

Dickinson College

Order-of-Magnitude Space Analysis

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Rickes Associates Inc.
Excellence in Higher Education Planning

OVERVIEW & GOALS

Rickes Associates (RA) was engaged by Dickinson College to conduct an Order-of-Magnitude Space Analysis based on the strategic drivers of enrollment, personnel, and programmatic changes, and informed by space planning guidelines promulgated by various professional entities. The outcome will help determine the highest and best use of existing space as related to the academic mission of the College.

The following data was analyzed:

- Enrollment: full- and part-time levels.
- Personnel: full- and part-time by department/unit and associated level
- Space Inventory: organizational structure, space assignments, and distribution.
- Instructional Space Utilization Analysis: scheduling and space use.
- Programmatic Changes: current and anticipated programs; goals of the institution.
- Interviews: qualitative input from interviews with a cross-section of stakeholders.

Collectively, these analyses established a quantitative basis to support the development of a space program categorized by space codes defined by the Facilities Inventory Classification Manual (FICM) of the National Center for Education Statistics (NCES).

The following summarizes the results of the analyses based on the operational environment. Currently, enrollment is estimated to remain stable, and there are no immediate plans for significant changes in curriculum or program offerings. The modest space increases indicated in the space program are driven by a *current* need for space, not planned growth. Application of specific and order-of-magnitude calculations indicate areas where additional space is necessary to support current activities in the existing environment. Supporting documentation from the surveys, the instructional space utilization analysis, and the space inventory, are provided in the Appendix.



STRATEGIC DRIVERS

The two major drivers of space needs are students and personnel; those who physically use the space. The level and type of students and personnel define needs across various categories of space. For example, a campus where enrollment is primarily commuter based requires different types of space to support the student and staff populations than does a campus where enrollment includes housing and full-time traditional students. Understanding institutional mission and culture, along with knowledge of evolving trends in higher education, provides direction in terms of the various space types and amounts required to support the College's teaching and learning environment.

To ensure the space program reflects a "snapshot" of the institution at a specific point in time, Rickes Associates requested consistent Fall-only data for all data sets.

Enrollment & Personnel

With thanks to the Office of Institutional Research and Human Resources for support in providing and clarifying the data.

Quantification of space needs for any institution is driven by the users: students, staff, and faculty. The numbers of users in terms of headcount and FTE provides the working foundation for the space needs calculations. The analysis used Fall 2013 unduplicated student headcount and FTE to drive space needs for the majority of the space categories on campus.

Figure 1: Total Enrollment 2013

	Headcount	FTE
Full-Time	2,356	2,356
Part-time	44	12
Total Enrollment	2,400	2,368
*as prepared by Campus and reported to IPEDS		

Another component of space demand is driven by the number of current employees at an institution. The need for office space and other types of support space for both instructional and non-instructional staff is calculated through a quantification and analysis of staffing levels throughout the institution. The primary source of data for this analysis was the personnel database extract provided by the College, which served as a snapshot in time of Dickinson's total staff. As was the case with student data, the personnel data were evaluated by both headcount and FTE. The following figure summarizes the personnel count for Fall 2013.

Figure 2: Total Personnel 2013

Division/Unit	Full-Time	Part-time	Total	Estimated FTE
Academic Affairs	330	71	401	365.5
College Advancement	43	1	44	43.5
Enrollment & Communications	81	11	92	86.5
Finance and Administration	251	40	291	271
Library and Information Services	76	4	80	78
President	9	1	10	9.5
Student Development	69	6	75	72
Total Personnel	859	134	993	926

Space Inventory

With thanks to the Facilities Office for support in creating, providing, and clarifying the data

During the project kick-off, Rickes Associates worked with Dickinson College to set up and define the required base elements and layout for the space inventory. Although the elements existed in various data sets on campus, individual assignable square footage (ASF) per space was not available for all areas. In addition, a coding structure was not in place that would permit a comparative analysis to other campuses of similar size.

ASF: This measures a defined, discrete space in which specific functions occur (office, classroom, library, etc.)

The space inventory is a powerful facilities management tool that should be continuously updated and integrated into the decision-making fabric of the institution. The data contained in the inventory can provide the foundation for data driven decision-making regarding capital and non-capital improvements, and help to balance quantitative and qualitative concerns regarding space. It is also critical to establish the “supply” side that is at the cornerstone of institutional space management and serves both as the foundation for the space program and the “gap” analysis between existing and projected need. A working space inventory, at its rudimentary level, will differentiate each and every space by building, floor, room number, ASF, and associated space code as defined by the Facilities Inventory Classification Manual (FICM) of the National Center for Education Statistics (NCES).

FICM uses a multi-category space type classification system to organize campus space into 10 discrete categories: classrooms, labs, offices, study facilities, special and general use areas (e.g., athletic facilities, assembly, lounges, recreation), central services, health care, unclassified, and residential, as applicable. Not included are the non-assignable areas related to circulation, mechanical, janitorial, and structural. These spaces are calculated as part of the grossing factor, which is applied during design stage.

RA worked with the campus to refine the space inventory and expanded it to provide elements on organization and department assignments along with standardized space codes. Dickinson College undertook the integration of the various data sets and confirmed that all spaces were accounted for and appropriately assigned. Priority was given to the academic core of the campus. As a result of these activities, RA was able to determine the current distribution of space by space type and by organizational level, although it became clear that some space elements are still missing from the working database.

The following analysis is a work in progress and will need to be updated as additional information is identified for input. The Space Program notes some instances where information was either missing or required correction. The following figures reflect those evaluations of need that could be completed using the working space inventory.

Space by Type

Each three-digit FICM code categorizes a space according to its primary function. Excluding residential space (not used in this study), and associated rented and farm spaces, the system “rolls up” each space to its highest level of aggregation. The following figure presents how the 774,338 ASF of existing institutional space is distributed across the major FICM clusters, excluding Residential.

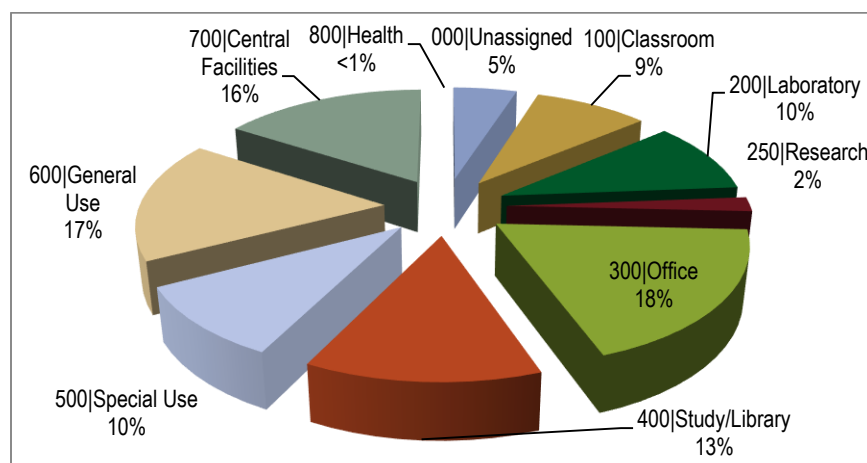
Figure 3: Space by Category

FICM Code	Category	Description	Total ASF	% of Total
000	Unclassified	Space unassigned/ under construction	39,311	5.1
100	Classrooms	General-purpose instructional spaces	68,729	8.9
200	Laboratory	Specialized instructional spaces	79,944	10.3
250	Research	Faculty and Student research space	15,260	2.0
300	Office	Academic/administrative offices and related spaces	143,097	18.5
400	Study/Library	Traditional library space and related study spaces	97,106	12.5
500	Special Use	Athletic, media, demonstration spaces	74,877	9.7
600	General Use	Dining, bookstore, day care student activities spaces	132,345	17.1
700	Central Facilities	Shops, storage, mailroom, printing service spaces	122,006	15.7
800	Health Care	Examination rooms, nurse station, waiting area	1,663	0.2
Grand Total			774,338	100%
Rented Warehouse to Project Share			56,000	
Grand Total			830,338	

May not add due to rounding. *Note: there appears to be some portions of buildings excluded from the study

The following provides a graphical representation of the distribution of space on campus by FICM category.

Figure 4: Distribution by Space Type



Residential space is excluded from this analysis as a prior study had been completed.

- Office space constitutes the largest single space type at 143,096 ASF, close to 20% of the campus space.
- Instructional space, combined, encompasses 19% of the campus space. This includes all instructional, open labs, and associated support areas, but excludes research space.
- The 500 Special Use Category is just 10% and is missing some square footage such as the farm and associated outbuildings.
- The General Use (600) category, on the other hand, appears somewhat large at 17% of the campus. This category includes meeting space, assembly, recreation, merchandising, dining, etc. One of the largest spaces coded to this category is the ATS building itself with 12,000 ASF and the majority of the HUB at 71,000 ASF.
- Central Facilities (700) is 16% of the campus space and encompasses various warehouses and distributed facilities.
- There is 39,311 ASF of unassigned/unused space, of which 18,206 ASF is vacant space in Allison.

Space by Type & Building

The following table presents the existing distribution of ASF at the College by space code and building.

Figure 5: Distribution by Building

Building	Total ASF
233 West Louthier St.*	666
450 West High	1,121
5 North Orange	100,673
50 Mooreland	11,233
55 North West St.	1,800
57 South College	1,364
61 North West St.	1,247
Admissions	5,714
Allison Hall	18,206
Althouse	15,911
Asbell Center*	376
ATS	12,092
Biddle House	5,884
Bosler	20,699
Children's Center	8,252
Clark Center	1,865
Cook International House	1,321
Dana Hall	19,814
Denny Hall	19,072
Dickinson Park Warehouse	21,220
East College	9,000
Goodyear – Art Studios	20,765
Holland Union Building	89,565
Kaufman	62,973
Kline Center (Estimated)	74,688
Kline Center – Wellness Center	12,388
Landis House	2,086
Montgomery House	4,899
Old West	15,192
The Quarry	2,066
Rector - James Hall	12,208
Rector North	8,559
Rector - Stuart Hall	13,864
South College	5,519
South College Annex	5,037
Stern Center	10,755
Tome	27,002
Waidner Library	103,070
Weiss	26,172
Total (39 buildings)	774,338
5 North Orange – East Warehouse (Rented Space to Youth Ballet)	56,000
Grand Total (40 buildings)	830,338
*May not add due to rounding	

At the time of the study, building square footage was being updated.

- Dickinson encompasses some 774,000 ASF located in 39 buildings (excluding residence halls and the large rented warehouse).
- There are various buildings that are houses and do not provide efficient use of space. These buildings should be reconsidered in terms of future planning for the campus. Houses converted to offices are often non-accessible and have poor configuration of office and support spaces.
- Waidner Library is the largest building on campus followed by 5 North Orange, the HUB, and then Kline.



Space by Organization

The following table identifies the distribution of total campus-wide space by organizational area as defined by the existing organizational charts.

Figure 6: Distribution by Organization

Organization	ASF
Academic Affairs	256,471
Enrollment & Communication	98,440
Finance & Administration	283,078
Library & Information Services	119,515
Student Development	16,834
Total	774,338
Rented	56,000
Grand Total	830,338



May not add due to rounding.

In terms of ASF, the largest unit is Finance & Administration, comprising 283,078 ASF, or over one-third of campus space. The smallest is Student Development.

Summary of Existing Space

Combined, instructional and student spaces and support areas coded in the 600 category make up over one-third of the campus space, reflecting a College with a strong commitment to education and student development. Current projects at Dickinson continue to address the holistic need of the student through renovation and additions to the Kline Center (Athletics) to provide more opportunity for club, intramural, and recreational uses. Future projects will be centered on the residence halls as living learning areas so as to enhance the experience of the on-campus student, as well as provide “equality” of residence life across the campus.

INSTRUCTIONAL SPACE UTILIZATION ANALYSIS

With thanks to the Office of the Registrar for support in providing and clarifying the data.

A detailed utilization analysis of the College's 85 general-purpose classrooms and 44 specialized instructional spaces has been completed, based on Fall 2013 course data and an inventory of instructional spaces. Course data was "scrubbed" to eliminate courses held off-site, zero-enrollment courses, and the potential duplication of cross-registered courses. Recent information indicates that eight of the general-purpose classrooms should be excluded as they are misclassified, leaving 77 remaining. The effect of this adjustment is minimal and does not significantly impact the findings. This analysis is based on the existing 85 rooms originally identified as general-purpose classrooms for this study. The following instructional space utilization metrics and guidelines were used for general-purpose classrooms and specialized instructional spaces to inform recommendations for the overall needed capacity distribution.

Utilization

The average number of hours a space is formally scheduled as related to the official scheduling window.

An institution's scheduling window is the block of time within which it is reasonable and possible to schedule all or most coursework during a week. The weekly room hour utilization rate is the percent of the weekly scheduling window during which that space is scheduled for instruction.

A perfect "match" between available classroom capacities and course section enrollments cannot always be made in every time period. Classroom capacity, course enrollment, seat configuration, technology, and other amenities impact demand and availability. A target weekly hour utilization rate of 67 to 70 percent for general-purpose classrooms provides the scheduling flexibility to better match courses to classrooms, permits maintenance access, and allows for ad hoc room uses, such as special events. Specialized instructional spaces should be scheduled for 50 percent of the weekly scheduling window to allow for set up and break down as well as independent student use outside of scheduled instruction.

Occupancy

The average percentage of seats filled when the space is formally scheduled.

The occupancy rate is the percent of seats occupied when scheduled for instruction. It varies by classroom capacity as well as by instructional space type. Ideally, classrooms seating 70 or fewer students should have 67 percent of their seats occupied. Classrooms seating more than 70 students and specialized instructional spaces ideally have 80 percent fill, given the configuration of such spaces and their greater relative capital cost.

The average occupancy will include lower and higher occupancy rates on a room-by-room and course-by-course basis. These guidelines have been found to be efficient averages given that course sizes are not entirely predictable, so there is a need to balance course scheduling against the desire for a flexible room configuration.

Capacity

The average area provided per student in a given space based on assignable square footage and the number of seats.

The amount of space allocated to each student in an instructional space is calculated by dividing the total assignable square footage (ASF) for the room by the number of student seats. ASF per student guidelines vary according to space type. A range of 20 to 25 ASF per seat is recommended for typical flat floor classrooms, for example, while lecture halls seating 200 or more students require only 12 to 15 ASF per seat. Specialized spaces such as computer labs typically require 30 to 40 ASF per station while a Dance Studio needs 100 ASF/person.

The data sets used to conduct this analysis are constructed from various campus sources and include:

- Fall 2013 course data (core data set)
- Course scheduling window for day and evening courses
- Identification of standard and non-standard time blocks
- Assignable square footage and seat count for each instructional space

CLASSROOMS

Course Scheduling

Scheduling Window

Four-year colleges and universities typically have separate daytime and evening scheduling windows. Daytime scheduling windows generally range from 35 to 50 hours per week. Based on the scheduling grid provided, Dickinson has a 37.5-hour daytime scheduling window that begins at 8:30 a.m. and ends at 4:30 p.m., Monday through Friday, with the exception of an activity period, running from 12:00 p.m. to 1:15 p.m. Tuesday and Thursday. The evening scheduling window totals 22 hours per week, Monday through Thursday, beginning at 4:30 p.m. and ending at 10:00 p.m. Since daytime courses drive the demand for classrooms at Dickinson, the daytime window was used in this analysis.

Course Meetings by Day

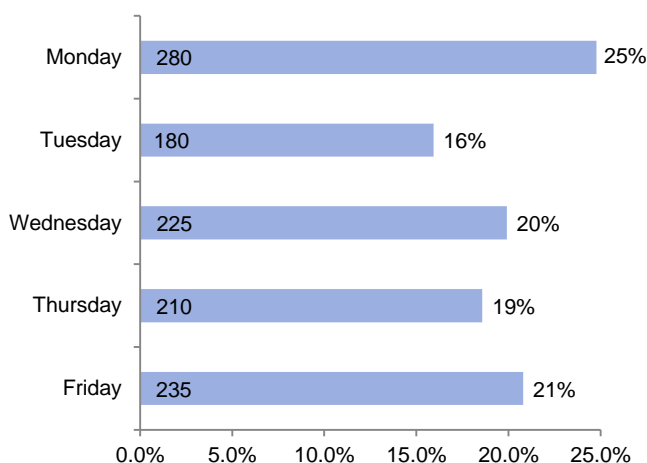
Course meetings are defined by the combination of days and times in which the courses are scheduled. A total of 13 course meeting day combinations were identified in the Fall 2013 course data. The most frequent combination was Monday-Wednesday-Friday, used for 30 percent of the 426 daytime classroom courses offered. Tuesday-Thursday scheduling was the next most frequently used scheduling pattern, accounting for 19 percent. Interestingly, 15 percent of the courses were scheduled five days a week.

Course meetings were distributed somewhat unevenly across the days of the week with the fewest course meetings occurring on Tuesdays (16%) and the most on Mondays (25%). The following tables present the distribution of meeting day combinations and the number of individual course meetings per weekday.

Figure 7: Course Meeting Day Combinations

Day Combinations	Daytime Courses	Percent of Daytime Courses
MWF	129	30%
TR	80	19%
MTWRF	64	15%
MR	53	12%
TF	23	5%
W	20	5%
MF	16	4%
T	10	2%
R	10	2%
MW	9	2%
M	6	1%
MTWR	3	0.7%
F	3	0.7%
Total	426	100%
*May not add to 100% due to rounding		

Figure 8: Course Meetings Per Weekday (Total = 1,130)



Time Blocks

Standardized Time Blocks

Standardized time blocks are planned combinations of course meeting days, as well as start and end times, during which courses are scheduled in a single room for a semester. Standardized time blocks form a scheduling grid covering an entire weekly scheduling window. Dickinson's daytime scheduling grid contained 20 identified standard time blocks.

Standardized time blocks reduce or eliminate overlap among scheduling options. Typical standardized time blocks schedule course meeting three times per week on Mondays, Wednesdays, and Fridays, on the hour, with 10-minute pass times. Courses meeting twice a week typically meet for 75 to 80 minutes on Tuesdays and Thursdays with an associated 10 to 15 minute pass time. Dickinson's scheduling grid does not exactly follow this pattern, with more half-past the hour start times and unique day combinations. Fall 2013 course data showed 25 non-standard time blocks in use in addition to the 20 standard blocks.

The table below presents the standard and non-standard time blocks in use during Fall 2013 and the number of courses scheduled in each. The 20 standardized time blocks are shaded.

Figure 9: Courses per Standard and Non-standard Time Block

Start Time	End Time	M	MTWR	MTWRF	MW	MWF	MR	MF	R	T	TF	TR	W	F	In Std. Time Block	Out of Std. Time Block	Total Courses
8:00 a.m.	9:15 a.m.												1		0	1	1
8:30 a.m.	9:20 a.m.			13		13									26	0	26
9:00 a.m.	10:15 a.m.											31			31	0	31
9:30 a.m.	10:20 a.m.		1	26		24		1	1			2			50	4	55
10:30 a.m.	11:20 a.m.		2	22		33						1	1		55	4	59
10:30 a.m.	11:45 a.m.						1		1			39			39	2	41
10:30 a.m.	12:20 p.m.				1										0	1	1
11:30 a.m.	12:20 p.m.					37									37	0	37
11:30 a.m.	12:45 p.m.				1			14							0	15	15
12:30 p.m.	1:20 p.m.					22									22	0	22
12:30 p.m.	4:30 p.m.												1		0	1	1
1:15 p.m.	4:15 p.m.								1	1					2	0	2
1:30 p.m.	2:20 p.m.			3				1							3	1	4
1:30 p.m.	2:45 p.m.				4		32			1	14	3			46	8	54
1:30 p.m.	4:30 p.m.	6							4	8			17	3	38	0	38
2:00 p.m.	4:00 p.m.											1			0	1	1
3:00 p.m.	4:15 p.m.				2		20		3		9	3			29	8	37
4:00 p.m.	4:30 p.m.				1										0	1	1
Courses in Standard Time Blocks		6	0	64	0	129	52	0	4	8	23	70	17	3	376		
Courses Outside of Standard Time Blocks		0	3	0	9	0	1	16	6	2	0	10	3	0		50	
Total Courses		6	3	64	9	129	53	16	10	10	23	80	20				426

Exceptions to standardized block scheduling are sometimes necessary. The need for students to attend practica or engage in clinical activities, for instance, could require course times, meeting days, or course lengths inconsistent with the grid. However, too many exceptions can impede efficient utilization. For example, an undergraduate course held Monday, Wednesday, and Friday from 9:00 a.m. to 10:15 a.m. would overlap two standard Monday-Wednesday-Friday time blocks, allowing only that one course to be held in a classroom during the nearly two-hour window of 8:30 to 10:20 a.m., three days per week.

The amount of out-of-block scheduling that is acceptable is more dependent on the *reasons* the courses are scheduled, the *impact* this has on student success, and *efficient* use of space. Questions such as the following should be asked to determine if the non-standard schedule is acceptable.

