



Academic Recovery Diagnostic Toolkit

**A Practitioner's Guide to Identifying, Analyzing,
and Prioritizing High-DFW Courses**

This toolkit is for

- Institutional research teams
- Student success offices
- Academic affairs analysts
- Enrollment management professionals
- Anyone tasked with pulling and analyzing DFW data

This toolkit provides

- A tiered approach to data collection based on your capacity
- Copy-paste data request templates
- Step-by-step checklists for analysis and interpretation
- A framework for prioritizing interventions
- A real campus dashboard example

Start Here: What Is a “High DFW” Course?

There is no single, definitive definition for “high DFW.” While some universities choose an arbitrary threshold early in their investigation (e.g., 20% of students earn a D, F, or W), context matters. The goal is not to find the “right” definition—it’s to identify courses where intervention will have the greatest impact on student success.

Key Considerations for Identifying Target Courses

- High DFW rates in high-enrollment courses affect a larger proportion of your student body
- Courses with many repeat attempts signal systemic barriers to student success
- Gateway courses (introductory gen ed or entry-to-major) create outsized effects on retention and time to graduation
- Not all high-DFW courses are equal in their impact—some are far more likely to precipitate stop-out

Why This Matters

High-DFW courses—sometimes called “barrier courses”—prevent students from progressing toward graduation. In the worst cases, they push students out of higher education entirely.

These courses disproportionately impact underrepresented and under-resourced students.

A small number of high-enrollment gateway courses often account for a disproportionate share of student attrition.



The Four-Tier Approach

Institutions vary widely in their data capacity and experience with DFW analysis. This tiered approach allows you to start where you are and deepen over time. Each tier builds on the previous one.

TIER 1: BASELINE DFW INQUIRY

Start here if you've never systematically analyzed DFW patterns

- Identify 10-20 high-enrollment and/or gateway courses
- Examine enrollment and grades (D, F, W) across 3+ years
- Calculate average DFW rate by course, term over term
- Aggregate across sections to see course-level patterns

TIER 2: STUDENT SUCCESS FOCUS

Add disaggregation and retention analysis

- Disaggregate by student population (Pell, first-gen, race/ethnicity, gender)
- Track repeat rates: % of students repeating within 3 terms
- Measure retention: % enrolled in subsequent term/year after DFW
- Track major changes and time to graduation impacts
- Focus on first-year student DFW rates

TIER 3: ACADEMIC RECOVERY FOCUS

Deep dive into repeat-taker pathways

- Student-level repeat histories (attempts, term sequence, final outcome)
- Time between attempts and continuous enrollment status
- Success rates by number of attempts (1st, 2nd, 3rd+)
- Existing repeat policies and whether they're being enforced
- Characteristics of repeaters (aggregated to protect privacy)

TIER 4: DISSEMINATION & INTERVENTION

Build infrastructure for ongoing monitoring and action

- Create shared dashboards for faculty and staff
- Establish benchmarks for early intervention (midterm grades, warnings)
- Track DFW rates semester-over-semester to evaluate interventions
- Capture qualitative data from students and support staff
- Engage teaching and learning centers for evidence-based redesign

Copy-Paste Data Request Templates

Use these templates to request data from your Institutional Research office. Adapt as needed for your context.



Baseline DFW Data Request

We are beginning a review of DFW patterns in high-enrollment gateway courses. Please provide the following:

- 1 A list of our 15-20 highest-enrollment courses that serve as general education requirements or entry points to popular majors.
- 2 For each course, across the past 3 academic years (or 8 terms):
 - Total enrollment by term (aggregated across sections)
 - Number and percentage of D grades
 - Number and percentage of F grades
 - Number and percentage of W (withdrawal) grades
 - Combined DFW rate by term
- 3 A simple ranking of courses by average DFW rate across the time period.

We are looking for course-level patterns, not section-level or instructor-level data at this stage.



Academic Recovery Data Request

We are conducting a focused review of course repeat patterns and student outcomes following D, F, or W grades in high-DFW gateway courses.

Please provide the following for the past 3-5 academic terms:

- 1 A list of courses with the highest DFW rates, including enrollment counts and DFW percentages by term.
- 2 For each of those courses, the number of students who have:
 - a. Repeated the course once
 - b. Repeated the course two times
 - c. Repeated the course three or more times
- 3 Student-level repeat histories for these courses, including:
 - a. Number of attempts
 - b. Term sequence of attempts
 - c. Final outcome (pass, continued enrollment, stop-out, withdrawal from institution)
- 4 The time between course attempts and whether students remained continuously enrolled.
- 5 Any existing limits or policies on course repeats and whether those limits are being enforced.
- 6 Where available, basic student characteristics for repeaters (Pell status, first-generation status, race/ethnicity), aggregated to protect privacy.

The goal is to identify patterns of repeated failure and understand where institutional policies and course design may be contributing to stalled student progress.

Making Sense of Your Data: Analysis Checklist

Once you receive your data, work through this checklist to move from raw numbers to actionable insights.

