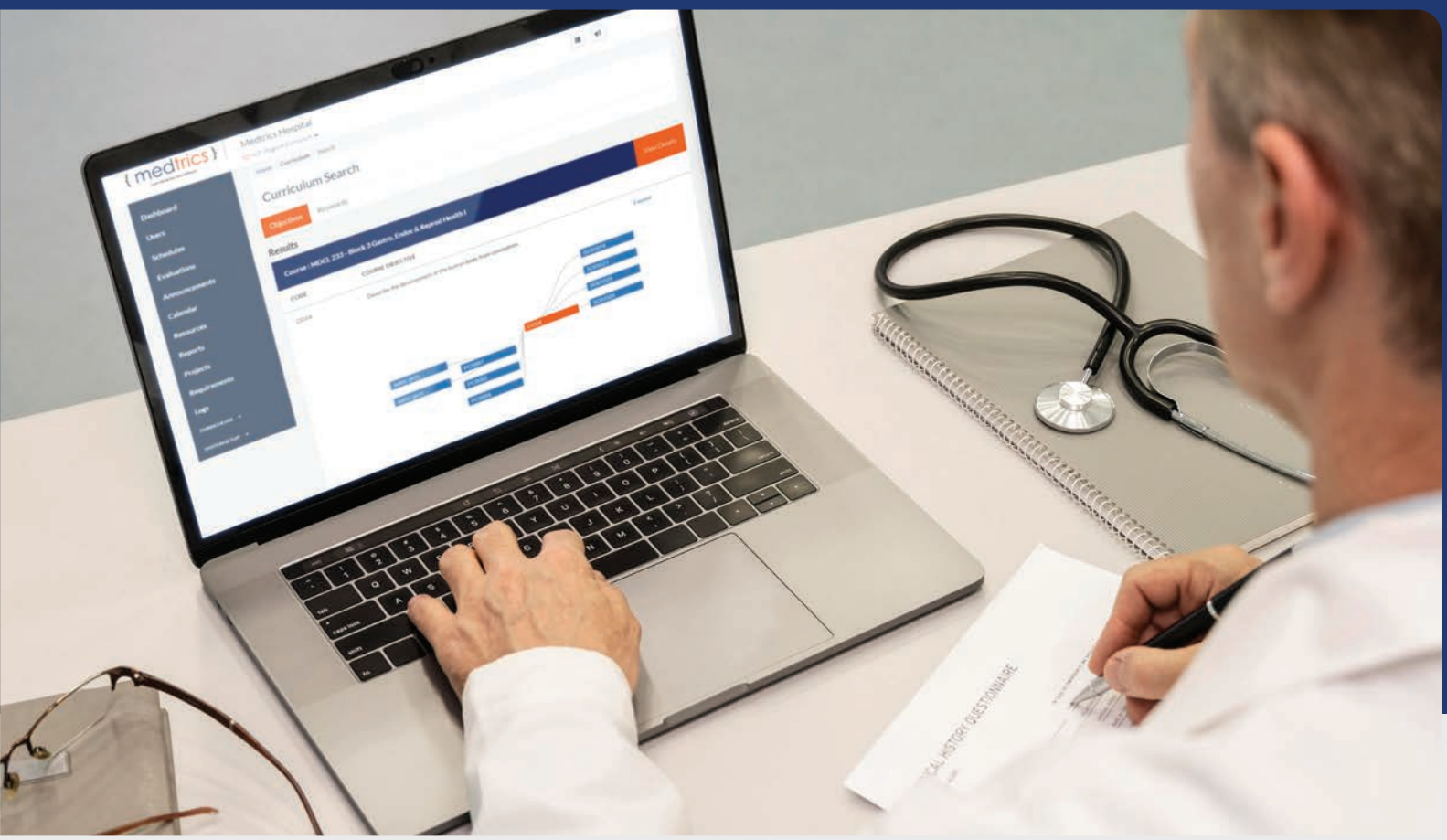

From Spreadsheets to Searchable Strategy: How AUC Transformed Curriculum Mapping with Medtrics

How a global medical school replaced fragmented curriculum files with a centralized, searchable platform.