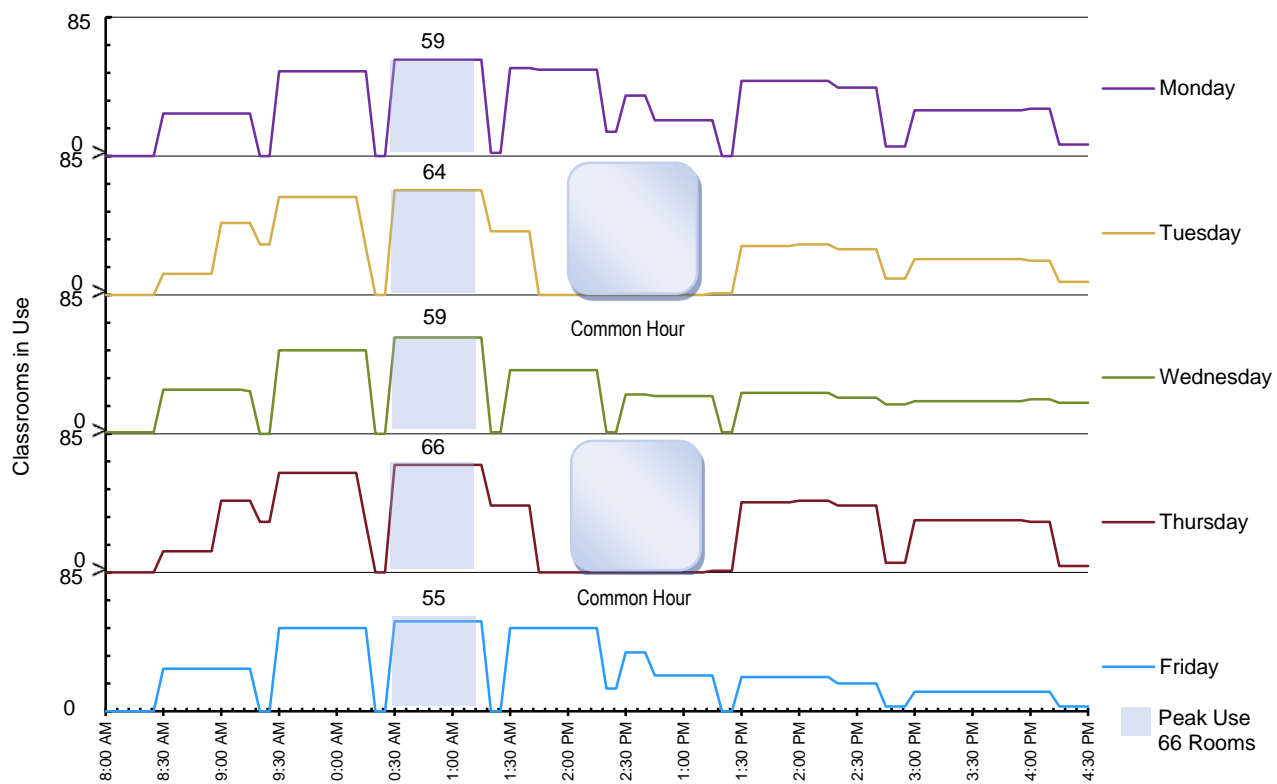
- Is the time chosen driven by the course/pedagogy, or is it based on the preference of the instructor?
- Do the courses scheduled in the non-standard time blocks impede students from taking required courses to graduate in a timely manner?
- Does the out of block schedule class make it difficult for student to create a reasonable schedule?
- Do the times cause conflicts in departmental scheduling?
- Are departments distributing courses appropriately between standard and non-standard?

During fall 2013, 88 percent (376) of daytime classroom courses were scheduled within the 20 standardized time blocks. The remaining 50 daytime classroom courses were scheduled in 25 non-standard time blocks. The individual reasons behind these courses and an associated policy review should be conducted.

Intra-Day Classroom Use

The demand for classrooms is also influenced by intra-day scheduling, creating spikes and troughs of use during the day and throughout the week. On many campuses, highest use during the day is typically late morning through early afternoon with lower use during the “shoulder” periods. For the most part, this is also true of Dickinson, although one can see slightly more consistent classroom use throughout the day when factoring out the activity period on Tuesday-Thursday afternoons. The following graph indicates the number of classroom in simultaneous use during each weekday based on five-minute intervals.

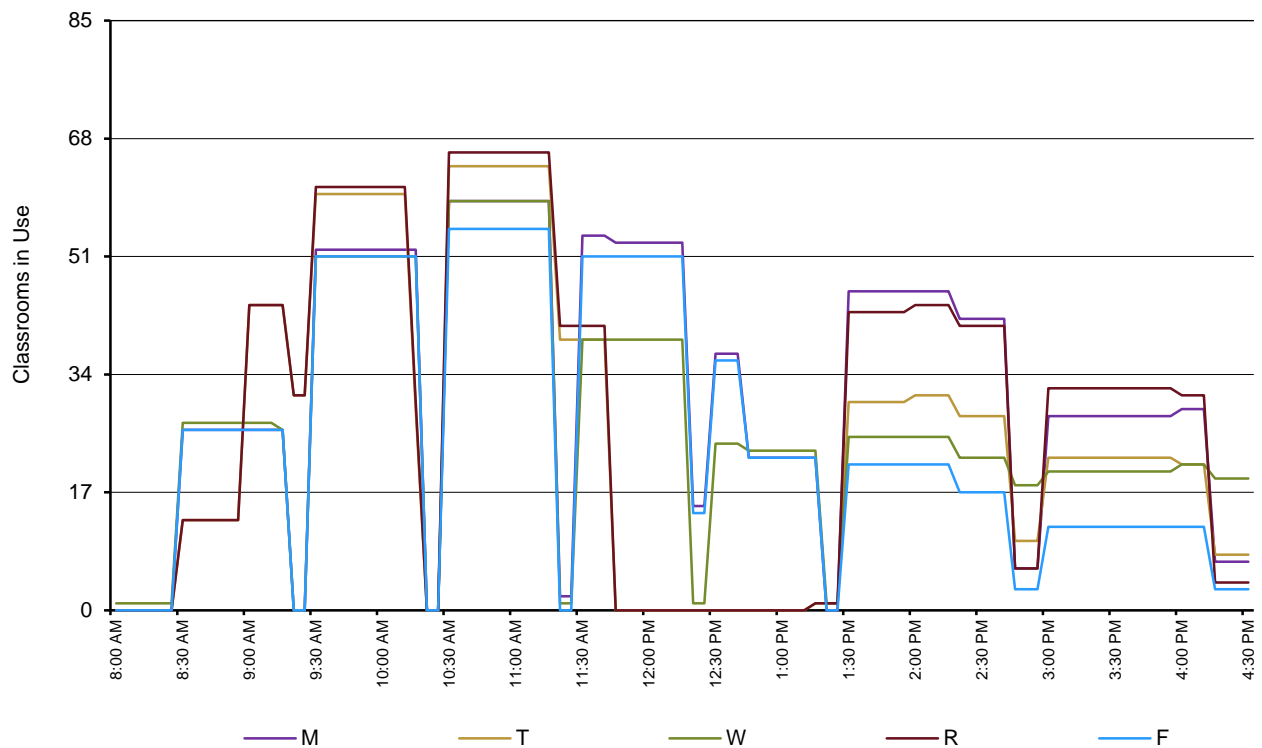
Figure 10: Classrooms in Use by Day and Time



Monday, Wednesday, and Friday at Dickinson College see a fairly steady number of classrooms in use between 9:30 a.m. and 1:30 p.m. This is indicative of the various morning language courses and associated afternoon labs. Tuesday and Thursday morning schedule is similarly steady but with the drop-off occurring at 12:00 p.m., instead. This is attributable to the Tuesday-Thursday activity period / common hour at Dickinson that runs from 12:00 p.m. to 1:15 p.m. The maximum number of rooms scheduled is 66 of the available 85 spaces between the hours of 10:30 a.m. and 11:15 a.m. on a Thursday. This timeframe reflects the peak point of use across all five days. Overall, there is low use in the afternoons.

Figure 11 overlaps daily graphs of the number of classrooms in use by five-minute intervals to provide another graphic means of comparing daily classroom use.

Figure 11: Classrooms in Use by Day and Time (n = 85)



Utilization, Occupancy, and Capacity

The 85 classrooms that existed during Fall 2013 were separated into two groups in this analysis: classrooms having 70 or fewer seats and those with more than 70 seats. Each group was analyzed separately due to the different guidelines for weekly utilization and seat occupancy. This approach allows for a more thorough analysis. It was found that classrooms seating 70 or fewer students were not only largely underutilized, but also exhibited low seat occupancy rates compared to targets. The few classroom spaces seating more than 70 students were underutilized and under occupied as well. Both categories of space had average station sizes that were below guideline ASF per seat.

70 or Fewer Students

Utilization

There were 80 classrooms seating 70 or fewer students. While planning guidelines suggest for these spaces to be scheduled for instruction during 67 to 70 percent of the weekly daytime scheduling window, average hour utilization was 37 percent, significantly lower than recommended. Overall, average hour utilization ranged from 76 percent in Denny Hall 204, a 25-seat classroom (10 courses), to seven percent in Tome 227, an 18-seat classroom (1 course).

Occupancy

Two-thirds of the seats in a room seating 70 or fewer students should be filled, on average, when the room is scheduled for instruction. During Fall 2013, such rooms had an average seat occupancy of 58 percent. Bosler, Dana, and Denny Halls are all academic buildings on campus that have seat occupancies well below the standard. Weiss Center had the highest average seat occupancy of any College building at 88 percent. Average seat occupancy ranged from over 100 percent in East College 312, a 13-seat classroom with six courses, to 17 percent in Bosler Hall 208, a 50-seat classroom with four courses.

Capacity

Rooms too small for their number of seats feel crowded, are difficult to reconfigure, and limit pedagogical flexibility. Average ASF per seat for classrooms seating 70 or fewer students varies by room type and furnishings. A planning guideline of 20 to 25 ASF per seat is recommended for classrooms seating 30 or fewer students. Rooms seating more students can allocate as few as 18 to 20 ASF per seat if equipped with tablet armchairs. Average seat size for classrooms seating 70 or fewer students was 22.5 ASF and on target. Capacity ranges from 11.3 ASF per seat in East College 102 to 42.7 ASF per seat in Stern Center 12.

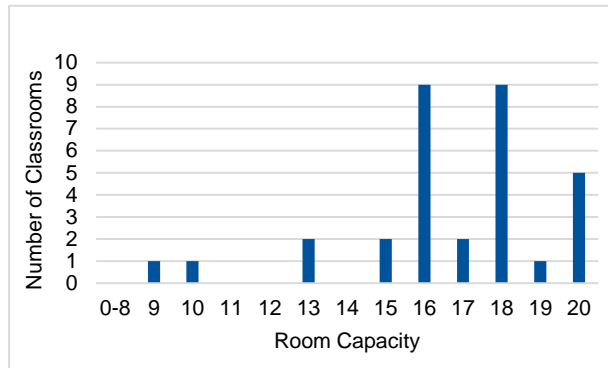
Figure 12A presents the distribution of classroom capacities and their average hour utilization, seat occupancy, and ASF per seat by building and capacity category for classrooms seating 70 or fewer students. Guidelines for average hour utilization and average seat occupancy are provided at the tops of their respective columns.

Figure 12A: Classrooms ≤ 70 Seats Distribution and Summary Utilization Findings

≤ 70 Seats																			Goals			Total ASF
																			67%	67%	Varies*	
Seats per Space	Althouse Hall	Asbell Center	Bosler Hall	Cook International House	Dana Hall	Denny Hall	East College	Kade House	Kauffman Hall	Kline Life Sport Complex	Rector - Stuart Hall	South College Annex	Stern Center	Tome Scientific Hall	Waidner Spahr Library	Weiss Center	West College	Total Spaces	Average Hour Utilization	Average Seat Occupancy	Average ASF per Seat	
1 to 20	2		10			2	5	1		1		2	2	2	2	1	2	32	28%	66%	25.0	3,088
21 to 30	2	1	4	1	1	3	3		3				1		1		1	21	39%	59%	23.8	4,992
31 to 40	4		2		1	4			2		1		1	1	1			17	47%	61%	23.5	9,452
41 to 50			1		1	6								1				9	46%	47%	16.1	944
51 to 60							1											1	47%	52%	19.6	2,048
Spaces	8	1	17	1	3	15	9	1	5	1	1	2	4	4	4	1	3	80	Overall Avg. 37%	Overall Avg. 58%	Overall Avg.	Overall
Daytime Hr. Utilization	50%	7%	42%	8%	35%	45%	42%	18%	37%	7%	59%	15%	48%	30%	3%	15%	25%	Overall Avg.				
Avg. Seat Occupancy	72%	64%	50%	50%	51%	51%	67%	87%	71%	20%	60%	31%	60%	62%	33%	88%	47%	Overall Avg.				
Avg. ASF per Seat	26.1	19.2	19.0	11.5	30.1	17.5	18.7	25.2	35.8	23.8	28.1	32.6	22.2	22.3	31.6	30.9	21.8	Overall Average			22.5	Total ASF
Total ASF	6,152	480	7,386	252	3,072	9,112	3,815	378	5,408	476	900	1,302	2,153	2,670	2,657	402	1,353	Overall Total ASF				47,968

*ASF per seat varies according to classroom type, furnishings, and capacity.

Figure 12B: Classrooms ≤ 20 Seats Distribution



- Figure 12 B illustrates the distribution of the 32 classrooms that are within the 1-20 capacity.
- Classrooms with a capacity of 16 and 18 are the most common, with nine classrooms each.

More Than 70 Students

There are only five classrooms that seat more than 70 students. These rooms have low average occupancy and utilization rates: Similar to specialized instructional spaces, these rooms are relatively costly to run (heat, lights) for less than optimal use.

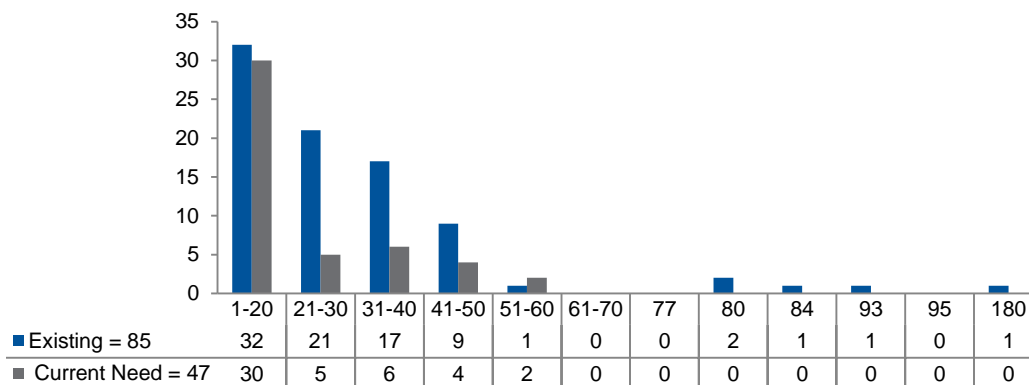
- Average utilization was 31%, well below the metric of 67 to 70% time use.
- Average occupancy was just 32%, significantly below the proposed fill rate of 80% for these spaces.
- Average ASF was 16.1, a respectable average seat size for these capacity rooms.

Current Optimal Demand

The needed distribution of classroom capacities was based on Fall 2013 course data and the current 37.5-hour weekly daytime scheduling window. Need was calculated based on guidelines of 67 percent average weekly daytime hour utilization, average seat occupancy of 67 percent for spaces seating up to 70 students, and average seat occupancy of 80 percent for spaces seating over 70 students.

In contrast to the 85 classrooms and 56,308 ASF of classroom space, a current optimal need for 47 classrooms comprising 29,070 ASF was calculated, albeit with a different distribution of capacities than currently exists. The most significant difference between the existing and current optimal need is a recommendation for 16 fewer 21- to 30-seat classrooms.

Figure 13: Existing and Current Optimal Need by Capacity



Right-Sizing

“Right-sizing” is the adjustment of the number of seats through the application of a planning guideline to achieve a target ASF guideline. Generally, this hypothetical/mathematical exercise will identify rooms where a reduction in the number of seats could ease overcrowding and provide classrooms of a needed capacity for the campus. Because Dickinson College has, on average, 22 ASF/seat already, right-sizing would not provide any significant shift in seating capacities.

Intra-Week and Intra-Day Demand

Calculation of the needed distribution of classroom capacities assumes average utilization of 67 percent of the weekly scheduling window for each capacity category. It makes no assumption regarding when classrooms in any one capacity category will be scheduled during the week or during the day. If courses were evenly distributed throughout the week and day within each capacity category, the optimal distribution of classrooms to satisfy current need would be sufficient. A different scheduling pattern, however, could create peaks in demand that would necessitate more classrooms of certain capacities.

Figure 14 illustrates how this would occur by graphing Fall 2013 classroom courses by day and time of day in a hypothetical array of adequately-sized classrooms and comparing the resulting classrooms that would be in use to the distribution of classrooms recommended to satisfy current demand. This scenario models the peaks and valleys of demand for classrooms of different sizes if Fall 2013 course schedules and enrollments were held constant. As Figure 14 illustrates, the number and capacity distribution of classrooms needed to satisfy peak demand would be much different from that of the calculated optimal need. This is especially true of 20-seat classrooms, with a peak demand of 43 classrooms versus an optimal current need for 30 classrooms.

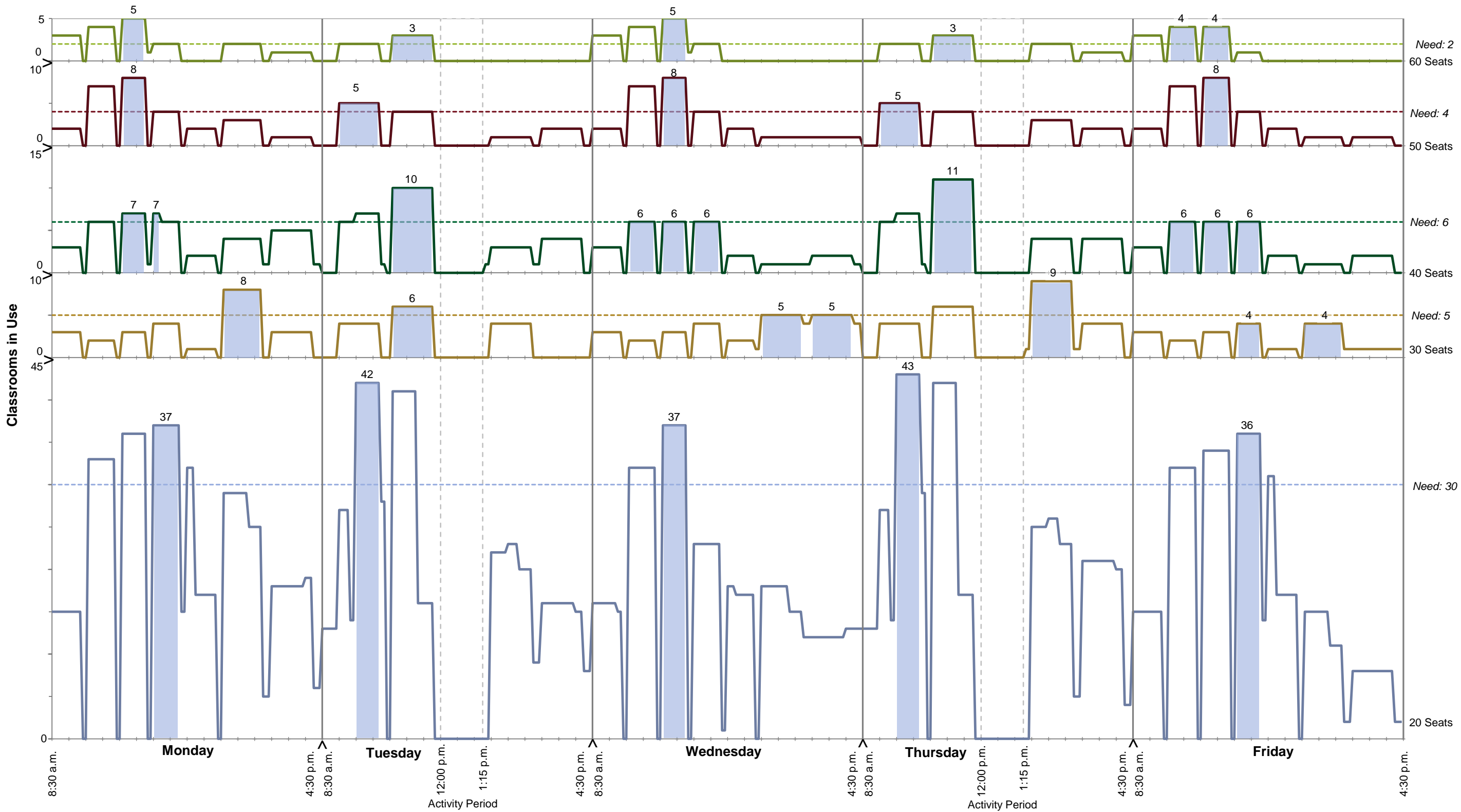
Some “smoothing” of demand within each capacity category could be achieved by moving courses to times during which fewer courses are scheduled. The goal of such an exercise would be to keep classroom demand in each capacity category beneath the “line” of current optimal need for classrooms. Whether this is practical in every capacity category or during every time block depends on the nature of the courses and the population of students taking them and the availability of faculty to teach them. Moving enough 20-seat classroom course meetings to lesser-used scheduling blocks to significantly even out demand for these spaces may not be practical. More room for maneuvering exists in the two largest capacity categories illustrated.

Taking both the optimal distribution of classrooms to satisfy current need and the intra-week and intra-day demand shown in Figure 14 into account suggests that an attempt to even-out classroom demand through scheduling adjustments would be a worthwhile exercise before capital planning decisions regarding the provision of new or renovated classrooms are made.



Figure 14: Optimally-Sized Classrooms in Use by Day, Time, and Capacity

----- Represents Current Optimal Need by Capacity



Other Considerations

The guidelines and analyses used in this study to evaluate the need for classroom space and for determining how effectively current classrooms are used are quantitative tools that are not meant to be used in isolation. Among the factors affecting how classrooms are used and the array of classroom capacities needed are the following:

- Programmatic needs
- Pedagogical preferences
- Non-instructional use of classrooms

Programmatic Needs

Staffing levels can have an effect on how classrooms are used. Constraints on the number of faculty available during a given time can result in increased course sections sizes. While these conditions may be temporary, they occur in a relatively static portfolio of classrooms and can result in overcrowding or overscheduling of certain spaces when appropriately-sized rooms are not available. Though such conflicts hamper the efficient scheduling of classrooms, they may be unavoidable.

Pedagogical Preferences

Mismatches between course section sizes and room capacities can occur when section sizes are capped to achieve particular student-instructor ratios. They can also occur when efforts are made to schedule a department's courses in its headquarters building. While these factors exist in tension with efficient scheduling practices, they are considerations that shape the environment in which learning takes place.

The need for breakout space to suit certain teaching methods can also affect the size and number of rooms that need to be scheduled to accommodate a course section. While the use of breakouts associated with classroom instruction is a trend in higher education, its prevalence and potential on Dickinson's campus is unknown. Breakout groups can also be formed by rearranging the furniture within a classroom already scheduled for instruction. This would not necessarily be reflected in course scheduling data, though it may influence faculty to request certain classrooms with movable furniture and sufficient space for its reconfiguration, even if that space may be larger than necessary to accommodate a given course enrollment. Some faculty might not use breakouts because of a perceived lack of space in which they could occur. In either case, detailed instructional space planning should involve ascertaining the desire for breakouts by faculty and the specification of classrooms that can accommodate both instruction and breakouts in the same space during a course meeting.

Non-Instructional Use of Classrooms

Non-instructional use of classrooms can include course-related activities such as review, study, and tutoring sessions, extra testing time, film screenings, and talks by guest speakers.

Classroom Recommendations

While Fall 2013 course data yielded an optimal need of only 47 classrooms as compared to the current pool of 85, a peak actual demand of 66 classrooms existed on Thursday mornings during the semester. If scheduling adjustments cannot be made to distribute courses more evenly throughout each day and throughout the week, then peak demand must be accommodated.