Step 1: Initial Ranking

- Rank courses from highest to lowest average DFW rate
 - Note total enrollment for each course
 - Flag courses that serve as gateways (gen ed requirements, entry to major)
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Step 2: Impact Assessment

- Calculate total students affected (enrollment × DFW rate)
 - Identify courses where DFW prevents progression to next requirement
 - Compare DFW rates across student populations (if data available)
 - Flag courses with student success gaps for underserved populations
 - Note courses with high repeat rates
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Step 3: Pattern Recognition

- Look for courses where students repeat 3+ times
 - Identify at what attempt number students typically stop re-enrolling
 - Check if DFW rates vary by term (fall vs. spring vs. summer)
 - Note any courses where repeaters do worse than first-time takers
 - Look for courses that function as “exit points” from the institution
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Step 4: Contextualization

- Convene a small group of informed colleagues to review findings
 - Ask: What factors might explain these patterns?
 - Consider: time/day offered, modality, available support, registration timing
 - Identify additional data that might help explain outliers
 - Document surprises and questions for follow-up
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Step 5: Reprioritization

- Re-rank courses based on scale of impact, not just DFW rate
 - Weight by institutional priorities (institutional student success goals, strategic plan)
 - Identify 3-5 courses for initial focus
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Prioritizing Interventions: Decision Framework

No data snapshot will ever be complete. You will have to choose a starting point based on what you have. Use this framework to prioritize where to focus first.

The Goal

Begin with a clearly defined, specific focus to capture early wins and create momentum for larger-scale, sustainable adoption.

You don't need to solve everything at once. Start small, learn, and expand.

1. Build from Your Strengths

- What strategic priorities are affected by the high-DFW courses you've identified?
- What existing offices, roles, and resources are natural allies for this work?
- Who are the key thought partners and advocates you can engage?

2. Take Seriously Your Institutional Capacity

- Which offices, staff, and faculty will be impacted by an intervention?
- Does this work align with their current responsibilities, or require additional capacity?
- If there's initiative fatigue, how will you motivate participation?
- What's the minimum viable version you could start with?

3. Align with Strategic Priorities

- Which intervention dovetails with existing, long-term institutional goals?
- Can you connect this work to institutional commitments to improving outcomes for underserved students and make impact transparent?
- Who needs to be at the table to ensure institutional buy-in?

4. Build in Evaluation from the Start

- What quantitative metrics will you track? (pass rates, retention, time to degree)
- What qualitative data will you collect? (student experience, faculty feedback)
- How frequently will you review data? (every term recommended)
- Who needs to see results, and in what format?

Key Questions to Surface in Your Analysis

As you review your data, these questions can help surface patterns and inform intervention design:

About Student Pathways

- Do students who receive a DFW repeat the course? Are they successful on retry?
- Do they remain in their majors, or change majors after a DFW?
- Do they return in subsequent semesters?
- At what point do students stop trying (2nd attempt? 3rd?)?

About Institutional Impact

- What is the total number of students not retained after a DFW?
- What is the fiscal impact of their departure?
- What is the effect on underrepresented groups specifically?
- Which departments or programs could most benefit from support?

About Course Context

- Do DFW rates vary by time/day the course is offered?
- Do rates vary by modality (online, hybrid, face-to-face)?
- What academic support is currently available for this course?
- Do students have access to on-time registration for sections they need?
- Are there policy limits on repeats? Are they enforced?



Campus Example: University Of Utah DFW Dashboard

After participating in the Academic Recovery Project, the University of Utah developed this dashboard to monitor high-DFW courses for degree-seeking students. This provides a model for Tier 4 (Dissemination & Intervention) work.

What to Notice in This Example

- Filters by student population, term, and course characteristics
- Shows both DFW rate and total enrollment (scale of impact)
- Tracks trends over time, not just point-in-time snapshots
- Allows drill-down to specific courses and departments
- Built for ongoing monitoring, not just one-time analysis

Course DEWI Dashboard

DEWI rate, average GPA, and total grades by course for degree-seeking undergraduates.



Filter: (Click headers for DEWI Rate, Average Course GPA, or Total Grades to sort in descending order.)

Acad Year (All) Acad Term (All) Acad Level (All) Class Level (All) Class Colle... (All) Subject (All) Mode (All) Campus (All) Section Size (All) Total Grades 10 2,036

Course	DEWI Rate	Average Course GPA	Total Grades
Summer 2019		3.08	230
Fall 2019		3.31	1,706
Spring 2020		3.57	1,315
Summer 2020		3.39	240
Fall 2020		3.30	1,685
Spring 2021		3.26	1,364
Summer 2021		3.10	239
Fall 2021		3.33	1,452
Spring 2022		3.20	1,296
Summer 2022		3.30	278
Fall 2022		3.17	1,626
Spring 2023		3.36	1,482
Summer 2023		3.38	310
Fall 2023		3.22	1,562
Spring 2024		3.36	1,454
Summer 2024		3.27	318
Fall 2024		3.47	1,581
Spring 2025		3.46	1,693
Summer 2025		3.39	319

Building Your Own Dashboard

When building a shared dashboard for your campus, consider including:

- Course-level DFW rates with enrollment context
- Disaggregation by key student populations
- Term-over-term trends (to evaluate interventions)
- Early warning indicators (midterm grades, attendance)
- Retention outcomes for students receiving DFWs
- Repeat attempt data

Remember

Requesting data inevitably leads to requesting more data. Don't wait for perfection.

Start with what you can get, learn from it, and refine your approach over time.

The goal is not a flawless analysis—it's to move from hope to action.

This toolkit is part of the Academic Recovery document suite.