Project Charter: Ad Astra

Background

The creation of Vermont State University presents an opportunity to reimage our existing structures, find operational efficiencies, understand instructional costs, and deliver the best student experience possible. The VSC institutions have used Ellucian Colleague as our student information system (SIS) for a number of years and operate within one instance of Colleague. To this point, the institutions have maintained separate course offering and section scheduling processes within this shared instance. The three merging institutions have used EMS as their events scheduling platform, again sharing one instance.

Past scheduling practices have been largely based on a term-to-term process of rolling over of past terms' offerings and making minor adjustments. As we seek to assure student success and financial sustainability in the creation of the new institution, we must take a data-driven approach to course scheduling and cannot rely on copying over past schedules at our institutions to project the course offering needs of the new university.

Demand-based course scheduling practices will be critical to ensure students have access to the courses they need at their location, including online. While Vermont State University will have a number of highly structured programs that lend themselves to a block scheduling approach, we will also have a large number of programs that are less prescriptive and provide students with the flexibility to choose from a menu of options to fulfill requirements. It will be important that we adopt a course scheduling platform that accounts for this variation in program structure when performing course demand analysis.

Goals

- Build a more student-focused term schedule that allows students to move seamlessly through their course program
- Build a more efficient term schedule and better understand instructional costs
- Reduce the number of human hours required to build a term schedule
- Create a more user-friendly scheduling process and platform
- Partner with Ad Astra and Ferrilli to retrain staff and faculty on the unified set of processes and standards that address scheduling needs and course schedule publication/student self-service needs

Scope

- Provide an intuitive interface for academic departments to submit information, and change requests, to an approval workflow process.
- Provide demand projections based on data contained in the SIS including student enrollment, degree audit, and student plans. Demand projections must account for program requirements, course offering cycles, student locations, and offering modality considerations.
- Collect faculty preferences (preferred meeting times, back-to-back spacing, rooms, tech features, etc.) and user preferences in scheduling optimization algorithms.
- Generate scheduling models to optimize for student needs, facilities, faculty workload, and the financial feasibility of the schedule. Optimization models must enforce process rules to ensure compliance with, programmatic requirements, course requisites and cross-lists, time block and meeting pattern policy, space constraints and features, and faculty preferences.

Project Charter: Ad Astra

- Provide visualization tools to facilitate review of course schedule including space usage, instructor conflicts, and programmatic conflicts.
- Final exam schedule creation.
- Provide an audit trail of changes made and approval communications.
- Two-way integration with Colleague.

The Community College of Vermont (CCV) is out of scope for this project but might be added in a later phase of the project.

Project Team

Sponsor	Nolan Atkins, Provost
Technical Lead	Ferrilli
Project Manager	Meg Walz, Director, Project Management
Project team members	Thom Anderson, Associate Academic Dean Tammy Carter, Associate Registrar at NVU Erica Dana, Scheduler at VTC Doug Eastman, Director of Information Systems Darlene Jones, Associate Registrar at VTC Meaghan Meachem, Professor at NVU Heather Morrison, Registrar at CU Joan Richmond-Hall, Professor and Faculty Moderator Scott Roper, Professor at CU David Rubin, Interim Assistant VP Campus Operations Shelly Russ, Registrar at VTC Dannielle Spring, Chief Budget and Finance Officer

Project Milestones

- Department Chairs will be given detailed schedule building instructions and guidelines in early January 2023 followed by submission deadline reminders in late January and early February.
- Complete and accurate course schedules are due from chairs no later than February 6, 2023.
- The Registrar's Office will enter course information into Colleague between February 7, 2023 and February 16, 2023.
- Schedule analysis and refinement will be conducted by academic deans between February 17, 2023 and February 26, 2023.
- The finalized schedule will be published on February 27, 2023 giving advisors three weeks to meet with their students prior to pre-registration.
- Pre-registration begins for Seniors (3/20/23), Juniors (3/21/23), Sophomores (3/22/23), and First-Year Students (3/23/23).

Project Budget

One-time implementation cost: $45,000
Annual subscription: $160,000

Project Charter: Ad Astra

Constraints, Assumptions, Risks and Dependencies

Constraints	• Ambiguity around the staffing and structure of the Registrar's Office. • Lack of administrative assistance to assist chairs and program coordinators may constrain efficient workflow. • Timely decision-making slows progress. • Unclear timeline for project details. • Unrealistic expectations regarding perfect processes.
Assumptions	• A finalized GenEd Program. • Finalized 2023 programs and courses. • Ability to project demand based on past offerings and past degree plans with 23-24 program maps. • Roles and Responsibilities of the Registrar/scheduling team will be clearly identified. • Accountability at each level of the scheduling process: Program Coordinators, Chairs, Deans, Registrar's Office. • Academic Deans will monitor course offerings for cost implications. • Clearinghouse of information, help center/suggestions/concerns/ related to scheduling. • Ad Astra has a robust help desk/support system for us when needed. • Ability to project new student enrollment in a way that supports course demand projection by program/location/modality. • Completeness and accuracy of facility (buildings and rooms) data out of EMS for all colleges. • Ability to understand impacts on course demand (pre-requisites, Teachout vs new programs, cross-program conflicts, etc.). • Ability to produce final exam schedule that aligns with room/modality expectations. • Alignment of modality expectations with enrollment demand and space/facilities capacity at the time of scheduling.
Risks and Dependencies	• Timely approval of program array and GenEd program. • Lack of communication and proper training will negatively impact project outcomes. • Lack of intercampus communication regarding shared programs is inhibiting progress. Relates to a lack of shared identity. • Lack of sufficient capacity in the registrar's office may negatively impact project outcomes. • The tight timeline might be untenable. • Multiyear scheduling must be implemented at some point, which is a huge lift and may require additional faculty compensation over the summer to happen.

	Write into contract/provide compensations for intensive focus on schedule building. • Impact of coding changes to support improved registrar processes and student registration experience on course scheduling practices and prediction (section identifiers, location codes, instructional methods, course equates/substitutions, requisite coding).