Though there was no calculated need for the larger classrooms that currently exist on campus, these rooms should be retained. Conversion of spaces with sloped or stepped floors to other uses can be cost-prohibitive, and their suitability to the case-study method, use of media in instruction, and ability to host guest speakers and other events gives them a value beyond fulfillment of peak classroom demand. Retention of these rooms brings the calculation of optimal classroom need to 52 classrooms. The remaining 14 classrooms that would be required to meet the peak demand of 66 rooms fall primarily in smaller classroom size categories. How this demand is satisfied, based on existing spaces, should take room quality, location, and anticipated enrollment into account. While an array of small-capacity classrooms can be readily created, the College may wish to create classrooms utilizing furnishings and/or seating arrangements that require more ASF per seat than needed for conventional classrooms using tablet-arm chairs or table-and-chair seating. Consideration should thus be given to retaining classrooms having greater areas in anticipation of supporting such needs.

SPECIALIZED INSTRUCTIONAL SPACES

A specialized instructional space, as defined by the National Center for Education Statistics (NCES), is a space used primarily for formally or regularly scheduled classes requiring special-purpose equipment or a specific configuration for student participation, experimentation, observations, or practice in an academic discipline. Such a space is designed for or furnished with equipment to serve the needs of a particular discipline for group instruction, limiting the room's use by other disciplines. Although NCES refers to these spaces as "laboratory facilities," the more descriptive term "specialized instructional space" is used to encompass studios and other spaces not commonly referred to as laboratories. Rickes Associates analyzed data based on discipline, and findings in this section are grouped accordingly.

SI Space Utilization, Occupancy, and Capacity

Due to their relatively higher capital and operating costs, as well as course-specific amenities, the metrics for evaluating SI spaces are different from those used to evaluate classrooms.

A weekly hour utilization guideline of 50 percent of the daytime weekly scheduling window was applied to allow experiments, materials, and equipment to be set-up and taken-down, and to permit students to use these spaces for coursework outside of scheduled instruction. Guideline station occupancy for SI spaces is 80 percent, abstracted from the ideas of both their greater expense and specific configuration.

Utilization

The 44 SI spaces at Dickinson College had an average hour utilization of 23 percent of the daytime weekly scheduling window. This represents only half of the daytime target. Specific spaces were responsible for significantly lowering this number, such as the Astronomy Workshop in Tome Scientific Hall and the Painting Studio in Weiss Center. Using the 50 percent daytime hour utilization guideline, only two spaces had an average utilization exceeding the recommendation. These two spaces were the Chemistry Lab in Rector - Stuart Hall Room 1121 and Computer Lab in Tome Scientific Hall Room 118.

Occupancy

Average daytime station occupancy for SI spaces at Dickinson College was 64 percent, below the 80 percent guideline. Rooms with low station occupancy rates either have too many stations relative to lab sizes or too few students, depending upon perspective. The intent would be to have a better alignment of course enrollments to room capacities so as to avoid the over-investment of capital resources.

Daytime station occupancies for three rooms were at or over 100 percent occupancy, indicating additional seats or sharing of stations by two or more students:

- Astronomy Workshop -Tome Scientific Hall | Room 105;
- Biology Lab – Rector - James Hall Science Center | Room 1218; and
- Environmental Studies Lab -Kaufman Hall | Room 109.

Capacity

Guideline station size varies based on SI space type and function. Almost half of the SI spaces are within 10 ASF of their guideline station size. A few SI spaces appeared to be more generously sized when compared to station counts. Such stations included the Ceramics Studio at Goodyear Arts Studio, Electronics and Circuits Lab at Tome Scientific Hall, and the Printmaking Studio at Weiss Center. Well over half of these SI spaces were over guideline ASF per station. In general, the 44 spaces encompassed 48,080 ASF, contained 1,092 stations, and were utilized 23 percent of the day at 64 percent occupancy.

A summary by room and discipline of the metrics of utilization, occupancy, and capacity as related to associated guideline for the 44 SI spaces is summarized in the Appendix. In addition, although not applied, the recommended ASF per station by discipline is identified for reference. In some instances, space assignment information was not available and so has been left blank.

Space Needs

Based on the location of the SI spaces and the discipline specificity of some of the rooms, the existing number of spaces and associated square footage appears to be appropriate. There may be an opportunity to reduce the use of computer labs through re-organization as some are minimally used. In terms of need, the Psychology / Computer Lab courses are at the high end of the use spectrum and could use an additional space, particularly if enrollment were to grow.

Summary

The utilization analysis of the 85 general-purpose classrooms identified a need for just 47 spaces, presuming scheduling is more uniformly distributed across the day and the week. Currently, the majority of the courses are scheduled in the morning period, showing 66 rooms in simultaneous use at peak. The existing number of classrooms is sufficient to satisfy current instructional need.

On average, Dickinson's 44 SI spaces were scheduled for an average of 23 percent of the daytime scheduling window. While average hour utilization is an important metric for determining how effectively instructional space is being used, the value of devoting space to given disciplines is ultimately a matter of their programmatic role within the institution. As some rooms are required to support specific academic program needs, they will, by necessity, exhibit chronically low use.

While there may be the opportunity to combine a few of the rooms based on a shared discipline, it is proposed that Dickinson College take a closer look at the individual labs by department to ascertain why the use is low. For example, it may be a case where a lab is truly very specialized, or it may be that courses have traditionally been held in a specific lab space.

INTERVIEW & SELECT SURVEY FINDINGS

Overview

During the week of March 3, 2014, Rickes Associates conducted three days of interviews in order to support the preparation of the Dickinson College Educational Space Master Plan. One interview was conducted by conference call, while the rest took place on campus. Interviewees included a member of the Board of Trustees, senior administrators, departmental and unit directors, faculty members, administrative and academic staff members, and students.

Interviews typically began with a review of current and projected staffing levels based on information provided by Human Resources. Next came questions regarding the appropriateness and adequacy of current space, using the College's space inventory database. In addition, the interview team sought insights into programmatic and spatial relationships between departments, and what facility improvements were needed to meet current and future program and operational requirements.

Of equal importance were the opportunities to discuss curricular and pedagogical changes that would impact the use of space on the Dickinson campus; existing and projected space needs based on enrollment and personnel growth; and overall campus space needs.

While detailed data on personnel, locations, and specific space deficiencies were gathered and will be used to complete the Plan, this document focuses on several broad themes that emerged from the interviews. These are summarized on the following pages. They are not prioritized.

The HUB (Holland Union Building)

The HUB is the center of campus life at Dickinson. It is a fairly typical student union with space dedicated to services common to all students: dining, mail, bookstore, student organizations. While the HUB is successful in many ways, it has some serious shortcomings, some resulting from its original design, others coming into focus as enrollment grows and demands increase. Some of the key issues raised in the interviews are:

- Student organizations that are housed in the HUB see it as the most appropriate location for them but face a lack of space, limited access and visibility, and not enough opportunities for productive adjacencies
- Many student organizations that are not now in the HUB would like to be, but there is not enough space for all groups that want to be there.
- There are several Student Development and Auxiliary Services functions, without enough space, in the HUB; others that are not in that location would like to be.
- Dining/Catering have outgrown their spaces, suffering from insufficient space in general, and obsolete or dated back of house functions in particular.
- The student dining room, which is the main dining hall on campus, is too small, unattractive, and outdated with respect to current campus food service meal counts, philosophy, approach to food preservation and serving, and methods. It suffers when compared to direct peer facilities.
- The Bookstore and Mail Room need more efficient layouts for administration and operations. Delivery and service functions for these areas have inadequate space which is inefficient and challenging with deliveries.
- The HUB sits at the crossroads of important campus pedestrian routes, but the design does not offer pleasant, efficient and readily visible routes through the building. Based on campus planning principles and the current campus plan, the HUB needs to be modified to allow these paths to flow through the building and provide spaces along these interior routes for student gathering, people-watching and meeting, and easy access to union functions.

Allison Hall

Allison Hall is a lovely former church that was acquired by the College in 2012. The building matches the adjacent student residence halls in architectural style, and offers a main space (the former sanctuary) seating 600 in the original pews, along with 150 additional seats in the balcony and in temporary seats; a fellowship hall below the main space; an education wing that has several classrooms and offices; and a small chapel. The College is currently using the main space for special lectures and presentations, while the fellowship room is being used as a community space for a variety of student events and gatherings. The chapel is used as an interdenominational worship space.

During the interviews, many uses were proposed for Allison, including:

- Performances/events
- Meetings/conferences
- Student clubs and organizations
- Instructional spaces
- Offices

The building offers great opportunities for any of these uses, but will require significant renovations, especially in the main space, to take advantage of them. The location also needs to be carefully considered when finalizing uses, as it sits at the corner of one of the College's residential quadrangles at the "far" southwest corner of the campus. Challenges of perceived remoteness and physical access need to be resolved when potential uses are considered. If Allison becomes a popular destination, there's the opportunity to liven up that portion of campus. The current campus master plan shows a significant addition to the education wing.

Athletics and Recreation

Consider the effects of shifts in enrollment on the demands of faculty, staff and community, and then factor in the increasing participation of students in both varsity and recreational sports, and you have considerable stress on the existing Kline Athletic Center. Complaints about the inability of non-varsity athletes to get court time, the inadequate locker rooms and other support spaces for varsity teams, the lack of space to address the PE requirement and serve student organizations; and space to enhance the health and wellness of the campus community, were frequent during the interviews.

The master plan for athletics and recreation facilities has been adopted and is currently evidenced by an addition to Kline that is now under construction. However, the current expansion addresses only a few of the many critical space needs. As a result, additional expansion is anticipated over the next few years, with the pace of construction dependent on fund-raising. A primary need at present is to focus on the backfill of space in Kline that will be vacated once the new addition comes on line.

Visual and Performing Arts

The state of the arts, both visual and performing, was the subject of frequent and sometimes extended discussion during the interviews. By all accounts the arts community at Dickinson is vibrant and growing. The College has attempted to keep pace with increasing demands for individual and interdisciplinary arts curriculums and programs. With one major exception, however, the lack of funds; less-than-adequate, inefficient, uninspiring existing facilities; and a piece-meal approach to addressing "hot" facility issues have limited progress to the acquisition of two off-campus buildings that housed dance and studio art, and small renovation projects. The single exception is the Rubendall Recital Hall in the Weiss Center, which is a fine facility that showcases certain aspects of the Music program, but has little impact on the other arts.

Art facilities are scattered from one end of the campus to the other, and in some cases are off campus, diffusing the Dickinson arts community. While the Weiss Center and the Mathers Theater are being used to capacity, others such as the Anita Tuvin Schlechter Auditorium are not. They are hampered by serious shortcomings that limit the number, size and type of concerts, performances and exhibitions that the College can offer; restrict basic functions like music practice, theater and dance rehearsals, art exhibitions, and storage; and constrain experimentation and interdisciplinary explorations.

The needs are formidable, in light of both lack of facilities and increasing demand. Many members of the campus community commented that the arts have been "a stepchild" on campus for years, and stated that it is time to step up the commitment. This need was raised by

the Arts Executive Committee, senior administration officials, faculty members from other departments, and students with the goal to promote Dickinson to become a more cohesive brand, to work toward a much higher level of visibility and identity on campus and in the community at large and regionally. As a liberal arts campus, the Arts need to be raised to that of the Sciences. This is, of course, a catch 22: in order to develop that strong identity and audience, the College must have high-quality facilities in which to provide an array of opportunities for students; offer superior and varied events for the arts community; and promote arts programs specifically and in general. The development of an Arts Master Plan (an approach under discussion) should address this issue with vision, and with the high level of interdisciplinary thought and pragmatism that these programs have exhibited over the past few years as interest in the arts has grown but related facilities have not.

Meeting, Gathering, Performance & Events Spaces

The issue that was brought up in the most interviews was the need for a larger number and variety of spaces for students to gather informally and to produce, support and attend events and performances of a wide variety of types and sizes. More specifically, interviewees cited the lack of a sufficient number and quality of the following:

- Student gathering spaces, both indoors and outdoors
- Performance and event venues for all sizes of groups, to seat up to the entire campus community
- Meeting rooms for organizations and clubs
- Places for students and faculty to meet, individually and in small groups
- Faculty meeting spaces

There was also considerable interest in the College developing a conference center capable of hosting a wide variety of types and sizes of events, some concurrently.

A related issue was the scheduling of events and venues on campus. Shortages of sufficient spaces of the right sizes and levels of technology and food service exacerbate the difficulties of obtaining space for student, faculty and administration events and meetings; and of scheduling space for such a variety and number of organizations. The logistics of mobilization at the HUB, and set up and tear down across the campus, worsen the situation. A bigger space inventory is seen as necessary to allow for a more precise and workable scheduling system.

Office Space

Constantly varying numbers of adjunct professors and instructors, faculty on sabbatical, visiting professors, and emeritus faculty, play havoc with a finite supply of office spaces. The number, nature, character, quality, and location of faculty offices is also in constant flux. By and large, most of the faculty members interviewed expressed comfort, if not total satisfaction, with their office environments. However, issues such as the coming of a new faculty member in the fall, with no offices to spare, continue to surface.

The same is true for administrative/staff offices, as programs change for a variety of reasons. Financial, academic, service, and auxiliary program staffs evolve, and support functions and spaces, such as conference spaces, must be adjusted accordingly.

Properly-sized offices are divided; closets and storage rooms become offices; instructional spaces are converted into office space for adjuncts; and offices are placed adjacent to other campus functions that are not conducive to an office environment. All of these conditions are reasons for having some flexibility in the College's office space inventory. This can be accomplished by establishing a planning basis for adding offices as part of some, if not all, construction projects, and/or building dedicated swing space designed appropriately and located conveniently to meet faculty and staff needs. Standards for the location and design of renovated and new offices would also help prevent inappropriate and inefficient offices from multiplying.

Comments were received with regard to the widespread distribution of administrative offices and units. This, together with many such offices being located in older buildings (Old West, 50 Mooreland, South College West), suggests that a dedicated administration building, perhaps with swing space incorporated, should be considered. For example, a renovated Old West with an appropriate addition to consolidate offices may be an option.

Instructional Spaces

Dickinson has an inventory of academic instructional spaces in buildings dating from the mid-1800's to the present day, and thus a wide variety of types, sizes, and levels of quality. The most recent upgrades, as in Althouse and Stern, and of course new buildings such as the Rector Science Complex, represent state-of-the-art classrooms, labs and seminar rooms. In contrast, spaces that have not been rehabilitated within the last 10 years or so are dated in appearance and comfort, and obsolete in terms of technology.

The College has a continuing program of instructional space upgrading, and in general is meeting the need for state-of-the-art learning environments. There are, however, issues that need to be addressed as quickly as possible to allow Dickinson faculty to effectively teach in every instructional space:

- Installation of "smart classroom" program for existing buildings is not yet complete.
- The quality of instructional space is not equal campus-wide.
- Appropriate space is needed to accommodate new trends and technologies such as "maker space" instruction.
- There are too many larger general-purpose classrooms and lecture halls, and not enough seminar and small group rooms.
- More collaborative and student/faculty meeting space in instructional space layouts is needed.
- A significant number of classrooms still feature dysfunctional furniture such as tablet arm desks.
- Equipment rooms and lecture/discussion spaces are sometimes distant from labs.
- There is limited space to accommodate appropriately-located and equipped interdisciplinary programs (such as the Creative Writing Program within the English Department, or Psychology, Neuroscience, and Biology).
- The white board vs. black board issue remains to be resolved.
- There are too few specialty spaces such as testing rooms for accommodation, individual and group study spaces, majors rooms, etc., which are needed to reduce scheduling pressures on typical instructional spaces and encourage collaboration and impromptu interdisciplinary encounters.
- Spaces are needed for collaboration and student/faculty meetings are in short supply, especially in older buildings but even in new ones.
- Language labs are not consistently right-sized and/or properly equipped, and attempts to make these rooms flexible enough for use by other departments/programs have so far been less than successful.

Information Technology (Library & Information Services)

Meeting the facility needs of Library & Information Services functions at Dickinson is a moving target, and promises to be for the foreseeable future. The discussions involving IT, and typically Academic Technology, all falling under Library & Information Services, resolved around existing situations and problems, and resulted in open-ended recommendations based on a "thinking on our feet while working with what we have" philosophy. The most significant needs facing the College's IT leaders and staff to emerge from the interviews were:

- Upgrading instructional space technology (smart classrooms and seminar rooms) with consistent equity while integrating new trends and programs (maker spaces, lecture capture, Skyping, etc.) using standardized suites of equipment and furniture.
- Improving access to and delivery of services to students, faculty and administration, and determining facility requirements to accomplish this.
- Accommodating an evolving relationship with the Library.
- Creating an Information Commons, including the Media Center, Help Desk functions, perhaps the Writing Center, and training space for students, faculty and staff, to foster access and collaboration for students and faculty.
- Providing flexibility, and consolidating resources and technology/computing power.
- Determining the best way to deliver IT services to all constituents, and accommodating these services in the existing Library.
- Consolidating LIS functions as completely as possible to improve visibility, access, collaboration and efficiency.
- Evaluating and upgrading language instructional spaces in terms of space/size, equipment, and scheduling (consider availability of computer labs).
- Evaluating and upgrading computer labs by addressing issues of location, access (24/7 or less?), dedicated versus open, operating system and software equity among labs, and scheduling to promote broader availability.
- Foreseeing ramifications of laptops, tablets, cloud computing, and other existing and future technologies.

Library

The Waidner-Spahr Library is a revered building at Dickinson. Students mentioned how much they enjoyed studying and gathering in the Library. Student issues were minor in nature, and were generally related to the building's success: too few quiet areas, too few study areas, too few computers, etc. Faculty were equally complimentary. The most common complaint from them was the lack of space for certain programs and activities, caused by the Library staff and administration endeavoring to accommodate new functions and needs while continuing to deliver traditional services to the College community in a finite amount of space.

Space in the Library is thus at a premium. This will be a continuing condition. Basic Library services need more space, collections continue to expand, and more recently-accessioned programs, such as the Writing Center and the Information Commons, need to grow. In addition, it may be desirable to bring off-site administrative, IT and AT functions, currently in Tome Hall, South College East, North Orange Street, and Bosler Hall, to the Library. Not all feel that all IT functions need to be together, but many commented that at least some functions, now dispersed, would benefit from being co-located.

There is a significant demand for additional classroom space in the Library, as well as for additional study rooms. There are now two classrooms, assigned to the Information Commons. Additional group meeting spaces are desired, as is a "signature" conference room for the Library. There appears to be only one conference room in the Library, located adjacent to the Director's office, but it is not big enough to function as a general primary conference room for the building.

As might be expected, storage space is in short supply. At present, the in-house storage area in the basement is at 95 percent capacity. Collections continue to grow, needing climate-controlled secure storage. A storage annex in Goodyear on the northwest edge of the campus does not have climate control. A new collections storage space could be combined with a dedicated swing space, which could allow the Library to develop and experiment with new ideas in the main building without affecting existing spaces and functions.

While the expansion of the digital realm may reduce the need for some forms of storage, the types of materials to be stored continue to evolve. The overall need for collections processing, handling and storage does not seem to be diminishing. The Library is at capacity and is landlocked. Increases in efficiency of space use are constantly countered by new programs and functions. Success in adapting to the changing role of college libraries has resulted in overcrowding and overuse. By all accounts, the Library is doing a commendable job at handling its evolving and expanding role. However, space issues are having an impact on efficiency and effectiveness. Library staff members mentioned a Library Master Plan under preparation. Flexibility and the availability of expansion opportunities will be key factors in planning for accommodating the many, often conflicting, demands that are and will be placed on the building and its occupants in the next few years.

Storage

Lack of storage space is a constant across most, if not all, departments and organizations, and in all facilities. While one would expect this to be true of the older, often historic, buildings on the Dickinson campus, and it is, it is also true for even the most recently-constructed buildings, such as the Rector Science Complex.

Storage space availability to individual departments and units varies widely, but in general, inadequate storage impacts offices, instructional spaces (including laboratories), and support spaces. There is a need for storage immediately adjacent to work spaces, and also for large-scale warehousing or compartmentalized storage located on the fringe or off-campus.

Lack of storage is a significant issue for student groups/organizations, Dining/Catering, and the Bookstore (i.e., in the HUB), for the Trout Gallery, and for the Library. Insufficient storage is sometimes simply a shortage of space in a particular building needed to support the current occupants/users. In other cases, storage space is lost to program spaces such as faculty or student offices, reflecting deeper storage deficiencies in those program spaces. This means less storage for increasing demand.

Providing additional storage space in an existing building is difficult at best, especially on a campus where many support functions are working in less space than they need for existing programs and personnel, let alone for future growth. New buildings often take so long to bring on line that faculty has grown but program space has not, thereby causing storage rooms to be re-purposed. Storage in new facilities is often maxed out on dedication day. Lack of swing space makes things worse.

Buildings

During the course of the interviews, many buildings were mentioned as being favorites, needing significant renovation, or needing replacement. Dickinson's historic buildings are beloved but those that have not been rehabilitated recently were singled out for requiring updating and upgrading if they are to continue to serve the campus community. Two of the College's most important modern (late 20th century) buildings were cited as being dysfunctional and "in the way" of resolving major campus planning and programming issues. Several new buildings should be in future plans, according to the interviewees, to meet specific program requirements as well as to resolve current space issues.

The following is a categorized list of building projects, compiled from interview notes. This list has not been coordinated with the current campus master plan, though we believe this list and the plan are largely in sync with regard to major projects. With the exception of guest houses, the interview process did not address residential buildings.

- | | |
|---|--|
| <ul style="list-style-type: none">• Renovation of historic buildings:<ul style="list-style-type: none">○ Allison Hall○ Biddle House○ Bosler○ Dana○ Denny○ East College○ Old West• Candidates for extensive renovation/expansion:<ul style="list-style-type: none">○ HUB○ Library○ Weiss• Candidates for removal:<ul style="list-style-type: none">○ ATS○ Montgomery Hall | <ul style="list-style-type: none">○ South College West○ 50 Mooreland• New buildings:<ul style="list-style-type: none">○ Alumni House○ Conference Center○ College Inn/Guest Housing○ Performing Arts Center○ Swing Building○ Central Administration• Completion of multi-phase projects planned or currently underway:<ul style="list-style-type: none">○ Kline Athletic Complex and new Field House○ Rector North |
|---|--|

Many of the "small houses" present space issues that will remain in play as long as intensive and often expanding uses are placed in them, often due to lack of space in preferred locations. These buildings are used for student residences, guest houses, student organizations and groups, faculty residences, and administrative and academic functions. While they serve their purposes, they should not be considered permanent solutions, as they are inefficient, remote, and expensive to maintain. They also represent problems with meeting accessibility requirements that are difficult and potentially expensive to resolve. Rand House, where Human Resources is located, is a good example of a small house that serves its purpose but barely adequately, as it does not have enough space or an efficient floor plan for a use that requires different types of office space as well as small and large meeting rooms and a training space.