{ medtrics }
Practice Medicine, Not Software

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Executive Summary

The American University of the Caribbean School of Medicine (AUC), a global medical school with a social accountability mission and over 8,500 alums, undertook a multi-year initiative to modernize its curriculum mapping processes. Before adopting Medtrics, AUC lacked a centralized way to access and analyze its curriculum. Faculty and leadership relied on manual processes that created friction across planning, instruction, and oversight.

Working closely with the Medtrics team, AUC migrated, cleaned, and restructured its entire curriculum into the Medtrics platform. The result is a living, searchable curriculum that supports program-wide transparency, enhances decision-making, and provides faculty with immediate access to critical academic information that had previously been scattered, inconsistent, and slow to retrieve. This case study outlines AUC's journey, from manual overhead to self-service insight.

Introduction

American University of the Caribbean School of Medicine (AUC) is a global medical school with a mission rooted in academic excellence, social accountability, and international experience. With campuses in Sint Maarten and the United Kingdom, AUC trains future physicians through immersive learning environments and hands-on clinical preparation. The school is accredited by the Accreditation Commission on Colleges of Medicine (ACCM), and its students consistently perform at a high level, posting a 95% first-time residency match rate and an 84% first-time pass rate on the United States Medical Licensing Examination (USMLE) Step 1 between 2019 and 2023.

To deliver on that promise across borders, campuses, and clinical partners, AUC depends on a curriculum that is not only well-structured but also transparent: easily understood, accessible, and queryable by those who use it every day.

Why Curriculum Transparency Matters in Global Medical Education

Curriculum transparency plays a critical role at institutions like AUC. Faculty and leadership work across countries and time zones, making it essential to track what students learn, when they learn it, and how each session aligns with broader program objectives. Transparent access to curriculum data gives teams the clarity they need to maintain academic quality and deliver on institutional goals.

When curriculum data is opaque or inaccessible:

- **Faculty members unknowingly duplicate instruction** or miss opportunities to build on previous learning.
- **Leadership cannot identify coverage gaps or overlaps** in critical domains such as biochemistry, clinical reasoning, or professional competencies.
- **Accreditation preparation becomes reactive and time-intensive**, relying on staff to manually piece together evidence from dozens of disconnected spreadsheets.

At AUC, these risks were compounded by an ambitious curriculum refresh. The institution needed a system that could scale alongside its evolving academic model and support a more proactive, self-service approach to curricular insight.

Early Signs of Strain

Prior to adopting Medtrics, AUC's entire curriculum map lived in Excel. Objectives were tracked manually, global themes were inconsistently categorized, and no tool existed to search across the curriculum by keyword or concept. Even straightforward questions required curriculum leadership to search, clean, and interpret spreadsheet data manually. The process slowed real-time planning and left faculty disconnected from the broader curriculum.

The Problem: A Curriculum Locked in Spreadsheets

AUC managed curriculum data in isolated spreadsheets that became increasingly difficult to maintain as the program evolved. Objectives, competencies, and mappings were buried in disconnected files with no reliable way to search or cross-reference content. As the school expanded its academic goals, the system slowed faculty, staff, and leadership alike.

AUC encountered five major breakdowns in its curriculum process:

Faculty Worked Without Context

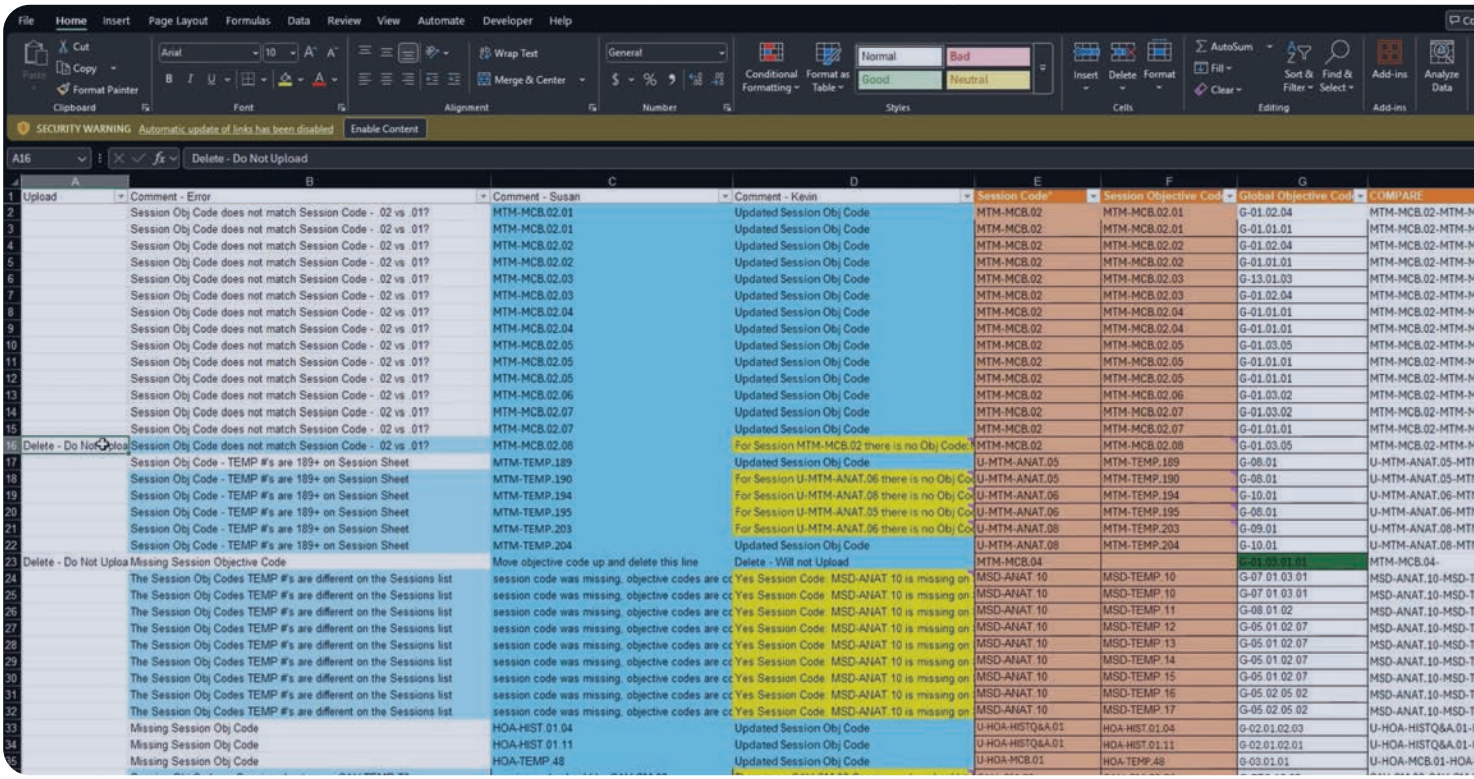
The faculty had no direct way to determine whether a concept, such as gene transcription or renal physiology, was already covered in another course. To get answers, they had to email the curriculum team and wait for a response.

"That was basically inaccessible information," said Chris Tokodi, Chief Information Officer at Medtrics, who supported the AUC implementation. "They would either have to go through the spreadsheets, or just contact the curriculum office... which could take weeks."

Without a way to explore the curriculum independently, instructors risked duplicating topics, missing foundational content, or failing to cover essential material.

Leadership Had No Immediate Visibility

AUC's academic leadership faced the same constraints. To run a curriculum mapping report, identify unlinked sessions, or verify alignment to external frameworks, the team had to locate and manually cross-reference multiple files. The curriculum offered depth. It lacked transparency.



Inconsistent data added to the challenge. Slight variations in terminology, such as "Renal Physiology" versus "Physiology of the Renal System," caused duplication. Unmapped sessions slowed efforts to prepare for accreditation or curriculum review.

National Standards Were Difficult to Track

USMLE content and AAMC objectives appeared throughout the curriculum. However, the spreadsheets offered no consistent way to track or search those references. As a result, it was difficult to verify whether key competencies were being taught, and where.

