TYPE
All
COURSE PREFIX
All
COURSE CODE
ENGL110C

Student Attributes
STUDENT LEVEL
All
STUDENT CLASSIFICATION
Freshman

Select a single student classification at a time.

Downloadable Resource



Use the **Course Planning Excel Workbook** template to follow along with this guide and organize your analysis in a pre-formatted Excel workbook.

- 3 Calculate the number of students enrolled in each course by classification in the previous year's like term (i.e. compare fall to the previous fall term).

Key report: Earned Credits and Final Grades by Course Code

Location: APS Analytics dashboard, Students tab

Goal: Identify the number of students by classification enrolled in each section of the previous like term.

While the Earned Credits and Final Grades by Course Code report is primarily used to examine course completion and final grades, it can be used here to see the total number of students enrolled by each student classification.

Earned Credits and Final Grades by Course Code						
Filter on Course Code for the following report. The Final Grade filter only applies to the last column of the report. Click on metrics in this table to view trends and drill on Course Code to view the grade distribution by section.						FINAL GRADE All
Course Code	Course Name	# of Section	# of Students	% of Students Earning Credit	Range by Section [%]	% of Students Receiving Selected Grade(s)
ENGL110C	Masked ENGL110C	97	1,559	91.6%	83.3%	100.0%
Rollup		97	1,559	-	-	100.0%

At Woodley University, the number of Freshmen students enrolled in ENGL110C is 1,559.

- 4 Repeat this process for each student classification by changing the filters at the top of the page. Set the **Student Classification filter** first, then re-select the **Course Code filter** each time, and click Apply.

Example

Enrollment by Student Classification for Previous Fall in ENGL110C

Freshman	Sophomore	Junior	Senior
1,559	78	45	14

- 5 Apply the projected changes in enrollment to estimate the new enrollment in the course.

Example

Enrollment by Student Classification for Previous Fall in ENGL110C

Student Classification	Fall 2019 Enrollment	Expected Change in Enrollment	Projected Fall 2020 Enrollment
Freshman	1,559	-10%	1,403
Sophomore	78	-5%	74
Junior	45	0% (No Change)	45
Senior	14	0% (No Change)	14
TOTAL	1,696		1,536

Based on these assumptions, Woodley University can plan sections for 1,536 students in total in ENGL110C for the upcoming fall term.

- 6 Calculate the number of sections needed for the upcoming term. Start by setting the maximum enrollment capacity (max cap) for each section of the course.

Your filters should carry over from the previous analysis, but confirm that you have the correct **Academic Year**, **Term**, and **Course Code** set.

The median Max Cap is located at the top right of the page, just below the filters.

Key report: Median Class Capacity

Location: APS Analytics dashboard, Courses tab

Goal: View the maximum capacity for the previous like term.

Time Period	University Attributes*	Course Attributes	
ACADEMIC YEAR 2018-19	CAMPUS NAME All	COURSE DIVISION All	
TERM Fall	COLLEGE NAME All	COURSE TYPE All	
	DEPARTMENT NAME All	COURSE PREFIX All	
		COURSE CODE ENGL110C	Apply

*Filter selections in University Attributes determine available options for all other filters (except Time Period)

Class Capacity Utilization	Median Class Size	Median Class Capacity	Median Class Fill Rate	% of Classes with Size <10
	19	19	100%	1.1%

- 7 To calculate the number of necessary sections for the course, take the total projected course enrollment and divide by the Max Cap. We recommended adding 5-10% cushion to allow enough sections to accommodate schedules. Round up to the nearest whole number.

Number of Sections Needed for ENGL110C in Fall 2020

$$\frac{\text{Projected Enrollment} + 5\text{-}10\% \text{ Cushion}}{\text{Section Max Cap}} = \frac{1,536 + 1.05 \times 1536}{19} = 85 \text{ Sections}$$

Woodley University will only need 85 sections of ENGL110C in Fall 2020 based on their enrollment projections with an added 5% cushion for flexibility. Since they offered 93 sections in Fall 2019, they can consolidate 8 sections.

Questions for Consideration

1. Can you keep the same maximum enrollment capacity as previous terms?
2. If you are moving to a hybrid model, how will you regulate student attendance? For example, will all students come to campus at once or be split into groups and be asked to attend in-person with their respective group?
3. Can you set different caps based on different course modalities (i.e. in person vs. online) for the same course?
4. Can you set up shadow sections to quickly open as enrollment thresholds are met?