There was a good deal of discussion about making better use/expanded use of satellite/"edge" buildings such as Goodyear, West Louther Street Warehouse, Kaufman Building, 25 - 27 High Street, and Cubiculo. These buildings were mentioned in the context of meeting various College needs successfully while having the disadvantages of being off campus. The problems are overcome to varying degrees depending on the nature of the programs housed in these buildings, but in general, opinions were weighted toward long-term relocation of these functions to campus.

Buildings that are actually on the campus, but on the fringe, were described as remote and lacking common services such as food service and/or group meeting/storage space, for example. Paths from the center campus to the fringe facilities lack the design features of major paths in the center of campus, thus weakening connectivity.

Swing space has been mentioned in several of the summaries, and is worth a reference under this heading as well. Swing/transitional space is a significant issue, and the lack of it holds back experiments, swaps and renovations that could foster more efficient use of space. Swing space is needed in all categories: instructional, office, support, and storage.

As noted previously, the stated preference is to keep functions “whole” on campus. However, the discussions of off-campus facilities often led to thoughts about the relationship between the College and the town of Carlisle, especially with regard to the Arts. Weaving performing arts venues and visual arts studios and galleries into the fabric of the town is a subject worthy of further consideration in light of the space needs of the arts departments, and may represent a valid exception to the general rule of keeping as much of the College’s program space as possible on campus. At the same time, some thought that not having the premier arts spaces on campus, and preferably in the heart of the campus, was a mistake, reducing or removing daily contact with the arts for students and faculty. This subject should be an important part of the arts master plan mentioned as a necessary action item for immediate implementation.

Conclusion

The interviews provided a fascinating look into the character and life of the Dickinson College community. All comments came from the positive side of the spectrum. The themes represent the most commonly-held opinions on what needs improvement in the spatial realm. Although the spaces used by the Dickinson community are, in general, very good now, there is room for improvement. The need for space can be summarized with a few quotes that highlight some of the most important issues emerging from the interviews:

- “We have a history of making do with what we have.”
- “We have enough space, but it’s in a terrible building.”
- “The sciences have been taken care of; now it’s time for arts and humanities.”
- “We have a very ‘this side and that side of campus’ concept.”
- “The faculty and administrators are used to working with too little, with making do.”

There is much to do, but there is an excellent base on which to build, and a committed and caring Dickinson community to get it done. Construction of new buildings and the renovation or modernization of old ones has not kept pace with the growth in enrollment and changes in pedagogy. As a result of the Educational Master Plan, basic needs and themes have been identified. Ways to meet those needs are being thoughtfully put forward.

The College has excellent examples of new and renovated office, instruction, and service spaces in place for emulation. Creativity in planning the use of space, location of people and programs, collaborative scheduling, policy-writing, and facility planning is needed. Most of all, thoughtful and purposeful space planning is required to make the highest and best use of the space Dickinson has now, and to make sure that new capital projects solve present problems completely and incorporate the flexibility needed to accommodate the changes that will inevitably come in the future.

Surveys

Surveys were electronically distributed to administration, staff, faculty and students. The surveys queried respondents about specific areas of space needs, favorite and least favorite buildings, classrooms, identification of pressing space needs, among others.

- The Staff & Administration survey had 447 respondents (43% Administration, 57% Staff).
- The Faculty survey had 132 respondents, ranging from those that were very new to those who had been with the College for over twenty years.
- The Student survey had 697 respondents from almost all majors at Dickinson College. The distribution was a nearly proportional representation from each of the four years (freshmen, sophomore, junior, senior).

The following summarizes the main highlights of the survey as related to campus-wide space needs. A full summary of findings is provided in the Appendix:

- Lack offices to support new hires.
- Need an increased number of laboratories dedicated to research, teaching, and student projects.
- Lack integration of social and academic life.
- With the exception of the new Science area, there is a lack of student “collision” space in buildings or space where students can convene and build a sense of community.
- Parking is a challenge.
- The dining hall is limited in capacity and is outdated in terms of design and function.
- The residence halls need to be modernized and expanded to provide equal style housing across campus.
- The Anita Tuvin Schlechter Auditorium (ATS), is a versatile place for concerts, performances, lectures and debates, but it seems out of place and is in need of updates.
- Preference by faculty for flexible instructional spaces with furniture that is easily movable.
- Technology should be standardized across the rooms. However there was no sense that technology was not available and if there was a lack of access in a room it did not impinge on instruction.
- Need better control over environmental factors such as heating and lighting.
- Appropriate sized (adult sized) seating.
- More spacious classrooms.

SPACE PROGRAM

Rickes Associates' space guidelines have been developed over time based on extensive experience with the metrics of the Council of Educational Facility Planners International (CEFPI), best practices from representative public and private post-secondary institutions, and other published methodologies. The projections are also informed by RA's experience, interests in higher education planning trends, and knowledge of technological advances and pedagogical changes. The recommended space program is also supported by the qualitative information collected during the interviews and surveys, and informed by observations made during the campus walkthrough.

Planning Methodology

It is critical to note that order-of-magnitude space calculations represent a first iteration of campus space needs and are intended to serve as planning guidelines. Spaces included in the order-of-magnitude calculation are shown as "pools" of space to be used campus-wide, as needed. Given that they are proposed in the aggregate, they are not intended to act as program specifications for any particular building or facility, but to provide an overall sense of current and future space needs. However, where specific space challenges were strongly identified in the interviews and/or via other documentation, some more targeted recommendations for the distribution and re-organization of spaces have been provided. Overall, space is categorized into two main groups, Gross Square Feet (GSF) and Assignable Square Feet (ASF), defined below. For the purpose of this study, all calculations of space needs are calculated as ASF.

- GSF: the sum of all areas on all floors of a building to the outside face of the exterior walls and includes hallways, stairwells, mechanical rooms, rest rooms, etc.
- ASF: the amount of space assigned to people or programs, measured within the interior walls of the defined spaces and includes classrooms, laboratories, offices, study areas, athletics (interior) spaces, bookstores, dining, etc.

Inventory Challenges

The inventory will always be a work in progress and will continue to require refinement and updates. The estimated available square footage, based on the Facilities Management Department FY 14 Building Inventory as of July 2013, is 1.9 million gross square feet. Excluding the faculty and student residential space, the estimated total is 1.3 million gross square feet. This includes all other spaces such as auxiliary areas in Boiling Springs Farm and associated rental space.

The current listed ASF, assignable square feet, for the campus is 663,000 ASF (excluding the 30,000 ASF rental of the warehouse adjacent to Facilities). This distribution, based on a 1.3 million gross square foot campus, would indicate, roughly, an efficiency factor of 50 percent. While the net to gross ratio will be somewhat skewed in the aggregate based on the number of converted houses and the larger hallways and associated circulation, etc. of the older and more majestic buildings, it seems to suggest that the ASF indicated is underrepresented for a campus of this size.

Overview

The following sections compare the assignable square footage (ASF) provided as categorized according to FICM, to the quantity of space currently needed based on order-of-magnitude calculations. Each section also presents some related insights into the qualitative information gathered during the interview and survey process. A summary table is provided at the end of this section.

All units of measure are Assignable Square Feet (ASF).

General-Purpose Instructional Spaces (100)

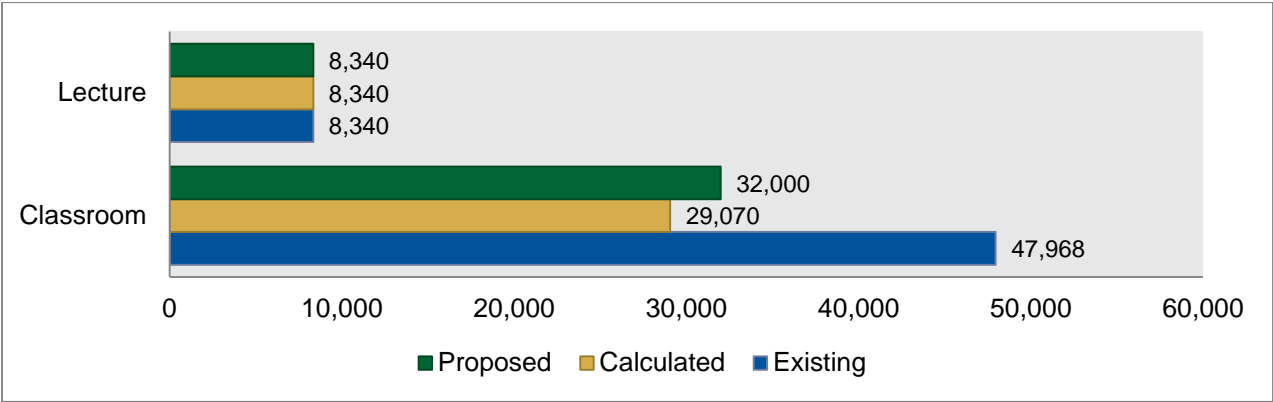
Planning Calculations:

The statistical methodology applied by RA to the instructional space utilization analysis is widely used and accepted in the realm of higher education. The analysis incorporates suggested guidelines for classroom utilization of 67 to 70 percent weekly hour utilization and seat occupancy. The station size is based on an a graduated average ranging from a low of 12 to 15 ASF/seat in large auditoria and lecture rooms, to 25 ASF per seat in flat floor lecture rooms. The overall average is 22 ASF/seat. These averages provide flexibility during the detailed planning process. Again, it is critical to note that these sizes are *planning factors* and not design guidelines.

Findings:

- Dickinson College has 56,308 ASF of actual/scheduled general-purpose classrooms (47,968 ASF) and lecture halls (8,340 ASF).
- Based on Fall 2013 enrollments, the current calculated need is for 47 appropriately sized rooms (29,070 ASF) and associated support, bringing the total general instructional need to roughly 32,000 ASF. Overlaid on this would be the retention of the five larger rooms (8,340 ASF) used for events and some larger combined class meetings, bringing the total pool of instructional space needed to roughly 40,000 square feet.
- The delta between existing space indicated in the inventory of 68,729 ASF and the proposed current need, may be attributed to either incorrectly coded spaces (such as the great room) or rooms that are used by departments and scheduled for small courses but are, in fact, conference or meeting rooms.

Figure 15: Instructional Comparison



The challenge is current scheduling practices, as Dickinson College holds the majority of its courses before noon. This scheduling practice increases the demand for an optimal need of rooms to 66 spaces. If scheduling adjustments cannot be made to distribute courses more evenly throughout each day and throughout the week, then peak demand must be accommodated. As such, retention of the existing number of rooms may be necessary. At a minimum, it is recommended that an effort be made to ensure that the required 47 rooms are appropriately sized. Keeping all spaces available would also support some future enrollment growth, presuming course sizes remain steady.

Specialized Instructional Spaces | Laboratories (200)

Open Laboratory (220)

Laboratory | Research Space (250)

Planning Calculations:

Specialized Instructional (SI) spaces are defined as Series 210/215 and consist of rooms characterized by special equipment that ties instructional activities to a particular discipline. Examples include science laboratories, art studios, etc. The same metrics of analysis are applied to SI spaces as were applied to general-purpose classrooms, but with variations on the guidelines:

- scheduling window (same),
- utilization (50%),
- occupancy (80%), and
- capacity (varies by discipline and space type).

Open laboratory space are areas in which generally non-formal instruction occurs, but the spaces are critical to the promotion of learning. Oftentimes these spaces are open/drop in computer labs, but can also be studio space dedicated to majors or individual practice rooms, such as those seen in visual arts or music. Open labs are calculated for the campus as a whole, using student FTE.

Research space (coded as 250/255) is generally assigned to faculty for individual research associated with grants or to further academic standing. Also prevalent is the assignment of labs to undergraduate students to conduct their own research and/or to work in conjunction with faculty.

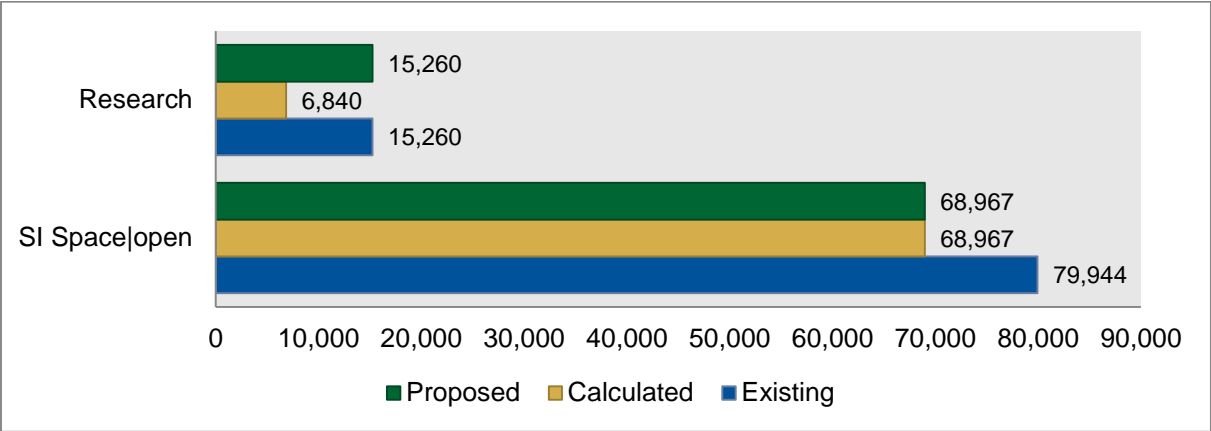
Findings, Instructional and Open Labs:

- There are 42 identified and scheduled specialized spaces encompassing 46,312 ASF and 1,063 stations. Room types range from computer labs to Geomicroscope Labs, from Theatre Design to Anthropology.
- Space need projections are calculated using enrollments for the departmental courses and a review of the seat occupancy. As such, although spaces are generally right-sized based on planning factors, like the classrooms, the existing spaces with few exceptions fall within the guidelines. The current need is equivalent to existing and was maintained.
- There are some room-by-room exceptions, such as Archaeology, where the associated lab space and square footage underserves the need of the program. Also, it is not appropriately located on the campus for efficient use.
- Based on standard calculations, there is a need for less open lab space than what currently exists. Because of the amount of individual open labs, studios, and associated practice spaces, Dickinson has upwards of 40,000 ASF of open / drop in space and associated support. The larger spaces are in Rector - James Hall for Biology, Goodyear for Art Studios, and Rector - Stuart Hall for Chemistry. It may be possible some of these spaces are unscheduled labs and/or could be research space, but it is not clear. Because there is a lack of detailed knowledge of use of the space, the associated square footage has been maintained as is at this time.

Findings, Research:

This space need is calculated using a guideline applied to full-time equivalent faculty. The calculated need for Dickinson is 6,840 ASF. This does not support the requested amount, nor the actual amount of space that currently exists on campus. Based on a review of the inventory and distribution of spaces, and the request for additional space during the interviews to offer more student engagement in research, the existing space was maintained.

Figure 16: Specialized Instructional and Research Space



This space type is typically one of the more expensive for a campus and will need to be disaggregated and cross-checked. Currently it appears that there may be courses assigned to rooms that are not necessarily “labs” and labs assigned to what appear to be research spaces. Some re-coding appears to be in order. In the aggregate, however, there is suitable overall space.

Offices (300)

Planning Calculations:

Office space is defined as Series 300 and encompasses both academic and administrative office space. Clusters include reception areas, conference rooms, workrooms, storage, and dedicated lounges. Student government offices are also counted in this category. While offices are all generally coded as a 310 space, it is recommended that academic, administrative, student, and associated related support spaces be coded separately to permit a finer-grained analysis. This allows for a more effective review of space distribution by department, faculty, administrative levels, and students.

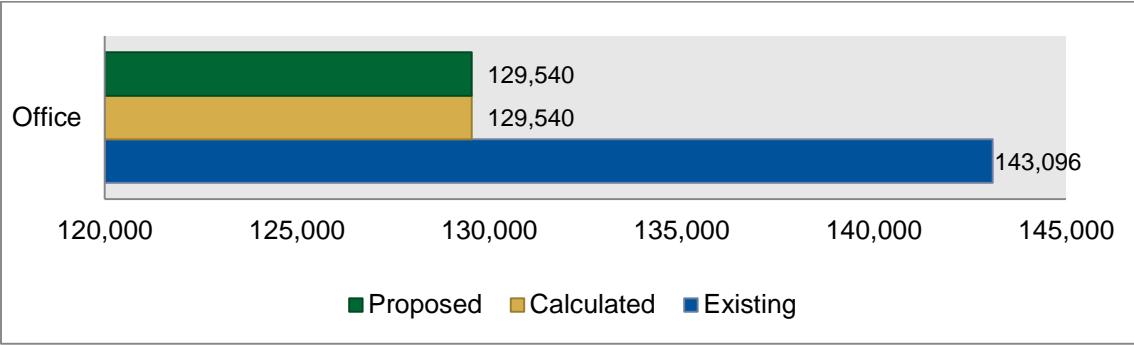
Office space needs are based on a multiplier per faculty, staff, FTE and associated organizational level. Levels are defined as Executive, Deans, Faculty, Professional, Managers, Technicians, etc. The level is important as some areas require less office space because of the nature of their work (e.g., maintenance staff in Facilities do not need private offices or workstations, but do need access to some support spaces), so these formulas are adjusted to reflect a “reduced” staff multiplier.

Academic and administrative office clusters include reception areas, conference rooms, workrooms, storage, and lounges. Current personnel figures were collected from the campus and converted to FTE. The FTE by department/area was multiplied by the appropriate ASF multiplier to provide the base need for offices and associated support spaces.

Findings:

- Overall, 993 headcount personnel were extracted from the data. This number converted to approximately 926 FTE.
- An existing need for 129,540 ASF was calculated.

Figure 17: Office Space



Assuming appropriately-sized and outfitted office spaces, just shy of 130,000 ASF of office space is needed (including support and storage space). Interviews identified challenges, however, with location of the offices, access, and design (some carved out of prior storage areas and some in reconfigured houses). There may also be an “overage” if some spaces are in “legacy” areas (oversized offices) vs. guideline recommendations.

Interestingly, additional office space was requested to meet the demand associated with new hires. It was also noted that there is a significant lack of storage space, in general.

Library Stacks and Processing, Study Space (400):

The Library space (400) needs are derived from CEFPI guidelines. The collection is converted into a “book volume equivalent” based on various components of the collection and a multiplier is applied. Space is separately calculated for stacks, processing space, and support. Space for reading and study areas is calculated based on a proportion of the number of undergraduate, graduate, and faculty FTE as users. Library staff office space and support appears under the calculation for administrative offices.

It should be noted that “study” space also refers to departmental libraries or spaces such as resource and skill centers, learning labs, and small group study rooms in various buildings throughout campus. Some of these spaces may be controlled by individual departments.

The existing library proper encompasses an estimated 103,070 ASF (85,965 ASF excluding offices and associated exhibition space), as identified in the space inventory. An additional 11,141 ASF is distributed in other buildings on campus that range from departmental libraries to reading rooms. The largest amount of space outside the library proper coded as study is in Dickinson Park, with 4,500 ASF assigned to storage for study services.

Libraries and their purpose have been shifting continuously over the past decade. Gone are the days where all students gathered at the library to simply study and read. Learning commons, gathering spaces, and group study areas are now the norm along with the inclusion of computer labs, classrooms, and student study / learning support areas.

For Dickinson College, a previous library study completed in 2011 indicated the existing library was sufficient to support not just the actual functions, but could accommodate an integrated Academic Commons within the existing footprint through re-organization and efficient re-use of space. Given this, the existing ASF for the building has been held constant.

Special Use (500)

Planning Calculations:

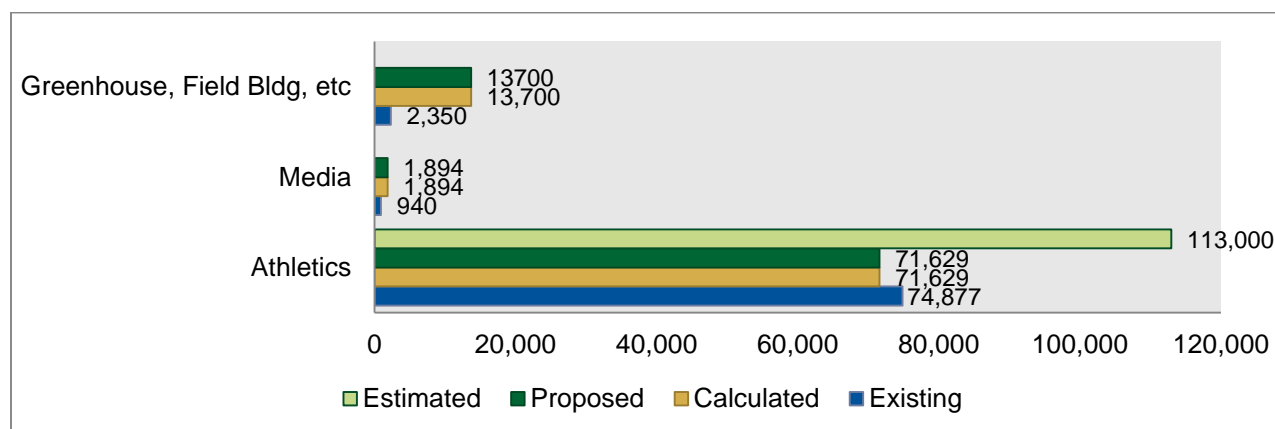
The Special use (500) category includes several room use categories that are sufficiently specialized in their primary activity to merit a unique code and therefore separate consideration. Included are athletic activity, media production, agricultural field activities, and animal associated support buildings.

Findings:

Because of the specialty nature of these spaces, core amounts are provided per guidelines based on type of institution and then augmented ad hoc.

- Athletics:
 - There is currently an estimated 74,688 ASF in the Kline Center, and another 12,388 ASF scheduled to come on line in the Kline Center – Wellness Center as a replacement for existing space.
 - A study completed in 2010 and expanded on in 2011 identifies improvements through renovation and additions to transform the center into a comprehensive facility and will included new gymnasium, locker rooms, sport medicine facilities, swimming pool, office, and associated meeting spaces.
 - The estimated outcome will be somewhere between 113,000 and 125,500 assignable square feet of refined space. This is above the allocated amount for a campus of this size, but supports the campus not only as a Division III, but as part of the campus' culture and drive.
- Media Production:
 - This refers to TV and Radio studios, distribution of materials and signals, etc. Currently there is a radio station located in the lower level of the HUB.
 - Projected need is for slightly larger space.
 - The Pod Cast rooms are not categorized at this time as Media Production and are coded currently under 200's.
- Greenhouse/Field Buildings/Animal Quarters:
 - Dickinson College has a separate Farm that supports the campus through growing of goods and processing of materials. Interviews indicated the existing space at the Farm facility could be expanded and would allow for more support of dining facilities, particularly with an ability to preserve and store food.
 - Existing information is not included in the working space inventory so a comparative analysis of this space type cannot be conducted.
 - Current calculations indicate there is a minimum need for 13,700 ASF of greenhouse space and associated buildings, animal quarters, or demonstration/teaching areas. Some calculations were based on a higher allowance of ASF/FTE, because of the role the Farm plays in the sustainability efforts of the campus.