Accreditation Reporting Required Heavy Lifting

To meet ACCM requirements, AUC had to demonstrate coverage, mapping, and curricular intent across years and departments. However, without a centralized view of the curriculum, the burden fell to a small number of staff who had to interpret the spreadsheets and clean the data manually. Each accreditation cycle meant hours of reactive effort and duplicated work.

A Curriculum Refresh Raised the Stakes

When AUC launched a curriculum redesign, the limits of the spreadsheet model became impossible to ignore. Curriculum teams had to validate objectives, identify gaps, and build forward-looking alignment. All of this occurred within a system that was never designed for scalability. AUC needed a platform that could grow in line with its academic goals and provide every stakeholder, from course directors to deans, the clarity to move quickly and plan confidently.

How Long Does It Take to Answer a Simple Curriculum Question?	
Before Medtrics (Excel-Based)	After Medtrics (Centralized Search)
Faculty emails curriculum team	Faculty logs into Medtrics
Curriculum staff locates correct file	Uses keyword or objective search
Staff cleans/validates spreadsheet	Session results appear instantly
Staff replies via email	Faculty exports to PDF or Excel
Time elapsed: 2–14 days	Time elapsed: <30 seconds

The Solution: Centralizing Curriculum in Medtrics

AUC partnered with Medtrics to replace fragmented spreadsheets with a **centralized, dynamic curriculum platform**. What began as a migration effort quickly evolved into a comprehensive structural overhaul. The project team audited and **cleaned legacy files, eliminated duplicate entries, and reorganized learning objectives** to reflect how the curriculum functioned in practice. AUC's IT team led the effort with close collaboration from Medtrics' support staff and curriculum leaders.

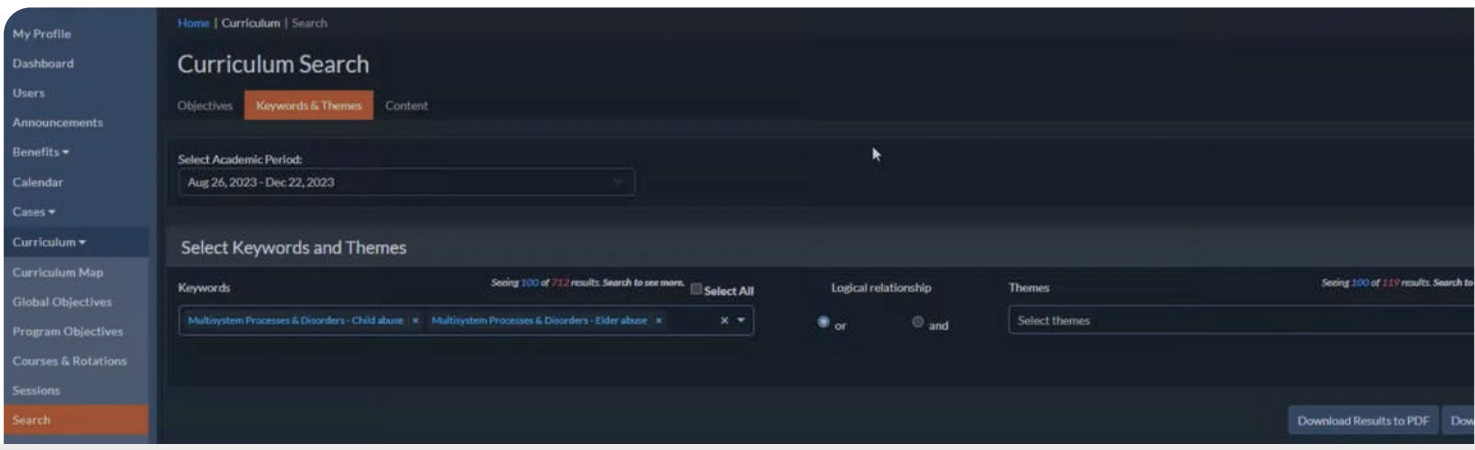
Medtrics now houses the full curriculum in one system, with access tailored by role and updated continuously.