Figure 18: Special Use Space



Based on the material provided, the proposed space here integrates the recommendations related to the Kline Center as identified in the provided report. Once the square footage for the Farm is integrated into the inventory, the space needs should be confirmed to ensure appropriate space is identified to support the requirements associated with canning, processing, freezing, storing, and maintaining materials.

General Use (600)

Planning Calculations:

General use (600) space includes a broad range of categories serving the campus and greater community, such as assembly, exhibition, theatre, lounges, merchandising, dining services, day care etc.

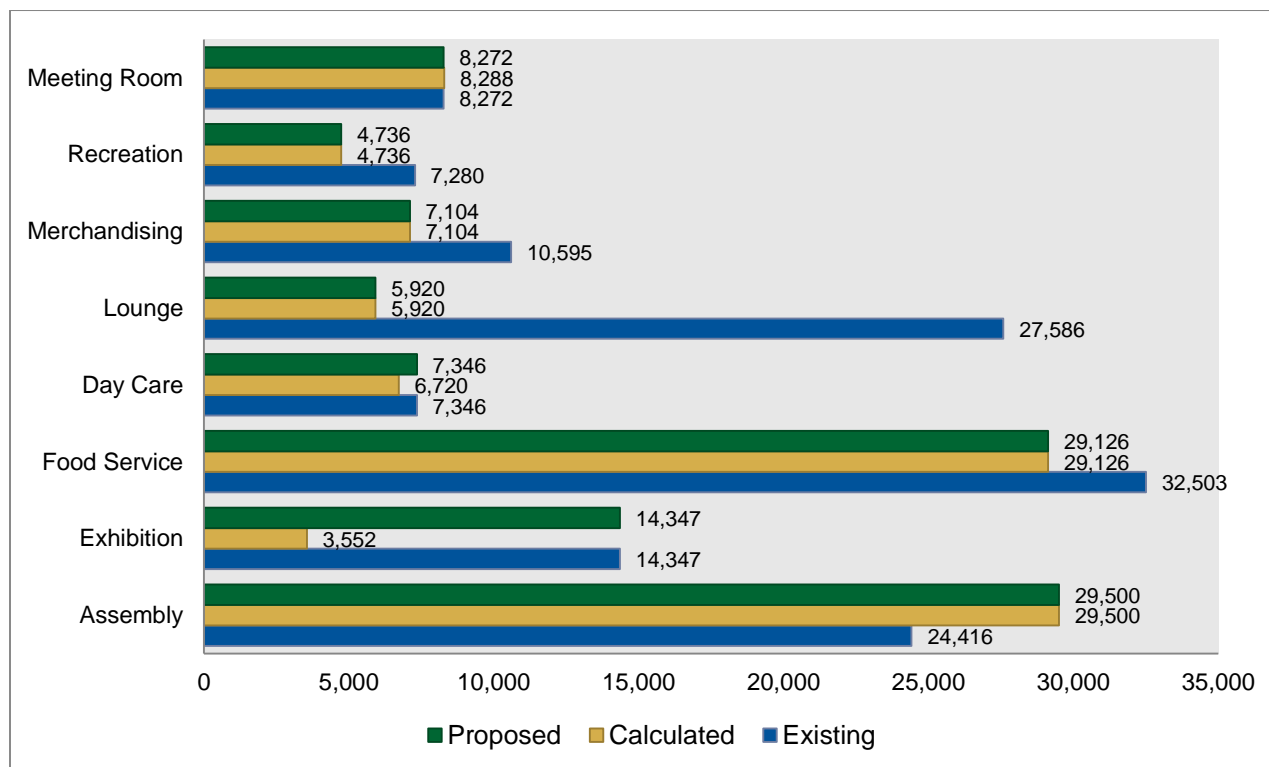
Findings:

Because of the specialty of the space needs, core amounts are provided based on type of institution and then augmented ad hoc.

- Assembly (24,416):
 - Includes the ATS auditorium, Theatre, and the Recital Hall, along with some smaller support areas on campus (HUB, Stern, and Weiss). Of the overall 24,416 ASF, almost half, 12,092 ASF, is for ATS.
 - Calculated need is for 29,500 ASF to support the core needs and Theatre, Music, and Dance. If the ATS is excluded, the balance of space in this category would be 12,324, leaving Dickinson with an even larger deficit. The question here is the fate of the ATS building. If this space is removed, then the College will need to define other Assembly space elsewhere on campus to meet the deficit of 17,000 ASF
- Exhibition (14,347)
 - This space is located in Admissions, Goodyear, Waidner, and Weiss. The largest space for exhibition is assigned to the archival space for the library followed by space located in Goodyear, the Trout Gallery.
 - The calculated need based on square footage per FTE is just 3,552 ASF. If the archival space and Gallery are excluded, there is still an “excess” of exhibition space over the proposed need.
- Food Service (32,503):
 - The main dining area is located in the Holland Union Building and encompasses 24,287 ASF. The additional square footage is distributed to The Quarry, Kaufman, Stern Center, and associated vending areas.
 - The current design of the dining space is outmoded and does not support student expectations. It was indicated that when students meet at the dining hall it is “by the flags” as the space is non-descript and more like a large dining / cafeteria similar to a high school. As such, students sit according to the hanging flags so they know where to meet their friends. In addition, the serving areas are undersized and the back of the house is not able to adequately support the meal needs in the allocated dining time. Other challenges include production issues in relation to the kosher kitchen and the channeling of customers to a center point.
 - While dining does perform an excellent service meeting current requirements, a revamping/re-design is in order. Ideally, this would include brand markets, individual choices, and contemporary seating areas.
 - The calculated main dining space need is roughly 29,000 ASF, slightly less than what currently exists – although clearly configured in a different manner.
 - Additional space for consideration would support catering, updated mechanicals, dedicated office space for cash managers, and loading dock challenges. Consideration could also be given to the decentralization of the grab and go format of dining to remove pressure from the current space.
- Day Care (7,346):
 - The day care center supports 112 children from 6 weeks of age to 6 years. Placement is open to College first and then to the community.
 - The existing space works well and there were no requests or identification of additional needs.
 - The existing square footage was maintained as in includes a well-defined Gym and associated support spaces. The calculated need would come in just under the existing square footage.
- Lounge (27,586)
 - Lounge space for students, faculty, and staff to gather is generally distributed across campus. At Dickinson, there are two main large areas located in Kaufman (1,150 ASF) and Weiss (1,074). Althouse has a combined space of 4,356 ASF across the three floors.
 - Calculated need for the campus is significantly less than existing, at 5,920 ASF.

- Merchandising (10,595)
 - Merchandising space relates to bookstores, supply stores, vending areas, etc. The current inventory identifies 10,595 ASF distributed between the bookstore, the convenience store, and various vending areas on campus.
 - Interview findings indicated some challenges with the bookstore related to the lack of dock area, need for secure storage, and desire to be upstairs and more visible (where theatre is would be ideal).
 - The convenience store would like to remain in a HUB location, near dining and mailboxes, as it works with multiple external vendors.
 - The calculated need for merchandising activities is less than existing (7,104 ASF).
 - The need for the current amount of merchandising space should be reviewed in greater detail. For now, the existing space has been retained.
- Recreation (7,280)
 - Recreation space throughout campus is greater than calculated need (4,736 ASF).
- Meeting Rooms (8,272)
 - As with Merchandising, Dickinson College has what appears to be an overage in the Meeting Room cluster. These rooms are heavily used / scheduled and are mainly located in the HUB.
 - The calculated needs of for just 8,288 ASF for the campus as a whole. However, based on the popularity of these spaces, the existing square footage has been maintained at this time.

Figure 19: General Use



This category has some areas that could be re-designed or reduced if the decision is to downsize some of the campus for other needs, as long as it is done judiciously. For example, lounge space can be reduced in the formal setting if balanced with “collision” spaces in the hallways and in other small group areas on campus.

Central Facilities (700)

Planning Calculations:

Central/Support facilities (700) are the “back of the house” campus spaces such as:

- carpenter, plumbing, and electrical shops;
- physical plant maintenance;
- bulk storage;
- central computer support such as central server, network centers, etc.;
- centralized services such as mail facilities, central shipping and receiving; and
- hazardous material storage.

CEFPI guidelines apportion a percentage of total campus space to this function.

Findings:

In this category, the campus appears to more than sufficient space. The calculated need is for 33,646 ASF, much less than the existing 122,006 ASF. Many of the spaces are large warehouses and dispersed spaces on campus. It is possible a more efficient and consolidated space would be more appropriate.

Health Services (800)

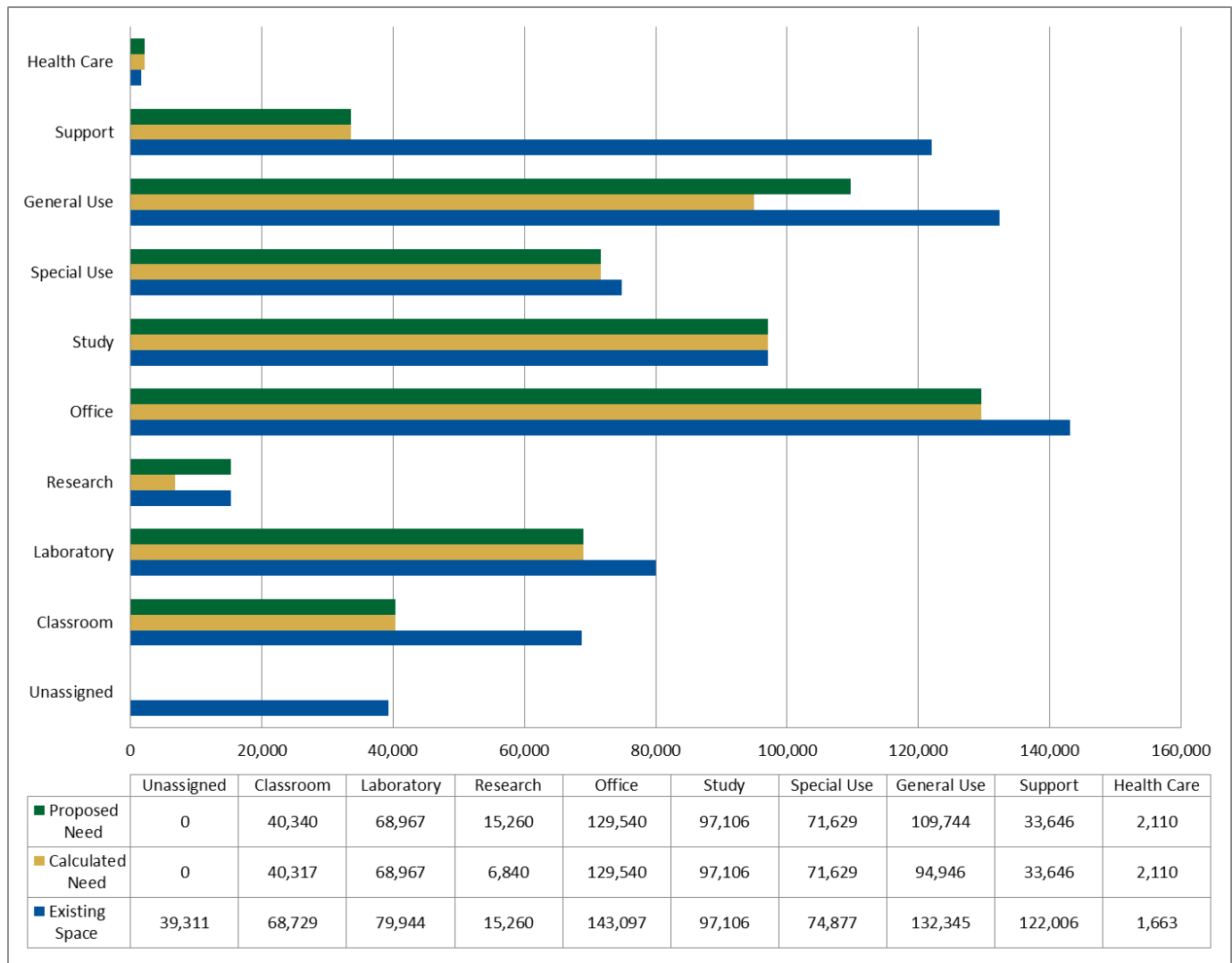
Planning Calculations:

This category refers to student health services, or “wellness centers” in contemporary parlance. CEFPI calculates these needs on a module basis augmented by a per FTE allowance. At Dickinson College, the existing square footage is 1,663 ASF. The calculated need is for 2,110 ASF to support the campus.

Summary

The following table summarizes the existing, calculated, and proposed need to support the existing campus and associated enrollment. Currently, Dickinson College has a minimal square footage deficit, overall.

Figure 20: Summary Table



- Currently, Dickinson College encompasses 774,338 ASF distributed on campus, including about 39,000 ASF of unassigned space (and excluding rented space). If the unassigned is removed, there is a total of roughly 735,000 ASF of useable space on campus and equals 310 ASF/FTE.
- Based on guidelines there is a calculated need for 545,102 ASF to support an enrollment of roughly 2,300 FTE.
- The proposed need indicates what is necessary to meet current enrollment based not just on pure calculated guidelines, but in association with campus classification, location, strategic direction, and the impact of changing trends in higher education. This revised need is 568,342 ASF and would calculated to 240 ASF/FTE.

The space deficit can be met with the re-organization on campus and integration of the unassigned space currently housed in Allison Chapel. The challenge is in balancing the type of space, whether or not it is appropriately located on campus, and the need to make thoughtful and purpose-driven decisions. The following section offers some preliminary options for consideration.

PRELIMINARY OPTIONS

During the on-campus interviews conducted the week of March 3, 2014, many building groups and individual structures were mentioned in a variety of contexts. The following is a summary of the more frequently-discussed larger-scale and/or more complex facility changes that would involve significant capital projects and important changes if implemented.

Some preliminary recommendations are offered as part of this review. Please note that although the consultants briefly reviewed current campus planning documents during the course of the space master plan work, they do not have a thorough, comprehensive understanding of these plans or of the implementation framework for them. While we have done our best under project constraints to propose appropriate and realistic changes, some of these recommendations may conflict in some respect(s) with Dickinson's planning efforts. Our hope is that this section of the report will open some new discussions and/or facilitate or stimulate further development of building plans already in process.

Allison Hall

Allison Hall is a former Methodist church that was acquired in January, 2013, when three local congregations elected to join together and use a different building as their home. This 30,000 square foot building complex offers the College many possibilities for adaptive re-use.

The main sanctuary is a gracious and flexible space. It seats 600 in the existing pews and has space for another 150 people in temporary seats, which can be set up in side and rear galleries and the balcony. The facility also includes a large fellowship hall on the ground floor, a small chapel on the main level, and a variety of offices, small meeting rooms, and storage spaces in a substantial education wing.

The complex is already being used for community space for a variety of student events and gatherings, for worship (in the chapel), and office work, without any renovation to date, in keeping with uses suggested during the interviews:

- performances and events
- meetings and conferences
- student clubs and organizations
- instructional spaces
- offices

Uses identified and selected for the building should take into consideration not only the configuration and character of the existing building, but also the location, at the far southwest corner of the Benjamin Rush Campus, both in terms of the residential context, and the distance from the core campus. There is substantial parking adjacent to the building, which in addition to providing that benefit, also offers the possibility of significant expansion of the complex. Accordingly, the current campus master plan shows a significant addition to the education wing.

The consultant recommends that the College commission a detailed and comprehensive feasibility study to determine the highest and best short-term and long-term use(s) of Allison Hall in the immediate future. This project should be given a high priority status.

Holland Union Building (HUB)

The HUB has served its purpose well and functions as the center of Dickinson College life in many important ways. However, it is functionally obsolete, and needs substantial renovation and expansion to house those operations presently in the building, not to mention the many campus entities that would like to be (and should be) there.

The HUB, as the adopted name implies, is inextricably interwoven with the buildings and pathways that surround it and go through it. Thus its future has been the subject of a great deal of thought in recent campus planning exercises. The need for expanding the HUB to accommodate more student services and organizations; expand dining and book store operations; and accommodate pedestrian movement through it, was a key subject of many interviews. Equally important is the freeing up of space in other overused campus buildings that could occur if the HUB were enhanced with new and substantially renovated space.

The consultant suggests that the HUB and its immediate neighbor buildings (the Waidner-Spahr Library, the Anita Tuvin Schlechter Auditorium, Montgomery Hall, and Biddle House), as well as Britton Plaza and the Dickinson Walk, be the subject of an intensive "precinct plan" that would look at these resources in a comprehensive way and suggest opportunities and constraints related to significant changes. Given the apparent lack of available major building sites, this area, perhaps with the addition of a substantial new underground component, has the potential to be re-planned in such a way that many of the most pressing space needs of the College can be met without an expansion of the institution's development limits.

Kline Athletic Center

The immediate and significant need for additional space for varsity athletics and recreation and related support facilities is well-documented. A comprehensive plan for athletics and recreation facilities has been completed. Kline Athletic Center has been expanded through the construction of a new fitness center, a five-court squash center, and a cafe. The new Durden Athletic Training Center is being constructed at Biddle Field. Other improvements to fields and individual spaces are planned or have been completed recently. Further expansion of the Kline Center and the construction of a new field house at Biddle Field are major projects that will go a long way toward alleviating issues raised many times during the interviews.

The athletics and recreation plan should be updated and completed. In the near term, backfilling vacated space in Kline should be a high priority, though at the time of the interviews, no final plan had been formulated. Also, the need for storage and program space for recreation-oriented student organizations and student/faculty gathering spaces with enhanced food service venues should be taken into account as the plan is developed.

New Administrative Office Building

Administrative space is currently spread across the campus. Most administrative units are somewhat satisfied with their locations and offices, at least on the surface. However, deficiencies soon became apparent. Many interview comments were focused on obtaining higher-quality, more appropriate space, and/or consolidating functions to achieve important adjacencies.

When taking actual physical shortcomings of most of the buildings currently housing administrative functions into account, the consultant suggests that the College consider planning a central administrative building to include all administrative functions except for Admissions and Alumni Affairs. As a result, 50 Mooreland, Rand House, South College West, and Biddle would be vacated. In some cases (50 Mooreland, South College West), buildings would be removed and replaced by higher-priority program space. In the case of Rand House and Biddle House, more appropriate uses would be found.

An administration building, if realized, should include a significant amount of swing space, to allow for needed renovations in other buildings, to allow for experimentation and temporary shuffling in existing spaces, and to accommodate staffing changes.

Two significant problems with this suggestion are: finding a location for such a substantial structure; and disregarding the symbolic importance of Old West as the home of senior administrators. An alternative to a new building might be the renovation and expansion of Old West, though this would be a difficult design and campus planning problem due to the significance of the building and its prime location (an addition might not be permitted by any historic preservation agency having jurisdiction).

Expanded and Consolidated Services Complex

Several interview comments referred to the need for more centralized receiving, storage, preparation, and distribution of College supplies and other purchasing. Storage space for certain program-related items such as works of art, books, and journals also needs to be upgraded and increased. Many of these functions are now in buildings that are shared with program spaces and/or non-College entities.

Creation of a modern materials-handling facility dedicated entirely to the College and with some swing space and room for future expansion (perhaps designed to accommodate a second story in the future) would result in an increased ability of College programs to function in their current locations due to reduced on-site storage requirements.

Anita Tuvin Schlechter Auditorium (ATS)

Like the HUB, the ATS is a significant campus landmark that has served its purpose adequately but that has serious programmatic and functional shortcomings for today's College operations. The ATS was mentioned perhaps more than any other building during the interviews, almost entirely with regard to its deficiencies as a presentation and event space.

The ATS occupies a prime "crossroads" site at the functional center of the campus. It is not big enough to serve its primary function, and its architectural style and concrete structure make modifications and expansion difficult. Consequently, planning studies conducted over the past several years have included calls for the removal of this building to allow the construction of a larger, more flexible, and more "friendly" building to serve as a campus events center and performance venue, and possibly as the College's major theater. The sentiment for replacement of the ATS appears to be growing.

The consultant suggests that the same planning efforts proposed for the renovation and expansion of the HUB include the ATS, as the land on which the ATS sits would be prime ground for additions to the HUB and the Library. Such a project would likely include the removal of Montgomery Hall. With the availability of the sites of the ATS and Montgomery Hall and the adjacent parking lot, and the use of underground construction (assuming there are no major geological issues in the way), meaningful expansion of the Library and the HUB could be feasible. Significant campus landscape and pathway improvements could be realized, as well.

The Arts

The very important subject of the future of the performing and visual arts at Dickinson was addressed extensively during the interviews, and documented at length in the Thematic Summaries. Expansion of the Emil R. Weiss Center for the Arts is proposed in the current master plan, but the needs of all of the arts are not considered in a comprehensive way. A comprehensive Master Plan for the (Performing and Visual) Arts should be undertaken. Such a plan will have an impact on several buildings, including Weiss, South College East and West, the Carlisle Theater/Cubiculo, 25-27 West High Street, the HUB, the ATS, Montgomery Hall, Allison Hall, and the Goodyear Art Studios Building.

While a location for a Performing Arts Center has already been proposed (a greatly-expanded Weiss Center on the sites of South College East and West and adjacent parking lots), finding a place for a Visual Arts Center, to include an expanded Trout Gallery, may prove more difficult. A significant portion of the Master Plan for the Arts effort will need to focus on that issue, as well as on the question of whether the arts should continue to be dispersed across the campus and off campus, or be concentrated in one or two signature structures.

The consultant suggests that the commissioning of a Master Plan for the Arts at Dickinson College should be among the highest priority facilities projects for the immediate future.

The Natural Sciences

Great strides have been made over the past few years in meeting the programmatic space and functional needs of the natural sciences at Dickinson, primarily through the construction of Tome Hall and the Rector complex and the renovation of Kaufman Hall. However, there are still space needs to be met and adjacencies to establish or re-establish. To this end, there are a few projects that should figure prominently in campus planning and development efforts in the near- to mid-term:

- complete the consolidation of Biology, Psychology, and Neuroscience
- dedicate all of Kaufman to the sciences, consider future expansion; include student amenities and campus landscape planning in scope to tie the building more closely to the core campus
- if necessary once Rector and Kaufman are optimized, and if possible and practical, construct a new science building on the vacant parcel across the railroad right-of-way from Rector

Information Technology/Academic Technology

Library & Information Services continues to evolve and adapt, and will likely continue to be a moving target where planning is concerned. The Media Center and the proposed and developing IT Commons in the Library are examples of programs working with resources available to create state-of-the-art technologically-oriented spaces. At the same time, the need for more IT service and support has led to a fragmentation of L&IS and AT from the center to the edges of the campus.

It appears that there will always be a comprehensive IT plan underway. Based on interview discussion points, a worthy goal of these efforts is to consolidate customer services in an Information Commons, preferably in the Library. Doing so ultimately will necessitate continuing renovation and expansion of the Library, and will solidify the position of the Library as the learning center of the campus.

Expansion and updating trends will have an impact on Bosler Hall as well, with an increasing likelihood of the Media Center outgrowing its space in the near future. Relocating the Media Center and all of the public functions of AT to the Library would lend credence to the idea of expanding the Library. Consolidating IT public functions, such as all help desks, Media Center, a printing center, open computer labs, and technology training rooms in the Library would vacate space for other uses or remove obsolete space from the inventory in South College East, Bosler, and Tome.

Library Renovation & Expansion

The Library itself must and will continue to adapt to rapidly changing technology and pedagogy, as suggested previously. It will continue to be a place of experimentation with regards to technology and program delivery. In addition, in spite of predictions that print materials will disappear, collections of books and journals, as well as other media, continue to grow. Thus space to store, handle, and use these resources will remain in short supply.

As part of the redevelopment of the Library/Hub core, expansion of the Library would be a prime objective. Many of the functions requiring additional space could comfortably occupy underground space. Stack and other media storage space could be added underground, perhaps reducing the need for off-site storage. The cost of additional at-grade warehouse-type storage would almost certainly be less expensive than below-ground bulk-storage space. However, the above-ground space is limited and valuable, and remote storage has efficiency and convenience costs associated with it.

The Library and the technology services would benefit greatly from on-site swing space, to allow for easily-executed trials and experiments with new ideas and alternative spaces for program delivery. Swing space could be provided in below-grade construction. Expanded above-ground space would be assigned to new public spaces and program spaces requiring and/or benefiting from daylight, visibility, and accessibility.

Expansion of the Library in concert with growth of the HUB and infill of the spaces between them would allow a meaningful boost of connectivity between these two campus centers.

Conference Center

There was considerable interest on the part of many interviewees in the idea of a Conference Center to serve the many constituent groups of the Dickinson community. A dedicated conference center could allow the College to:

- provide new event and program venues for student organizations and faculty groups
- deliver higher-quality services in support of events (catering, technology, etc.)
- attract outside groups (and income) to the campus while not impacting in-house functions
- increase event space inventory
- improve event and program scheduling
- enhance the College's brand

Several locations were suggested for a conference facility, including an expanded HUB, a renovated and expanded Allison, or a new building on a campus edge or on a downtown site close to the campus. Another thought expressed in an interview was to include an Alumni House function in a new conference facility. Perhaps the Alumni House and the Conference Center could be combined in a new building. A feasibility/planning exercise is warranted to explore the physical, programmatic, and financial parameters that would govern an on-campus conference center. Such a study would include an examination of ownership and management options.

Alumni House

Several interview participants suggested the concept of an Alumni House for the College. Although not a new idea, the concept has merit and has been implemented on many of Dickinson's peer campuses. In addition to the central purpose of providing a comfortable and attractive place for Dickinson Alumni and other guests to gather, such a building could provide meeting spaces of varying sizes that could be added to the College's event/meeting space inventory in a modern, easily-serviced facility.

Suggested locations included Biddle House (allowing easy access to the additional venues and the food services of the directly-adjacent HUB); Allison Hall; within the HUB; combined with a Conference Center; a new on-campus facility; or a new or re-purposed downtown building convenient to the campus.

The consultant suggests that Biddle House would be a good Alumni House, making use of a comfortable historic former residence, located directly adjacent to the HUB. In addition, Biddle is across the beautiful, walkable Benjamin Rush quadrangle from Allison Hall, a relationship that would be beneficial if Allison were to become a Conference or Events Center. The functions now housed in Biddle, Advising, Career, Registrar, and Learning/Disability Services would need to be relocated to more purpose designed space. This adjustment would support the Dickinson's Strategic plan for enhanced coordination between Advising and Career Services, and could also promote efficiencies with Disability Services. Most importantly, the purpose built spaces would then "fit the function" vs. the organizations "functioning to the fit" as is now occurring. The following summarizes some the Issues identified during the various interviews.

- The Offices of Learning Skills and Disability Services: is physically split between Biddle House and Dana (testing services) and creates challenges associated with proctoring and testing oversight. In addition, the current location in Biddle does not promote the necessary confidentiality and anonymity generally offered by Disability Services. A recombined office with testing would promote more efficient use of space and, as the number of self-declared students increases, will be able to support what is becoming a growing need on campuses.
- The registrar is located on the upper floor of Biddle. Existing space is cramped and carved out of what were closets and associated storage areas. While the space "functions" it is difficult to access and may be better served to be situated with associated areas such as Financial Aid, Admissions, Bursar, etc. similar to a one-stop service area.
- The Advising Office is mainly in Biddle. While the House is well desired for its proximity to serve students and faculty, the space need to support Peer advisors, Peer Tutors, and Student Proctors would be better suited in a more efficient and purposefully designed space. An opportunity to share or work with tutoring space with Disability Services could be considered.

Classroom Buildings

Previous sections in this report have addressed the natural sciences, the arts, the administration, conferences, and alumni, among other constituencies. The Humanities and Social Sciences deserve equal attention as pillars of Dickinson academics.

Many issues relating to academic buildings surfaced in the interviews. As a result, the consultant suggests that the following projects be considered:

- Rehabilitate East College to the same standards as Althouse
- Rehabilitate, and possibly expand, Old West for academic use if administrative functions are relocated to a new Administrative Center; work should be executed according to historic preservation standards and guidelines
- Continue upgrading Denny Hall according to historic preservation standards and guidelines
- Rehabilitate and expand Dana Hall for Humanities (not Natural Sciences) (assumes the natural sciences precinct is completed as suggested previously)
- Rehabilitate Bosler Hall (assumes the Media Center is relocated to the Library)

These projects together should bring all of Dickinson's academic instructional spaces up to a consistently high level of comfort, efficiency, technology and effectiveness.

Remote Facilities

The question of locating College program space downtown or on the fringe of campus came up in several interviews. Performing and Visual Art program and storage space is already located remotely, with mostly positive results. Remote locations could also be considered for administrative functions, back-of-house services in particular; and perhaps for support functions such as a Conference Center or an Alumni House. While there will always be some disadvantage due to distance from the campus, this may be offset by other positives, such as possible financial and political advantages to working with the town to redevelop historic and/or underutilized properties.

Service and storage functions are appropriate for fringe locations, such as the central warehouse/distribution facility suggested earlier in this report. Some types of swing space may be considered downtown (office space), on a campus edge, or in a town industrial park (warehousing and service), thereby allowing for higher uses of scarce on-campus real estate.

Appendices

General-Purpose Classrooms

Specialized Instructional Spaces

Survey Findings: Administrators & Staff

Survey Findings: Faculty

Survey Findings: Students

Appendices

General-Purpose Classrooms

Specialized Instructional Spaces

Survey Findings: Administrators & Staff

Survey Findings: Faculty

Survey Findings: Students

Building	Room	NCES	Room Department	Subject	Course	Section	Course title	ASF	Seats	ASF per Seat	Percent Seats	Weekly Room Hour Utilization
Althouse Hall	07	110	Academic Affairs					336	18	18.7	55%	52%
Althouse Hall	07			AFST	310	02	Call and Response: Performance and Performativity in the Black World				39%	
Althouse Hall	07			AFST	320	01	Africanisms in African America				44%	
Althouse Hall	07			FYSM	100	37	First-Year Seminar				89%	
Althouse Hall	07			INST	401	01	Interdisciplinary Seminar Research				83%	
Althouse Hall	07			JPNS	231	01	Advanced Japanese				28%	
Althouse Hall	07			LALC	200	01	Race, Ethnicity, and Hybridity				17%	
Althouse Hall	07			SPAN	104	01	Elementary Spanish				83%	
Althouse Hall	08	110	Academic Affairs					888	35	25.4	75%	63%
Althouse Hall	08			ECON	111	07	Introduction to Microeconomics				114%	
Althouse Hall	08			ECON	111	08	Introduction to Microeconomics				100%	
Althouse Hall	08			ECON	112	01	Introduction to Macroeconomics				111%	
Althouse Hall	08			ECON	112	02	Introduction to Macroeconomics				114%	
Althouse Hall	08			ENGL	213	01	The Structure of English Grammar				23%	
Althouse Hall	08			INBM	230	02	International Organizational Behavior				74%	
Althouse Hall	08			INST	401	02	Interdisciplinary Seminar Research				37%	
Althouse Hall	08			POSC	281	01	American National Security Policy				57%	
Althouse Hall	08			POSC	390	01	The Debate over U.S. Decline				43%	
Althouse Hall	106	112	Academic Affairs					1,462	93	15.7	30%	15%
Althouse Hall	106			FLST	101	01	Intro to Film Studies				40%	
Althouse Hall	106			INBM	300	06	Leadership in Four Directions – Preparing Individuals and Organizations for Success				20%	
Althouse Hall	109	110	Academic Affairs					600	25	24.0	83%	67%
Althouse Hall	109			EASN	203	01	Rewriting Identities in Japanese Fiction				44%	
Althouse Hall	109			ECON	222	01	Environmental Economics				104%	
Althouse Hall	109			ECON	288	01	Contending Economic Perspectives				104%	
Althouse Hall	109			ECON	474	01	Econometrics				52%	
Althouse Hall	109			ENST	222	02	Environmental Economics				100%	
Althouse Hall	109			FYSM	100	06	First-Year Seminar				64%	
Althouse Hall	109			FYSM	100	35	First-Year Seminar				64%	
Althouse Hall	109			INBM	240	01	Marketing in a Global Context				100%	
Althouse Hall	109			INBM	240	02	Marketing in a Global Context				104%	
Althouse Hall	109			POSC	280	02	American Foreign Policy				92%	
Althouse Hall	110	110	Academic Affairs					600	25	24.0	56%	40%
Althouse Hall	110			ERSC	311	01	Paleoclimatology of East Asia				28%	
Althouse Hall	110			FREN	230	02	Communication in French and Francophone Contexts				52%	
Althouse Hall	110			FREN	230	02	Communication in French and Francophone Contexts				52%	
Althouse Hall	110			INBM	300	05	Comparative Business Ethics				64%	
Althouse Hall	110			ITAL	324	01	Italian Cinema				32%	
Althouse Hall	110			PMGT	228	01	Economic Analysis of Policy				100%	
Althouse Hall	110			SPAN	380	01	Don Quijote de la Mancha: The Birth of the Novel				64%	
Althouse Hall	201	110	Academic Affairs					1,050	40	26.3	85%	53%
Althouse Hall	201			ECON	111	01	Introduction to Microeconomics				93%	
Althouse Hall	201			ECON	111	02	Introduction to Microeconomics				88%	
Althouse Hall	201			ECON	111	03	Introduction to Microeconomics				100%	
Althouse Hall	201			ECON	111	04	Introduction to Microeconomics				98%	
Althouse Hall	201			INBM	100	01	Fundamentals of Business				98%	
Althouse Hall	201			INBM	100	02	Fundamentals of Business				98%	
Althouse Hall	201			INBM	230	01	International Organizational Behavior				63%	
Althouse Hall	201			INBM	300	02	Global Supply Chain Management				48%	
Althouse Hall	204	110	Academic Affairs					1,428	40	35.7	70%	33%
Althouse Hall	204			EASN	101	01	Introduction to East Asia				63%	
Althouse Hall	204			INBM	110	01	Fundamentals of Accounting				100%	
Althouse Hall	204			INBM	110	02	Fundamentals of Accounting				100%	
Althouse Hall	204			INBM	220	01	Managerial Decision Making				33%	
Althouse Hall	204			INBM	220	02	Managerial Decision Making				53%	
Althouse Hall	206	110	Academic Affairs					375	18	20.8	68%	42%
Althouse Hall	206			ECON	314	01	F.A. Hayek: Political Economy and Social Philosophy				89%	
Althouse Hall	206			FYSM	100	13	First-Year Seminar				89%	
Althouse Hall	206			INBM	400	01	Seminar in International Business Policy and Strategy				83%	
Althouse Hall	206			JPNS	211	01	Intermediate Japanese				61%	
Althouse Hall	206			JPNS	211	02	Intermediate Japanese				17%	
Althouse Hall	207	110	Academic Affairs					875	35	25.0	65%	51%
Althouse Hall	207			ECON	278	01	Intermediate Microeconomic Theory				74%	
Althouse Hall	207			INBM	400	02	Seminar in International Business Policy and Strategy				51%	
Althouse Hall	207			INST	200	01	Global Economy				80%	
Althouse Hall	207			INST	200	02	Global Economy				77%	
Althouse Hall	207			SOCI	230	02	American Capitalism and Social Justice				71%	
Althouse Hall	207			SOCI	230	03	American Capitalism and Social Justice				71%	
Althouse Hall	207			WGST	200	01	Introduction to Women's and Gender Studies				71%	
Althouse Hall	207			WRPG	101	01	U.S. Research Writing for International Students				20%	
Althouse Hall Total								7,614	329	23.1	68%	46%

Building	Room	NCES	Room Department	Subject	Course	Section	Course title	ASF	Seats	ASF per Seat	Percent Seats	Weekly Room Hour Utilization
Asbell Center	SEM	110	Academic Affairs					480	25	19.2	64%	7%
Asbell Center	SEM			FYSM	100	34	First-Year Seminar				64%	
Asbell Center Total								480	25	19.2	64%	7%
Bosler Hall	208	110	Academic Affairs					750	50	15.0	17%	36%
Bosler Hall	208			PORT	115	01	Portuguese for Speakers of a Romance Language				16%	
Bosler Hall	208			RELG	250	03	Religion and Communism				36%	
Bosler Hall	208			RUSS	104	01	Elementary Russian				6%	
Bosler Hall	208			RUSS	231	01	Russian Conversation and Composition				8%	
Bosler Hall	211	110	Academic Affairs					368	19	19.4	57%	47%
Bosler Hall	211			FYSM	100	28	First-Year Seminar				84%	
Bosler Hall	211			FYSM	100	40	First-Year Seminar				84%	
Bosler Hall	211			RUSS	101	01	Elementary Russian				26%	
Bosler Hall	211			RUSS	101	02	Elementary Russian				32%	
Bosler Hall	211			SPAN	231	04	Nature and Technology in the Hispanic World				79%	
Bosler Hall	211			WRPG	101	02	U.S. Research Writing for International Students				37%	
Bosler Hall	213	110	Academic Affairs					515	35	14.7	31%	59%
Bosler Hall	213			FREN	362	01	Representation of the Algerian War in France: October 17, 1961				29%	
Bosler Hall	213			GRMN	101	01	German in Everyday Life				34%	
Bosler Hall	213			GRMN	102	01	German in Everyday Life				14%	
Bosler Hall	213			GRMN	202	01	Intermediate German II: Mediated German Cultures				31%	
Bosler Hall	213			GRMN	300	01	Examining Major Cultural Movements				17%	
Bosler Hall	213			ITAL	324	01	Italian Cinema				29%	
Bosler Hall	213			SPAN	380	02	Literary Approaches to the 1937 Parsley Massacre in Hispaniola				60%	
Bosler Hall	214	110	Academic Affairs					564	16	35.3	66%	49%
Bosler Hall	214			ENGL	212	04	Writing about Visual Arts				19%	
Bosler Hall	214			FREN	245	01	Contemporary Issues in French Society				75%	
Bosler Hall	214			FREN	246	01	Introduction to Francophone Cultures				94%	
Bosler Hall	214			FYSM	100	08	First-Year Seminar				81%	
Bosler Hall	214			ITAL	116	02	Intermediate Italian				69%	
Bosler Hall	214			ITAL	116	04	Intermediate Italian				56%	
Bosler Hall	222	110	Academic Affairs					350	18	19.4	19%	18%
Bosler Hall	222			RUSS	104	01	Elementary Russian				17%	
Bosler Hall	222			RUSS	231	01	Russian Conversation and Composition				22%	
Bosler Hall	305	110	Academic Affairs					396	17	23.3	71%	53%
Bosler Hall	305			FREN	116	03	Intermediate French				65%	
Bosler Hall	305			PORT	242	01	Brazilian Cultural and Social Issues				18%	
Bosler Hall	305			SPAN	104	03	Elementary Spanish				76%	
Bosler Hall	305			SPAN	104	04	Elementary Spanish				88%	
Bosler Hall	305			SPAN	230	03	Advanced Grammar				88%	
Bosler Hall	305			SPAN	230	04	Advanced Grammar				88%	
Bosler Hall	306	110	Academic Affairs					374	20	18.7	71%	40%
Bosler Hall	306			FYSM	100	12	First-Year Seminar				80%	
Bosler Hall	306			ITAL	101	05	Elementary Italian				50%	
Bosler Hall	306			SPAN	101	01	Elementary Spanish				80%	
Bosler Hall	306			SPAN	101	02	Elementary Spanish				75%	
Bosler Hall	307	110	Academic Affairs					252	18	14.0	66%	35%
Bosler Hall	307			FREN	230	01	Communication in French and Francophone Contexts				56%	
Bosler Hall	307			JRNL	200	01	Newspaper Journalism				39%	
Bosler Hall	307			SPAN	230	01	Advanced Grammar				67%	
Bosler Hall	307			SPAN	230	02	Advanced Grammar				89%	
Bosler Hall	307			SPAN	231	02	A Chicano Family in the U.S.				78%	
Bosler Hall	308	110	Academic Affairs					368	18	20.4	74%	33%
Bosler Hall	308			SPAN	116	06	Intermediate Spanish				83%	
Bosler Hall	308			SPAN	116	07	Intermediate Spanish				67%	
Bosler Hall	308			SPAN	116	08	Intermediate Spanish				72%	
Bosler Hall	309	110	Academic Affairs					368	20	18.4	52%	29%
Bosler Hall	309			FYSM	100	14	First-Year Seminar				80%	
Bosler Hall	309			RUSS	116	01	Intermediate Russian				35%	
Bosler Hall	309			RUSS	116	02	Intermediate Russian				40%	
Bosler Hall	310	110	Academic Affairs					368	21	17.5	52%	40%
Bosler Hall	310			FREN	101	03	Elementary French				52%	
Bosler Hall	310			FREN	104	02	Elementary French				57%	
Bosler Hall	310			GREK	101	01	Beginning Attic Greek				33%	
Bosler Hall	310			SPAN	231	01	Spanish Composition in Context: Contemporary Culture and Society in Spain				67%	
Bosler Hall	313	110	Academic Affairs					506	27	18.7	49%	60%
Bosler Hall	313			FREN	236	02	Introduction to Cultural Analysis				30%	
Bosler Hall	313			FYSM	100	05	First-Year Seminar				59%	
Bosler Hall	313			GRMN	250	01	Rebels without a Cause: Adolescence, Love, and Death in German Literature				33%	
Bosler Hall	313			SPAN	104	02	Elementary Spanish				52%	
Bosler Hall	313			SPAN	116	03	Intermediate Spanish				56%	
Bosler Hall	313			SPAN	116	10	Intermediate Spanish				56%	
Bosler Hall	313			SPAN	231	03	Spanish History and Society thru Film: 1936-Present				56%	

Building	Room	NCES	Room Department	Subject	Course	Section	Course title	ASF	Seats	ASF per Seat	Percent Seats	Weekly Room Hour Utilization
Bosler Hall	314	110	Academic Affairs					825	34	24.3	49%	55%
Bosler Hall	314			ANTH	345	01	The Anthropology of Music in the Caribbean				24%	
Bosler Hall	314			EDUC	121	01	Social Foundations of American Education				103%	
Bosler Hall	314			EDUC	121	02	Social Foundations of American Education				47%	
Bosler Hall	314			EDUC	221	01	Educational Psychology				74%	
Bosler Hall	314			FREN	230	01	Communication in French and Francophone Contexts				29%	
Bosler Hall	314			ITAL	232	01	Reading and Performing Italian Texts				29%	
Bosler Hall	314			ITAL	301	01	The Discourse of Love				41%	
Bosler Hall	314			SPAN	410	01	Spanish-American Narrative of the 21st Century				47%	
Bosler Hall	315	110	Academic Affairs					252	17	14.8	59%	22%
Bosler Hall	315			CHIN	101	01	Elementary Chinese				65%	
Bosler Hall	315			CHIN	101	02	Elementary Chinese				53%	
Bosler Hall	318	110	Academic Affairs					390	21	18.6	60%	40%
Bosler Hall	318			FYSM	100	09	First-Year Seminar				67%	
Bosler Hall	318			ITAL	101	02	Elementary Italian				71%	
Bosler Hall	318			ITAL	116	01	Intermediate Italian				33%	
Bosler Hall	318			ITAL	116	03	Intermediate Italian				67%	
Bosler Hall	319	110	Academic Affairs					390	22	17.7	51%	60%
Bosler Hall	319			RUSS	333	01	Aspects of Russian Society and Civilization				23%	
Bosler Hall	319			SPAN	116	01	Intermediate Spanish				68%	
Bosler Hall	319			SPAN	116	02	Intermediate Spanish				64%	
Bosler Hall	319			SPAN	116	09	Intermediate Spanish				55%	
Bosler Hall	319			SPAN	230	05	Advanced Grammar				36%	
Bosler Hall	319			SPAN	238	01	Spanish for Business Professions				64%	
Bosler Hall	319			SPAN	305	02	Introduction to Literary Analysis and Theory				50%	
Bosler Hall	321	110	Academic Affairs					350	16	21.9	94%	33%
Bosler Hall	321			SPAN	101	03	Elementary Spanish				100%	
Bosler Hall	321			SPAN	101	04	Elementary Spanish				100%	
Bosler Hall	321			SPAN	104	05	Elementary Spanish				81%	
Bosler Hall Total								7,386	389	19.0	50%	42%
Community Studies Center	SEM	111	Academic Affairs					252	22	11.5	50%	8%
Community Studies Center	SEM			SOCI	400	02	Sociology of Violence				50%	
Community Studies Center Total								252	22	11.5	50%	8%
Dana Hall	101	110	Biology					832	42	19.8	45%	32%
Dana Hall	101			BIOL	314	01	Ecology w/Lab				38%	
Dana Hall	101			BIOL	323	02	Algae, Fungi & Lichens W/Lab				62%	
Dana Hall	101			BIOL	326	01	Microbiology w/Lab				50%	
Dana Hall	101			BIOL	412	01	Seminar				14%	
Dana Hall	101			CHEM	343	01	Metabolism				62%	
Dana Hall	110	112	Biology					2,050	180	11.4	20%	27%
Dana Hall	110			BIOL	120	02	Life at the Extremes: A Survival Guide				22%	
Dana Hall	110			BIOL	128	01	Field Natural History				22%	
Dana Hall	110			BIOL	129	02	Changing Ocean Ecosystem W/Lab				22%	
Dana Hall	110			ENST	131	03	Introduction to Environmental Science: Natural Ecosystems and Human Disruption				14%	
Dana Hall	201	110	Academic Affairs					1,140	24	47.5	52%	40%
Dana Hall	201			FREN	104	03	Elementary French				46%	
Dana Hall	201			FYSM	100	23	First-Year Seminar				67%	
Dana Hall	201			LATN	101	01	First-Year Latin				42%	
Dana Hall	201			LATN	101	02	First-Year Latin				54%	
Dana Hall	202	110	Biology					1,100	36	30.6	58%	33%
Dana Hall	202			BIOL	216	01	Genetics				67%	
Dana Hall	202			BIOL	216	02	Genetics				72%	
Dana Hall	202			BIOL	318	01	Animal Development w/Lab				67%	
Dana Hall	202			BIOL	321	01	Invertebrate Zoology w/Lab				19%	
Dana Hall	202			BIOL	333	01	Physiology w/Lab				67%	
Dana Hall Total								5,122	282	18.2	33%	33%
Denny Hall	103	110	Academic Affairs					576	35	16.5	61%	53%
Denny Hall	103			AMST	201	01	Introduction to American Studies				51%	
Denny Hall	103			HIST	211	01	20th Century American Radicals				60%	
Denny Hall	103			MISC	301	01	Adaptive Military Team Leadership				23%	
Denny Hall	103			MISC	301	01	Adaptive Military Team Leadership				23%	
Denny Hall	103			PHIL	255	01	Philosophy of Law				66%	
Denny Hall	103			POSC	290	04	International Terrorism				69%	
Denny Hall	103			RELG	104	01	Judaism				100%	
Denny Hall	103			RELG	260	01	Beyond Belief: Jewish Secular Culture from Spinoza to Seinfeld				77%	
Denny Hall	103			WGST	201	01	Women, Gender and Judaism				77%	
Denny Hall	104	110	Academic Affairs					600	40	15.0	65%	53%
Denny Hall	104			ANTH	100	02	Introduction to Biological Anthropology				63%	
Denny Hall	104			ARBI	360	01	Media Arabic				28%	
Denny Hall	104			HIST	118	01	American History 1877 to Present				83%	
Denny Hall	104			PHIL	103	01	Logic				73%	
Denny Hall	104			POSC	247	01	The American Presidency				63%	
Denny Hall	104			POSC	290	02	China's Foreign Relations				40%	
Denny Hall	104			SOCI	110	01	Social Analysis				88%	
Denny Hall	104			WGST	101	01	Modern Women Writing War				83%	