Structuring the Curriculum for Search and Insight

One of the most important changes involved how AUC handled USMLE-aligned content. Instead of burying references in spreadsheets or session-level notes, the team transformed these into **structured keywords and themes.** Concepts like "renal physiology" or "gene expression" became **searchable tags, organized under broader themes** like molecular biology or systems-based instruction.

Faculty and course directors can now **search the curriculum directly by keyword, theme, or mapped objective.** A single query—such as "brain" or "immune system"—returns every relevant session, complete with objectives and teaching context. Searches that once took weeks can now be completed in seconds.

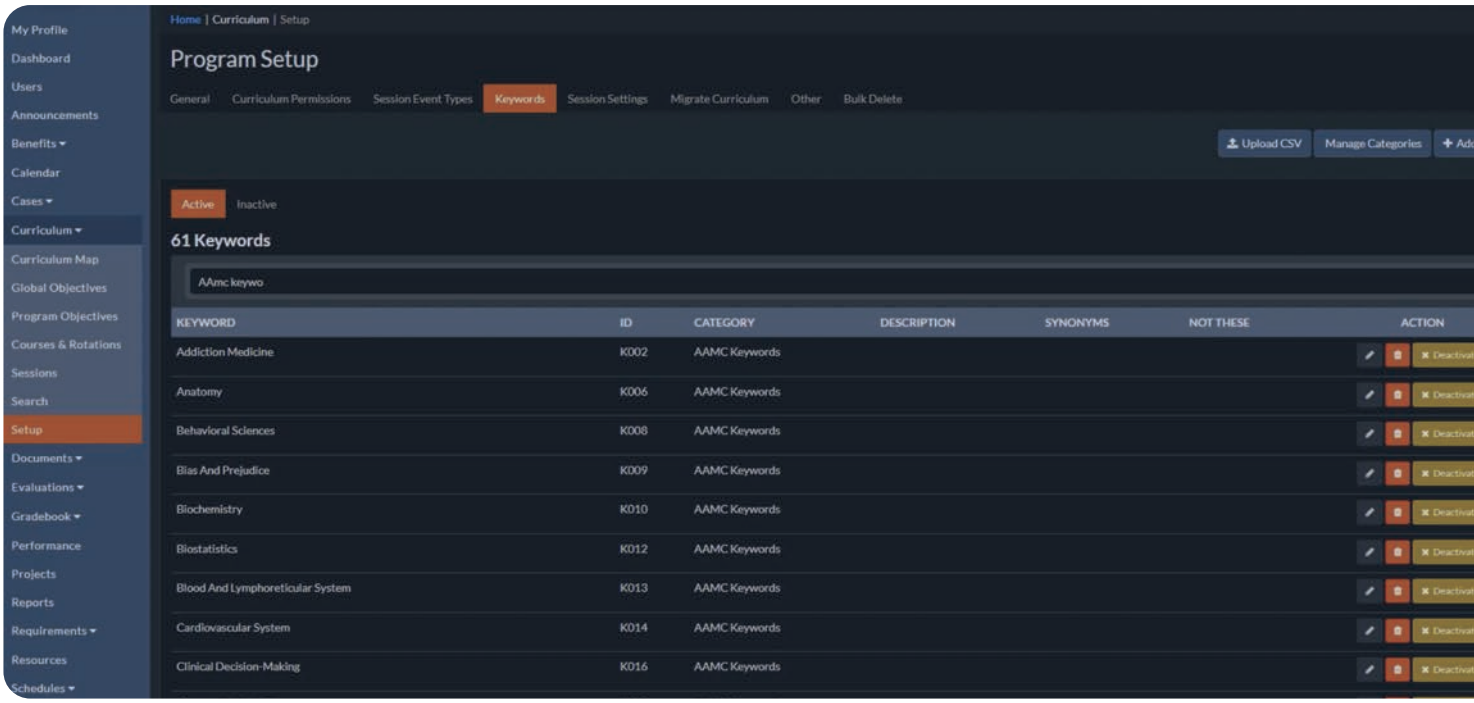
> ***"Now faculty can just log in with their normal account... and immediately get the answers that used to take weeks," said Tokodi.***



Giving Leadership the Tools to Lead

Medtrics also equips academic leadership with real-time reporting. Curriculum directors can view mapping coverage across courses, identify unmapped sessions, and verify alignment with external frameworks such as AAMC competencies. Reports are built into the system and update automatically as content evolves.