Building	Room	NCES	Room Department	Subject	Course	Section	Course title	ASF	Seats	ASF per Seat	Percent Seats	Weekly Room Hour Utilization
Denny Hall	110	110	Academic Affairs					552	41	13.5	52%	53%
Denny Hall	110			ANTH	101	01	Anthropology for the 21st Century				76%	
Denny Hall	110			FLST	210	01	Middle Eastern Film				24%	
Denny Hall	110			HIST	223	01	Renaissance Europe				24%	
Denny Hall	110			LALC	230	01	Early Latin American History to 1800				49%	
Denny Hall	110			LAWP	290	01	The Legislative Process				46%	
Denny Hall	110			LAWP	290	02	Comparative Law				59%	
Denny Hall	110			POSC	170	01	Political Philosophy				85%	
Denny Hall	110			POSC	256	01	The City				54%	
Denny Hall	112	110	Academic Affairs					810	25	32.4	45%	47%
Denny Hall	112			HIST	204	01	Introduction to Historical Methodology				60%	
Denny Hall	112			HIST	378	01	Society and the Sexes				20%	
Denny Hall	112			ITAL	101	01	Elementary Italian				40%	
Denny Hall	112			ITAL	101	04	Elementary Italian				44%	
Denny Hall	112			ITAL	104	01	Elementary Italian				60%	
Denny Hall	15	110	Women's and Gender Studies					338	18	18.8	72%	13%
Denny Hall	15			FYSM	100	18	First-Year Seminar				89%	
Denny Hall	15			LALC	101	01	Introduction to Latin American, Latino, and Caribbean Studies				56%	
Denny Hall	203	110	Academic Affairs					576	44	13.1	41%	60%
Denny Hall	203			HIST	105	01	Medieval Europe				48%	
Denny Hall	203			HIST	211	03	Sex and the City: Gender, Politics, and Culture in 20th Century Urban America				34%	
Denny Hall	203			HIST	215	01	Imperial China				23%	
Denny Hall	203			HIST	234	01	Europe: 1914-1945				41%	
Denny Hall	203			HIST	254	01	Russia: Quest for the Modern				16%	
Denny Hall	203			INST	170	03	International Relations				77%	
Denny Hall	203			POSC	120	02	American Government				77%	
Denny Hall	203			POSC	277	01	International Politics of the Middle East				36%	
Denny Hall	203			POSC	290	03	Europe in Crisis				20%	
Denny Hall	204	110	Academic Affairs					575	25	23.0	56%	76%
Denny Hall	204			AMST	401	01	Research and Methods in American Studies				52%	
Denny Hall	204			ARBI	101	02	Elementary Arabic				56%	
Denny Hall	204			FREN	116	01	Intermediate French				60%	
Denny Hall	204			FYSM	100	21	First-Year Seminar				64%	
Denny Hall	204			HIST	315	01	Disease in World History				24%	
Denny Hall	204			POSC	290	05	Policy Practicum: The American Dream				56%	
Denny Hall	204			POSC	390	03	Comparative Political Corruption				56%	
Denny Hall	204			SOCI	240	01	Qualitative Methods				64%	
Denny Hall	204			SOCI	240	01	Qualitative Methods				64%	
Denny Hall	204			SOCI	330	01	Classical Sociological Theory				60%	
Denny Hall	21	110	Academic Affairs					792	45	17.6	64%	20%
Denny Hall	21			ANTH	101	02	Anthropology for the 21st Century				78%	
Denny Hall	21			ANTH	216	01	Medical Anthropology				58%	
Denny Hall	21			ECON	347	01	Money and Banking				56%	
Denny Hall	211	110	Academic Affairs					528	37	14.3	61%	33%
Denny Hall	211			ENGL	337	01	The Craft of Fiction				62%	
Denny Hall	211			FREN	236	01	Introduction to Cultural Analysis				38%	
Denny Hall	211			POSC	170	01	International Relations				86%	
Denny Hall	211			POSC	170	04	International Relations				86%	
Denny Hall	211			POSC	208	01	Justice in World Politics				32%	
Denny Hall	212	110	Academic Affairs					783	38	20.6	46%	51%
Denny Hall	212			AMST	200	01	Mass Media				66%	
Denny Hall	212			ECON	268	01	Intermediate Macroeconomic Theory				71%	
Denny Hall	212			FYSM	100	31	First-Year Seminar				42%	
Denny Hall	212			FYSM	100	36	First-Year Seminar				42%	
Denny Hall	212			HIST	311	01	Violence and Colonialism				37%	
Denny Hall	212			PMGT	301	01	Policy and Leadership				32%	
Denny Hall	212			PMGT	401	01	Policy Management Seminar				32%	
Denny Hall	303	110	Academic Affairs					575	25	23.0	57%	41%
Denny Hall	303			AFST	220	03	Ethnography of Postcolonial Africa				36%	
Denny Hall	303			AMST	101	01	Topics in U.S. Cultural Diversity				100%	
Denny Hall	303			FYSM	100	01	First-Year Seminar				48%	
Denny Hall	303			FYSM	100	26	First-Year Seminar				52%	
Denny Hall	303			LALC	349	01	Political Economy of the Third World				72%	
Denny Hall	303			SOCI	400	01	Postmodernism, Culture & Communication				32%	
Denny Hall	304	110	Academic Affairs					575	47	12.2	31%	62%
Denny Hall	304			ARBI	101	01	Elementary Arabic				26%	
Denny Hall	304			ARBI	211	01	Intermediate Arabic				11%	
Denny Hall	304			ENGL	101	05	Literature of Exploration				28%	
Denny Hall	304			HIST	277	01	European Empires				26%	
Denny Hall	304			INST	280	01	American Foreign Policy				53%	
Denny Hall	304			SOCI	230	04	Aging and the Life				36%	
Denny Hall	304			SOCI	233	01	Asian American Communities				28%	
Denny Hall	304			SOCI	272	01	Islam and the West				40%	

Building	Room	NCES	Room Department	Subject	Course	Section	Course title	ASF	Seats	ASF per Seat	Percent Seats	Weekly Room Hour Utilization
Denny Hall	311	110	Academic Affairs					617	43	14.3	50%	47%
Denny Hall	311			HIST	117	02	American History 1607 to 1877				42%	
Denny Hall	311			HIST	215	02	Cold War in Southern Africa 1945-1990				21%	
Denny Hall	311			HIST	272	01	The Atlantic Slave Trade and Africans in the Making of the Atlantic World, 1450-1850				33%	
Denny Hall	311			PHIL	101	02	Intro to Philosophy				79%	
Denny Hall	311			POSC	170	02	International Relations				70%	
Denny Hall	311			SOCI	237	01	Global Inequality				58%	
Denny Hall	311			SOCI	333	01	The Sociology of Health and Illness				47%	
Denny Hall	313	110	Academic Affairs					598	41	14.6	51%	53%
Denny Hall	313			ARCH	110	01	Archaeology and World Prehistory				85%	
Denny Hall	313			HIST	117	01	American History 1607 to 1877				71%	
Denny Hall	313			MEST	121	01	Middle East to 1750				61%	
Denny Hall	313			POSC	120	01	American Government				49%	
Denny Hall	313			POSC	271	01	Ethics and International Security				59%	
Denny Hall	313			WGST	102	01	Gender and Popular Culture				54%	
Denny Hall	313			WGST	200	02	Introduction to Women's and Gender Studies				15%	
Denny Hall	313			WGST	250	01	Methods in Women's and Gender Studies				12%	
Denny Hall	315	110	Academic Affairs					617	18	34.3	75%	13%
Denny Hall	315			AMST	303	01	The America that Race Built				67%	
Denny Hall	315			HIST	211	02	War, Violence, and Memory				83%	
Denny Hall	317	113U	Academic Affairs					1,700	84	20.2	29%	33%
Denny Hall	317			ARCH	140	01	Egyptian Art and Archaeology				42%	
Denny Hall	317			ARCH	210	01	Prehistoric Aegean Art and Archaeology				12%	
Denny Hall	317			ECON	111	05	Introduction to Microeconomics				42%	
Denny Hall	317			ECON	111	06	Introduction to Microeconomics				46%	
Denny Hall	317			THDA	101	01	Introduction to Theatre				4%	
Denny Hall Total								10,812	606	17.8	49%	44%
East College	102	110	Classics					315	28	11.3	38%	29%
East College	102			GREK	222	01	Philosophical Writers				14%	
East College	102			SPAN	116	04	Intermediate Spanish				46%	
East College	102			SPAN	116	05	Intermediate Spanish				54%	
East College	107	110	Classics					276	16	17.3	80%	61%
East College	107			ENGL	216	01	Screenwriting				88%	
East College	107			ENGL	218	01	Creative Writing: Poetry and Fiction				100%	
East College	107			ENGL	218	02	Creative Writing: Poetry and Fiction				144%	
East College	107			ENGL	319	01	Advanced Creative Writing: Poetry				25%	
East College	107			FYSM	100	16	First-Year Seminar				94%	
East College	107			HEBR	103	01	Elementary Modern Hebrew				50%	
East College	107			HEBR	116	01	Intermediate Modern Hebrew				63%	
East College	111	110	Classics					324	10	32.4	67%	20%
East College	111			GREK	111	01	Introduction to Greek Prose				30%	
East College	111			LATN	233	01	Roman Historians				90%	
East College	111			LATN	241	01	Early Christian Latin				80%	
East College	212	110	Academic Affairs					306	16	19.1	81%	28%
East College	212			FYSM	100	15	First-Year Seminar				100%	
East College	212			LATN	111	01	Intro to Roman Prose				94%	
East College	212			PHIL	302	01	Ethical Theory				69%	
East College	212			PHIL	401	01	Senior Seminar				63%	
East College	300	110	English					440	25	17.6	66%	53%
East College	300			ENGL	349	01	American Others: Growing Up Funny				56%	
East College	300			ENGL	370	01	American Literature of the 9/11 Decade				48%	
East College	300			ENGL	392	01	Shakespeare: Politics/Culture				92%	
East College	300			FYSM	100	43	First-Year Seminar				64%	
East College	300			PHIL	215	01	Existentialism				36%	
East College	300			RELG	214	01	History of Christianity: Reform and Modernity				100%	
East College	300			RELG	226	01	Contemplative Practices in Asia				28%	
East College	300			RELG	311	01	Buddhism and the Environment				100%	
East College	301	110	English					345	25	13.8	70%	53%
East College	301			ENGL	379	01	Jane Austen in Her Time				96%	
East College	301			ENGL	389	01	The Generational				84%	
East College	301			PHIL	201	01	Ancient Philosophy				80%	
East College	301			PHIL	205	01	Topics in Asian Philosophy				44%	
East College	301			SOCI	230	01	Conflict and Conflict Resolution Studies				84%	
East College	301			SPAN	239	01	Spanish for the Health Professions				52%	
East College	301			WGST	210	01	Philosophy of Feminism				60%	
East College	301			WRPG	211	02	Writing About the Horror Film				60%	
East College	312	110	English					323	13	24.8	115%	48%
East College	312			ENGL	218	02	Creative Writing: Poetry and Fiction				177%	
East College	312			ENGL	317	01	Advanced Creative Writing: Fiction				69%	
East College	312			ENGL	403	03	Elizabeth Bishop & the Poetics of Friendship				92%	
East College	312			FREN	116	02	Intermediate French				115%	
East College	312			FYSM	100	38	First-Year Seminar				123%	
East College	312			RELG	390	01	Interpreting Religion				115%	

Building	Room	NCES	Room Department	Subject	Course	Section	Course title	ASF	Seats	ASF per Seat	Percent Seats	Weekly Room Hour Utilization
East College	405	110	English					1,080	55	19.6	52%	47%
East College	405			ENGL	101	03	Literary Genres of Slavery and Freedom				31%	
East College	405			ENGL	358	01	Captivity and Conflict in US/American Literature Before 1900				18%	
East College	405			ENST	111	01	Environment, Culture & Values				64%	
East College	405			FLST	210	02	Shakespeare on Film				64%	
East College	405			PHIL	101	01	Intro to Philosophy				64%	
East College	405			PHIL	102	01	Moral Problems				60%	
East College	405			RELG	121	01	Hinduism				64%	
East College	406	110	English					406	16	25.4	86%	36%
East College	406			ENGL	218	01	Creative Writing: Poetry and Fiction				100%	
East College	406			ENGL	220	01	Critical Approaches and Literary Methods				63%	
East College	406			ENGL	220	02	Critical Approaches and Literary Methods				88%	
East College	406			ENGL	403	01	The Subject of Biography				81%	
East College	406			WRPG	211	03	Writing in and for Digital Environments				100%	
East College Total								3,815	204	18.7	67%	42%
Kade House	SEM	111	German Studies					378	15	25.2	87%	18%
Kade House	SEM			GRMN	201	01	Intermediate German I: Contemporary German Cultures				80%	
Kade House	SEM			GRMN	201	02	Intermediate German I: Contemporary German Cultures				93%	
Kade House Total								378	15	25.2	87%	18%
Kauffman Hall	116	110	Environmental Studies					1,190	30	39.7	67%	11%
Kauffman Hall	116			ENST	335	01	Analysis and Management of the Aquatic Environment				67%	
Kauffman Hall	153	110	Earth Sciences					900	24	37.5	25%	15%
Kauffman Hall	153			ERSC	201	01	Surface Processes				25%	
Kauffman Hall	153			ERSC	201	01	Surface Processes				25%	
Kauffman Hall	179	110	Academic Affairs					1,260	40	31.5	75%	47%
Kauffman Hall	179			ERSC	141	02	Planet Earth				90%	
Kauffman Hall	179			FYSM	100	29	First-Year Seminar				38%	
Kauffman Hall	179			INST	290	02	Global Environmental Politics				45%	
Kauffman Hall	179			PSYC	130	01	Perception, Memory & Thought				90%	
Kauffman Hall	179			PSYC	130	02	Perception, Memory & Thought				90%	
Kauffman Hall	179			PSYC	150	01	Introduction to Cross-Cultural Psychology				85%	
Kauffman Hall	179			PSYC	150	02	Introduction to Cross-Cultural Psychology				88%	
Kauffman Hall	186	110	Academic Affairs					1,302	36	36.2	75%	64%
Kauffman Hall	186			ARCH	218	01	Geographic Information Systems				53%	
Kauffman Hall	186			ENST	406	02	The Real Costs of Energy				28%	
Kauffman Hall	186			ERSC	142	02	Earth History				100%	
Kauffman Hall	186			PSYC	175	01	Introduction to Community Psychology				97%	
Kauffman Hall	186			PSYC	175	02	Introduction to Community Psychology				72%	
Kauffman Hall	186			PSYC	201	01	Design of Psychological Research				86%	
Kauffman Hall	186			PSYC	201	01	Design of Psychological Research				86%	
Kauffman Hall	186			PSYC	202	01	Analysis of Psychological Data				75%	
Kauffman Hall	186			PSYC	202	01	Analysis of Psychological Data				75%	
Kauffman Hall	187	110	Academic Affairs					756	21	36.0	69%	49%
Kauffman Hall	187			ENST	406	01	Understanding the Human Place in Nature: An Interdisciplinary Approach				71%	
Kauffman Hall	187			FYSM	100	20	First-Year Seminar				76%	
Kauffman Hall	187			PSYC	380	01	Guided Research in Psychology				62%	
Kauffman Hall	187			PSYC	410	01	Seminar in Learning				71%	
Kauffman Hall	187			PSYC	430	01	Seminar in Cognitive Psychology				62%	
Kauffman Hall	187			PSYC	480	01	Seminar in Organizational Psychology				76%	
Kauffman Hall	187			WGST	300	02	Gender and Sexual Identities				62%	
Kauffman Hall Total								5,408	151	35.8	71%	37%
Kline Life Sport Complex	SEMINAR	111	Academic Affairs					476	20	23.8	20%	7%
Kline Life Sport Complex	SEMINAR			PHED	352	01	Prevention & Care				20%	
Kline Life Sport Complex Total								476	20	23.8	20%	7%
South College Annex	3	110	Education					651	20	32.6	35%	23%
South College Annex	3			EDUC	354	01	Issues and Trends in Teaching Social Studies				10%	
South College Annex	3			EDUC	356	01	Issues and Trends in Teaching Mathematics				45%	
South College Annex	3			EDUC	458	01	Curriculum Design				5%	
South College Annex	3			FYSM	100	30	First-Year Seminar				80%	
South College Annex	4	110	Education					651	20	32.6	15%	7%
South College Annex	4			EDUC	352	01	Issues and Trends in Teaching English				15%	
South College Annex Total								1,302	40	32.6	31%	15%
Stern Center	103	110	Academic Affairs					448	36	12.4	51%	44%
Stern Center	103			AFST	100	01	Introduction to Africana Studies				56%	
Stern Center	103			FYSM	100	39	First-Year Seminar				44%	
Stern Center	103			HIST	275	01	The Rise of Modern China				42%	
Stern Center	103			ITAL	101	03	Elementary Italian				28%	
Stern Center	103			JDST	264	01	Politics, Society & Culture in Israel				64%	
Stern Center	103			POSC	258	01	Human Rights				72%	
Stern Center	11	110	Academic Affairs					597	27	22.1	75%	38%
Stern Center	11			FREN	116	04	Intermediate French				48%	
Stern Center	11			INBM	250	01	Finance				93%	
Stern Center	11			INBM	250	02	Finance				93%	
Stern Center	11			INBM	300	01	Law of Business Transactions				63%	
Stern Center	11			POSC	239	01	Research Methods				78%	