This new visibility supports more thoughtful planning, faster course updates, and ongoing accreditation readiness, all without depending on a specialist to run manual analyses.



From Questions to Clarity: How Medtrics Powers Curriculum Insight

1. Search Interface (Input Layer)

- Keywords/themes: “brain,” “renal system,” “gene expression”
- Visual: A single search bar with intelligent filters (course, year, objective type)
- Label: “Faculty and leadership start with a simple search.”

2. Smart Results (Processing Layer)

- Result cards with session title, mapped objectives, and linked themes
- Icons showing export to PDF/Excel and save to report
- Label: “Instantly view where topics are taught and how they align to objectives.”

3. Actionable Outcomes (Output Layer)

For Faculty

- Update course content
- Avoid duplication
- Reinforce earlier learning

For Leadership

- Identify gaps and overlaps
- Export for accreditation
- Monitor coverage by standard

The Impact: From Weeks to Seconds

With Medtrics, AUC moved from siloed data and manual reports to a searchable, real-time platform that supports faculty and leadership alike. Planning became faster, documentation became simpler, and academic decisions began moving at the speed of inquiry.

What Changed at AUC?

Before Medtrics	After Medtrics
Faculty emailed for curriculum answers	Faculty search and export results directly
Reports built by hand	Reports generated in real time
Duplicate keywords and objectives	Standardized metadata and themes
Accreditation data assembled manually	Accreditation data ready on demand
Fragmented files and folders	One centralized, searchable platform

- **Faculty plan with more autonomy.**

  Instructors now locate sessions, confirm objectives, and explore related content without involving support staff. They refine course content and coordinate sequencing across the curriculum with fewer handoffs, resulting in a more streamlined process. This shift has reduced dependency on coordinators and improved instructional workflow.

- **Leadership moves from observation to action.**

  Real-time reports show where gaps exist and how topics align with national frameworks. Academic leaders adjust course structures based on live data and track the impact immediately.

- **Accreditation is built into the workflow.**

  Mappings are exportable on demand. AUC can now respond to site visit requests or curriculum reviews without having to assemble documentation from scratch. The platform supports standards from ACCM and the AAMC directly.

- **Clean data supports consistent decisions.**

  Standardized keywords and resolved duplication make the system easier to search and easier to trust. Faculty work from a single source of truth, not a mix of overlapping files.

- **The platform supports what comes next.**

  AUC is preparing to load session schedules into Medtrics. Once complete, the curriculum will be searchable by both time and content, creating a more precise and coordinated approach to planning.

By turning curriculum data into an accessible, real-time asset, AUC replaced slow, manual work with a system that actively supports teaching, oversight, and institutional progress.

Looking Ahead

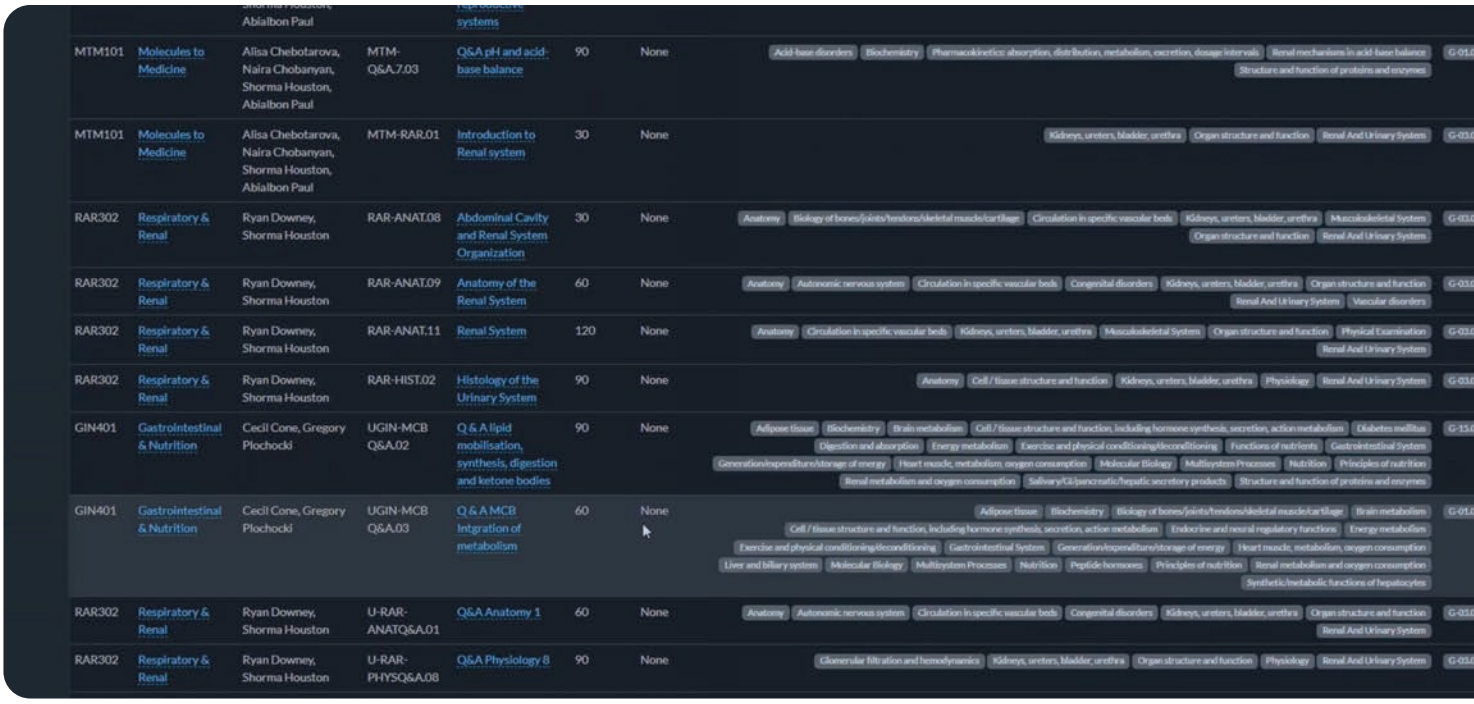
AUC's next step is **to integrate session scheduling** into Medtrics. With curriculum content already centralized and searchable, adding session timing will provide a more complete picture of when each topic is taught and how sessions align across the academic year. This layer of visibility will help faculty **manage pacing, coordinate content delivery, and identify instructional gaps** earlier in the planning process.

The curriculum team also plans to utilize Medtrics for **longitudinal analysis**. By tracking the progression of themes, objectives, and competencies over time, AUC can design more **cohesive learning experiences** and strengthen its ability to **respond to internal reviews or accreditation audits.**

These plans reflect more than just added functionality. They mark a shift in how AUC manages academic complexity. What began as a data migration effort has become a long-term foundation for strategic planning and curricular excellence. With the proper structure in place, AUC is well-positioned to scale its innovation, sustain oversight, and deliver high-quality medical education across its programs.

AUC's Curriculum Evolution with Medtrics

Stage	Label	Supporting Text
Step 1 (Complete)	Curriculum Centralized	Content mapped and searchable by objective, keyword, and theme.
Step 2 (In Progress)	Session Scheduling	Sessions are linked to time and sequence for clearer pacing and instructional planning.
Step 3 (Planned)	Longitudinal Planning	Track themes, competencies, and standards across academic years.



		Abialbon Paul		systems			
MTM101	Molecules to Medicine	Alisa Chebotarova, Naira Chobanyan, Shorma Houston, Abialbon Paul	MTM-Q&A.7.03	Q&A pH and acid-base balance	90	None	Acid-base disorders; Biochemistry; Pharmacokinetics: absorption, distribution, metabolism, excretion, dosage intervals; Renal mechanisms in acid-base balance; Structure and function of proteins and enzymes
MTM101	Molecules to Medicine	Alisa Chebotarova, Naira Chobanyan, Shorma Houston, Abialbon Paul	MTM-RAR.01	Introduction to Renal system	30	None	Kidneys, ureters, bladder, urethra; Organ structure and function; Renal And Urinary System
RAR302	Respiratory & Renal	Ryan Downey, Shorma Houston	RAR-ANAT.08	Abdominal Cavity and Renal System Organization	30	None	Anatomy; Biology of bones/joints/tendons/skeletal muscle/cartilage; Circulation in specific vascular beds; Kidneys, ureters, bladder, urethra; Musculoskeletal System; Organ structure and function; Renal And Urinary System
RAR302	Respiratory & Renal	Ryan Downey, Shorma Houston	RAR-ANAT.09	Anatomy of the Renal System	60	None	Anatomy; Autonomic nervous system; Circulation in specific vascular beds; Congenital disorders; Kidneys, ureters, bladder, urethra; Organ structure and function; Renal And Urinary System; Vascular disorders
RAR302	Respiratory & Renal	Ryan Downey, Shorma Houston	RAR-ANAT.11	Renal System	120	None	Anatomy; Circulation in specific vascular beds; Kidneys, ureters, bladder, urethra; Musculoskeletal System; Organ structure and function; Physical Examination; Renal And Urinary System
RAR302	Respiratory & Renal	Ryan Downey, Shorma Houston	RAR-HIST.02	Histology of the Urinary System	90	None	Anatomy; Cell / tissue structure and function; Kidneys, ureters, bladder, urethra; Physiology; Renal And Urinary System
GIN401	Gastrointestinal & Nutrition	Cecil Cone, Gregory Plochocki	UGIN-MCB Q&A.02	Q & A lipid mobilisation, synthesis, digestion and ketone bodies	90	None	Adipose tissue; Biochemistry; Brain metabolism; Cell / tissue structure and function, including hormone synthesis, secretion, action metabolism; Diabetes mellitus; Digestion and absorption; Energy metabolism; Exercise and physical conditioning/deconditioning; Functions of nutrients; Gastrointestinal System; Generation/expenditure/storage of energy; Heart muscle, metabolism, oxygen consumption; Molecular Biology; Multisystem Processes; Nutrition; Principles of nutrition; Renal metabolism and oxygen consumption; Salivary/GI/pancreatic/hepatic secretory products; Structure and function of proteins and enzymes
GIN401	Gastrointestinal & Nutrition	Cecil Cone, Gregory Plochocki	UGIN-MCB Q&A.03	Q & A MCB Intgration of metabolism	60	None	Adipose tissue; Biochemistry; Biology of bones/joints/tendons/skeletal muscle/cartilage; Brain metabolism; Cell / tissue structure and function, including hormone synthesis, secretion, action metabolism; Energy metabolism; Exercise and physical conditioning/deconditioning; Gastrointestinal System; Generation/expenditure/storage of energy; Heart muscle, metabolism, oxygen consumption; Liver and biliary system; Molecular Biology; Multisystem Processes; Nutrition; Peptide hormones; Principles of nutrition; Renal metabolism and oxygen consumption; Synthetic/metabolic functions of hepatocytes
RAR302	Respiratory & Renal	Ryan Downey, Shorma Houston	U-RAR-ANATQ&A.01	Q&A Anatomy 1	60	None	Anatomy; Autonomic nervous system; Circulation in specific vascular beds; Congenital disorders; Kidneys, ureters, bladder, urethra; Organ structure and function; Renal And Urinary System
RAR302	Respiratory & Renal	Ryan Downey, Shorma Houston	U-RAR-PHYSQ&A.08	Q&A Physiology 8	90	None	Glomerular filtration and hemodynamics; Kidneys, ureters, bladder, urethra; Organ structure and function; Physiology; Renal And Urinary System

Curious about how Medtrics can support your curriculum team?

Start the conversation at ***medtricslab.com/contact-us***