Building	Room	NCES	Room Department	Subject	Course	Section	Course title	ASF	Seats	ASF per Seat	Percent Seats	Weekly Room Hour Utilization
Stern Center	12	110	Academic Affairs					769	18	42.7	60%	58%
Stern Center	12			CHIN	211	01	Intermediate Chinese				50%	
Stern Center	12			CHIN	211	02	Intermediate Chinese				83%	
Stern Center	12			EASN	305	01	Japanese Music: Theory and Practice				33%	
Stern Center	12			EASN	306	01	Popular Culture and Japan				33%	
Stern Center	12			FYSM	100	33	First-Year Seminar				83%	
Stern Center	12			RELG	318	01	Care of the Soul				50%	
Stern Center	12			SPAN	305	01	Introduction to Literary Analysis and Theory				89%	
Stern Center	7	110	Academic Affairs					339	16	21.2	57%	50%
Stern Center	7			CHIN	231	01	Advanced Chinese				75%	
Stern Center	7			CHIN	361	01	Advanced Chinese II				25%	
Stern Center	7			JPNS	101	01	Elementary Japanese				88%	
Stern Center	7			JPNS	101	02	Elementary Japanese				44%	
Stern Center	7			JPNS	361	01	Advanced Japanese II				19%	
Stern Center	7			POSC	390	02	Gender and Politics				94%	
Stern Center Total								2,153	97	22.2	60%	48%
Stuart Hall	1104	113L	Chemistry					2,088	80	26.1	53%	47%
Stuart Hall	1104			CHEM	131	02	General Chemistry I with Lab				59%	
Stuart Hall	1104			CHEM	131	04	General Chemistry I with Lab				60%	
Stuart Hall	1104			CHEM	241	05	Organic Chemistry I with Lab				50%	
Stuart Hall	1104			CHEM	241	07	Organic Chemistry I with Lab				74%	
Stuart Hall	1104			ENST	131	02	Introduction to Environmental Science: Natural Ecosystems and Human Disruption				63%	
Stuart Hall	1104			INBM	300	03	Introduction to Cost Accounting				20%	
Stuart Hall	1104			SOCI	110	02	Social Analysis				45%	
Stuart Hall	1113	110	Chemistry					900	32	28.1	60%	59%
Stuart Hall	1113			CHEM	131	01	General Chemistry I with Lab				75%	
Stuart Hall	1113			CHEM	131	02	General Chemistry I with Lab				72%	
Stuart Hall	1113			CHEM	131	03	General Chemistry I with Lab				75%	
Stuart Hall	1113			CHEM	131	04	General Chemistry I with Lab				75%	
Stuart Hall	1113			CHEM	131	06	General Chemistry I with Lab				69%	
Stuart Hall	1113			CHEM	244	01	Thermodynamics and Kinetics				31%	
Stuart Hall	1113			CHEM	341	01	Quantum Chemistry and Spectroscopy				9%	
Stuart Hall	1113			CHEM	490	01	Chemical Ecology				75%	
Stuart Hall Total								2,988	112	26.7	55%	53%
Tome Scientific Hall	115	113U	Academic Affairs					1,138	46	24.7	71%	50%
Tome Scientific Hall	115			BIOL	124	02	Biology of Behavior w/Lab				87%	
Tome Scientific Hall	115			CHEM	111	02	Chemistry in the Kitchen				100%	
Tome Scientific Hall	115			CLST	100	01	Greek and Roman Mythology				76%	
Tome Scientific Hall	115			MISC	101	01	Introduction to Military Leadership I				43%	
Tome Scientific Hall	115			MISC	201	01	Foundations of Military Leadership I				30%	
Tome Scientific Hall	115			PHYS	109	02	Astronomy w/Lab				72%	
Tome Scientific Hall	115			PHYS	141	02	Physics for the Life Sciences				87%	
Tome Scientific Hall	115			PSYC	155	01	Child Development				76%	
Tome Scientific Hall	117	110	Academic Affairs					768	40	19.2	48%	47%
Tome Scientific Hall	117			FYSM	100	24	First-Year Seminar				40%	
Tome Scientific Hall	117			MATH	170	01	Single Variable Calculus				60%	
Tome Scientific Hall	117			MATH	170	02	Single Variable Calculus				60%	
Tome Scientific Hall	117			MATH	170	03	Single Variable Calculus				58%	
Tome Scientific Hall	117			MATH	361	01	Real Analysis				38%	
Tome Scientific Hall	117			MATH	361	02	Real Analysis				35%	
Tome Scientific Hall	117			PHYS	312	01	Electrodynamics				43%	
Tome Scientific Hall	213	111	Physics & Astronomy					414	16	25.9	67%	16%
Tome Scientific Hall	213			FYSM	100	07	First-Year Seminar				100%	
Tome Scientific Hall	213			PHYS	406	01	Advanced Astrophysics				25%	
Tome Scientific Hall	213			PHYS	491	01	Senior Research Seminar				75%	
Tome Scientific Hall	227	111	Academic Affairs					350	18	19.4	83%	7%
Tome Scientific Hall	227			FYSM	100	03	First-Year Seminar				83%	
Tome Scientific Hall Total								2,670	120	22.3	62%	30%
Waidner Spahr Library	ALDEN	111	Academic Affairs					641	24	26.7	58%	7%
Waidner Spahr Library	ALDEN			HIST	404	01	Imperial Rivals: France & Great Britain in the New World, 1689-1763				58%	
Waidner Spahr Library	ICCR	113L	Academic Affairs					863	36	24.0	0%	0%
Waidner Spahr Library	ICCR						Unscheduled				0%	
Waidner Spahr Library	JACOBS	110	Academic Affairs					358	9	39.8	156%	7%
Waidner Spahr Library	JACOBS			ENGL	212	01	Writing and Wellness				156%	
Waidner Spahr Library	RBNWTZ	111	Academic Affairs					795	15	53.0	0%	0%
Waidner Spahr Library	RBNWTZ						Unscheduled				0%	
Waidner Spahr Library Total								2,657	84	31.6	33%	3%
Weiss Center	219	111	Music					402	13	30.9	88%	15%
Weiss Center	219			ARTH	407	01	Art Historical Methods				62%	
Weiss Center	219			FYSM	100	11	First-Year Seminar				115%	
Weiss Center	235	110	Music					1,040	80	13.0	28%	36%
Weiss Center	235			ARTH	101	01	An Introduction to the History of Art				46%	
Weiss Center	235			ARTH	102	01	An Introduction to the History of Art				43%	
Weiss Center	235			CLST	253	01	Roman History				19%	
Weiss Center	235			MUAC	101	01	History of Music				24%	
Weiss Center	235			MUAC	209	01	Ethnomusicology: World Musics				20%	
Weiss Center	235			MUPS	111	02	Vocal Technique Class				15%	

Building	Room	NCES	Room Department	Subject	Course	Section	Course title	ASF	Seats	ASF per Seat	Percent Seats	Weekly Room Hour Utilization
Weiss Center Total								1,442	93	15.5	31%	25%
West College	1	111	Academic Affairs					364	16	22.8	66%	28%
West College	1			AMST	202	01	Workshop in Cultural Analysis				50%	
West College	1			FYSM	100	19	First-Year Seminar				100%	
West College	1			FYSM	100	22	First-Year Seminar				81%	
West College	1			WGST	400	01	Senior Seminar in Women's and Gender Studies				31%	
West College	DURBIN	110	Academic Affairs					505	30	16.8	43%	47%
West College	DURBIN			AFST	320	02	Memory and Memorialization				27%	
West College	DURBIN			FREN	101	01	Elementary French				50%	
West College	DURBIN			FREN	101	02	Elementary French				53%	
West College	DURBIN			FYSM	100	32	First-Year Seminar				50%	
West College	DURBIN			GRMN	101	02	German in Everyday Life				37%	
West College	McCaulty	111	Academic Affairs					484	16	30.3	0%	0%
West College	McCaulty						Unscheduled				0%	
West College Total								1,353	62	21.8	47%	25%

Appendices

General-Purpose Classrooms

Specialized Instructional Spaces

Survey Findings: Administrators & Staff

Survey Findings: Faculty

Survey Findings: Students

Discipline	Building	Room	NCES	Subject	Course	Section	Course title	Enrollment	Rooms	ASF	Seats	ASF per Seat	Percent Seats	Weekly Room Hour Utilization
Anthropology Lab									1	1,700	36	47.2	63%	29%
	Denny Hall	115	210						1	1,700	36	47.2	63%	29%
	Denny Hall	115		ANTH	100	01	Introduction to Biological Anthropology	26					72%	
	Denny Hall	115		ANTH	100	01	Introduction to Biological Anthropology	26					72%	
	Denny Hall	115		ANTH	100	02	Introduction to Biological Anthropology	25					69%	
	Denny Hall	115		ANTH	310	01	Nutritional Anthropology	13					36%	
	Denny Hall Total								1	1,700	36	47.2	63%	29%
Archaeology Lab									1	868	15	57.9	0%	0%
	Archeology Labs	Keck Lab	210						1	868	15	57.9	0%	0%
	Archeology Labs	Keck Lab					Unscheduled						0%	
	Archeology Labs Total								1	868	15	57.9	0%	0%
Astronomy Workshop									1	1,292	32	40.4	103%	5%
	Tome Scientific Hall	105	210						1	1,292	32	40.4	103%	5%
	Tome Scientific Hall	105		PHYS	109	02	Astronomy w/Lab	33					103%	
	Tome Scientific Hall Total								1	1,292	32	40.4	103%	5%
Biology Lab									7	8,820	174	50.7	75%	21%
	James Hall, Rector Science Center	1218	210						1	1,260	24	52.5	100%	8%
	James Hall, Rector Science Center	1218		BIOL	318	01	Animal Development w/Lab	24					100%	
	James Hall, Rector Science Center	1228	210						1	1,260	24	52.5	65%	23%
	James Hall, Rector Science Center	1228		BIOL	321	01	Invertebrate Zoology w/Lab	7					29%	
	James Hall, Rector Science Center	1228		BIOL	327	01	Developmental Neurobiology	20					83%	
	James Hall, Rector Science Center	1228		BIOL	327	01	Developmental Neurobiology	20					83%	
	James Hall, Rector Science Center	2218	210						1	1,260	27	46.7	74%	32%
	James Hall, Rector Science Center	2218		BIOL	120	01	Life at the Extremes: A Survival Guide	20					74%	
	James Hall, Rector Science Center	2218		BIOL	120	02	Life at the Extremes: A Survival Guide	20					74%	
	James Hall, Rector Science Center	2218		BIOL	129	01	Changing Ocean Ecosystem W/Lab	20					74%	
	James Hall, Rector Science Center	2218		BIOL	129	02	Changing Ocean Ecosystem W/Lab	20					74%	
	James Hall, Rector Science Center	2228	210						1	1,260	27	46.7	74%	32%
	James Hall, Rector Science Center	2228		BIOL	124	01	Biology of Behavior w/Lab	20					74%	
	James Hall, Rector Science Center	2228		BIOL	124	02	Biology of Behavior w/Lab	20					74%	
	James Hall, Rector Science Center	2228		BIOL	128	01	Field Natural History	20					74%	
	James Hall, Rector Science Center	2228		BIOL	128	02	Field Natural History	20					74%	
	James Hall, Rector Science Center Total								4	5,040	102	49.4	74%	24%
	Rector North	1316	210						1	1,260	24	52.5	99%	24%
	Rector North	1316		BIOL	216	01	Genetics	24					100%	
	Rector North	1316		BIOL	216	02	Genetics	26					108%	
	Rector North	1316		BIOL	326	01	Microbiology w/Lab	21					88%	
	Rector North	1317	210						1	1,260	24	52.5	67%	8%
	Rector North	1317		BIOL	314	01	Ecology w/Lab	16					67%	
	Rector North	2319	210						1	1,260	24	52.5	54%	21%
	Rector North	2319		BIOL	323	01	Algae, Fungi & Lichens W/Lab	14					58%	
	Rector North	2319		BIOL	323	02	Algae, Fungi & Lichens W/Lab	12					50%	
	Rector North Total								3	3,780	72	52.5	78%	18%
Ceramics Studio									1	1,591	15	106.1	70%	21%
	Goodyear Arts Studio	CERAMICS	210						1	1,591	15	106.1	70%	21%
	Goodyear Arts Studio	CERAMICS		ARTH	224	01	Wheelwork Ceramics	16					107%	
	Goodyear Arts Studio	CERAMICS		ARTH	224	02	Wheelwork Ceramics	5					33%	
	Goodyear Arts Studio Total								1	1,591	15	106.1	70%	21%
Chemistry Lab									4	5,640	96	58.8	82%	39%
	Stuart Hall	1121	210						1	1,560	24	65.0	80%	59%
	Stuart Hall	1121		CHEM	131	01	General Chemistry I with Lab	24					100%	
	Stuart Hall	1121		CHEM	131	02	General Chemistry I with Lab	23					96%	
	Stuart Hall	1121		CHEM	131	03	General Chemistry I with Lab	24					100%	
	Stuart Hall	1121		CHEM	131	04	General Chemistry I with Lab	24					100%	
	Stuart Hall	1121		CHEM	131	06	General Chemistry I with Lab	22					92%	
	Stuart Hall	1121		CHEM	244	01	Thermodynamics and Kinetics	10					42%	
	Stuart Hall	1121		CHEM	341	01	Quantum Chemistry and Spectroscopy	3					13%	
	Stuart Hall	1121		CHEM	490	01	Chemical Ecology	24					100%	
	Stuart Hall	2112	210						1	1,260	24	52.5	88%	32%
	Stuart Hall	2112		CHEM	131	05	General Chemistry I with Lab	16					67%	
	Stuart Hall	2112		CHEM	131	07	General Chemistry I with Lab	20					83%	
	Stuart Hall	2112		CHEM	141	01	Accelerated General Chemistry with Lab	24					100%	
	Stuart Hall	2112		CHEM	490	01	Chemical Ecology	24					100%	
	Stuart Hall	2117	210						1	1,260	24	52.5	78%	18%
	Stuart Hall	2117		CHEM	111	01	Chemistry in the Kitchen	22					92%	
	Stuart Hall	2117		CHEM	111	02	Chemistry in the Kitchen	24					100%	
	Stuart Hall	2117		CHEM	244	01	Thermodynamics and Kinetics	10					42%	
	Stuart Hall	1118	210						1	1,560	24	65.0	83%	45%
	Stuart Hall	1118		CHEM	241	01	Organic Chemistry I with Lab	22					92%	
	Stuart Hall	1118		CHEM	241	03	Organic Chemistry I with Lab	24					100%	
	Stuart Hall	1118		CHEM	241	04	Organic Chemistry I with Lab	24					100%	
	Stuart Hall	1118		CHEM	241	05	Organic Chemistry I with Lab	13					54%	
	Stuart Hall	1118		CHEM	241	07	Organic Chemistry I with Lab	16					67%	
	Stuart Hall Total								4	5,640	96	58.8	82%	39%
Computer Lab Math/Computer Science									4	3,535	108	32.7	69%	37%
	Tome Scientific Hall	118	210						1	1,152	25	46.1	89%	52%
	Tome Scientific Hall	118		COMP	131	01	Introduction to Computer Science I	25					100%	
	Tome Scientific Hall	118		COMP	131	01	Introduction to Computer Science I	25					100%	
	Tome Scientific Hall	118		COMP	131	02	Introduction to Computer Science I	21					84%	
	Tome Scientific Hall	118		COMP	251	01	Computer Organization and Architecture	24					96%	
	Tome Scientific Hall	118		MATH	151	01	Introduction to Calculus	24					96%	
	Tome Scientific Hall	118		MATH	170	01	Single Variable Calculus	24					96%	
	Tome Scientific Hall	118		MATH	170	04	Single Variable Calculus	17					68%	
	Tome Scientific Hall	118		MATH	171	02	Multivariable Calculus	20					80%	
	Tome Scientific Hall	118		MATH	271	01	Differential Equations	20					80%	
	Tome Scientific Hall	120	210						1	1,050	34	30.9	64%	41%
	Tome Scientific Hall	120		COMP	131	02	Introduction to Computer Science I	21					62%	
	Tome Scientific Hall	120		MATH	151	01	Introduction to Calculus	24					71%	
	Tome Scientific Hall	120		MATH	170	02	Single Variable Calculus	24					71%	
	Tome Scientific Hall	120		MATH	170	03	Single Variable Calculus	23					68%	
	Tome Scientific Hall	120		MATH	170	04	Single Variable Calculus	17					50%	
	Tome Scientific Hall	120		MATH	171	01	Multivariable Calculus	25					74%	
	Tome Scientific Hall	120		MATH	171	01	Multivariable Calculus	25					74%	
	Tome Scientific Hall	120		MATH	171	02	Multivariable Calculus	20					59%	
	Tome Scientific Hall	120		MATH	271	02	Differential Equations	18					53%	

Discipline	Building	Room	NCES	Subject	Course	Section	Course title	Enrollment	Rooms	ASF	Seats	ASF per Seat	Percent Seats	Weekly Room Hour Utilization
	Tome Scientific Hall	231	210						1	775	19	40.8	68%	37%
	Tome Scientific Hall	231		COMP	132	01	Introduction to Computer Science II	13					68%	
	Tome Scientific Hall	231		COMP	132	01	Introduction to Computer Science II	13					68%	
	Tome Scientific Hall	231		COMP	332	01	Analysis of Algorithms	9					47%	
	Tome Scientific Hall	231		COMP	356	01	Programming Language Structures	13					68%	
	Tome Scientific Hall	231		FYSM	100	27	First-Year Seminar	13					68%	
	Tome Scientific Hall	231		MATH	211	02	Discrete Mathematics	17					89%	
	Tome Scientific Hall	232	210						1	558	30	18.6	38%	17%
	Tome Scientific Hall	232		COMP	393	01	Constraint Programming	6					20%	
	Tome Scientific Hall	232		COMP	491	01	Fall Senior Seminar	12					40%	
	Tome Scientific Hall	232		MATH	211	01	Discrete Mathematics	16					53%	
	Tome Scientific Hall Total								4	3,535	108	32.7	69%	37%
Computer Lab/Chemistry									1	1,184	25	47.4	96%	7%
	Tome Scientific Hall	122	210						1	1,184	25	47.4	96%	7%
	Tome Scientific Hall	122		CHEM	141	01	Accelerated General Chemistry with Lab	24					96%	
	Tome Scientific Hall Total								1	1,184	25	47.4	96%	7%
Computer Lab/Math									1	1,147	35	32.8	71%	27%
	Tome Scientific Hall	121	210						1	1,147	35	32.8	71%	27%
	Tome Scientific Hall	121		MATH	121	01	Elementary Statistics	25					71%	
	Tome Scientific Hall	121		MATH	121	02	Elementary Statistics	24					69%	
	Tome Scientific Hall	121		MATH	121	03	Elementary Statistics	25					71%	
	Tome Scientific Hall	121		MATH	331	01	Operations Research	25					71%	
	Tome Scientific Hall Total								1	1,147	35	32.8	71%	27%
Dance Studio									1	1,695	100	17.0	15%	27%
	25-27 W. High Street	DANCE STU	210						1	1,695	100	17.0	15%	27%
	25-27 W. High Street	DANCE STU		THDA	121	01	Modern Dance I	20					20%	
	25-27 W. High Street	DANCE STU		THDA	200	01	Introduction to Dance and the Western Tradition	18					18%	
	25-27 W. High Street	DANCE STU		THDA	204	01	Fundamentals of Choreography and Dance Composition	5					5%	
	25-27 W. High Street	DANCE STU		THDA	321	01	Modern Dance III	15					15%	
	25-27 W. High Street Total								1	1,695	100	17.0	15%	27%
Digital Photography Lab									1	460	19	24.2	55%	21%
	Goodyear Arts Studio	101	210						1	460	19	24.2	55%	21%
	Goodyear Arts Studio	101		ARTH	221	01	Introduction to Photography	15					79%	
	Goodyear Arts Studio	101		ARTH	360	02	Picture Stories & The Photographic Book	6					32%	
	Goodyear Arts Studio Total								1	460	19	24.2	55%	21%
Drawing Studio									2	2,377	40	59.4	68%	11%
	Weiss Center	343	210						1	1,156	20	57.8	85%	11%
	Weiss Center	343		ARTH	122	01	Fundamentals of Composition and Drawing	17					85%	
	Weiss Center Total								1	1,156	20	57.8	85%	11%
	Goodyear Arts Studio	UPST	210						1	1,221	20	61.1	50%	11%
	Goodyear Arts Studio	UPST		ARTH	222	01	Drawing	10					50%	
	Goodyear Arts Studio Total								1	1,221	20	61.1	50%	11%
Electronics and Circuits Lab									1	800	6	133.3	217%	13%
	Tome Scientific Hall	217	210						1	800	6	133.3	217%	13%
	Tome Scientific Hall	217		PHYS	213	01	Analog & Digital Electronics	13					217%	
	Tome Scientific Hall Total								1	800	6	133.3	217%	13%
Environmental Archaeology Lab									1	438	16	27.4	100%	7%
	Dickinson Environmental Archaeology Lab 1		210						1	438	16	27.4	100%	7%
	Dickinson Environmental Archaeology Lab 1			FYSM	100	17	First-Year Seminar	16					100%	
	Dickinson Environmental Archaeology Lab Total								1	438	16	27.4	100%	7%
Environmental Studies Lab									1	1,190	24	49.6	104%	24%
	Kauffman Hall	109	210						1	1,190	24	49.6	104%	24%
	Kauffman Hall	109		ENST	131	01	Introduction to Environmental Science: Natural Ecosystems and Human Disruption	24					100%	
	Kauffman Hall	109		ENST	131	02	Introduction to Environmental Science: Natural Ecosystems and Human Disruption	26					108%	
	Kauffman Hall	109		ENST	131	03	Introduction to Environmental Science: Natural Ecosystems and Human Disruption	25					104%	
	Kauffman Hall Total								1	1,190	24	49.6	104%	24%
Environmental Studies/Terrestrial Lab									1	1,190	40	29.8	41%	25%
	Kauffman Hall	113	210						1	1,190	40	29.8	41%	25%
	Kauffman Hall	113		BIOL	320	01	Forest Ecology & Applications	20					50%	
	Kauffman Hall	113		ENST	310	01	Methods in Environmental Health Sciences	9					23%	
	Kauffman Hall	113		ENST	340	01	Forest Ecology & Applications	20					50%	
	Kauffman Hall Total								1	1,190	40	29.8	41%	25%
Geology Mineral Petrology Lab									1	900	24	37.5	72%	23%
	Kauffman Hall	140	210						1	900	24	37.5	72%	23%
	Kauffman Hall	140		ERSC	141	01	Planet Earth	18					75%	
	Kauffman Hall	140		ERSC	141	02	Planet Earth	18					75%	
	Kauffman Hall	140		FYSM	100	41	First-Year Seminar	16					67%	
	Kauffman Hall Total								1	900	24	37.5	72%	23%
Geology Prep. Lab									1	900	24	37.5	75%	23%
	Kauffman Hall	134	210						1	900	24	37.5	75%	23%
	Kauffman Hall	134		ERSC	142	01	Earth History	17					71%	
	Kauffman Hall	134		ERSC	142	02	Earth History	19					79%	
	Kauffman Hall	134		ERSC	221	01	Oceanography	18					75%	
	Kauffman Hall Total								1	900	24	37.5	75%	23%
Geology Sed/Strat Lab									1	900	24	37.5	58%	15%
	Kauffman Hall	152	210						1	900	24	37.5	58%	15%
	Kauffman Hall	152		ERSC	309	01	Sedimentology and Stratigraphy	14					58%	
	Kauffman Hall	152		ERSC	309	01	Sedimentology and Stratigraphy	14					58%	
	Kauffman Hall Total								1	900	24	37.5	58%	15%
Geomicroscope Lab									1	900	14	64.3	0%	0%
	Kauffman Hall	146	210						1	900	14	64.3	0%	0%
	Kauffman Hall	146					Unscheduled						0%	
	Kauffman Hall Total								1	900	14	64.3	0%	0%
Music Classroom									1	384	14	27.4	50%	32%
	Weiss Center	212	210						1	384	14	27.4	50%	32%
	Weiss Center	212		MUAC	125	02	Music Theory I, with lab	6					43%	
	Weiss Center	212		MUAC	125	03	Music Theory I, with lab	6					43%	
	Weiss Center	212		MUAC	125	04	Music Theory I, with lab	10					71%	
	Weiss Center	212		MUAC	125	04	Music Theory I, with lab	10					71%	
	Weiss Center	212		MUAC	245	01	Music Theory III, with lab	5					36%	
	Weiss Center	212		MUAC	353	01	German Opera and Society	5					36%	
	Weiss Center Total								1	384	14	27.4	50%	32%

Discipline	Building	Room	NCES	Subject	Course	Section	Course title	Enrollment	Rooms	ASF	Seats	ASF per Seat	Percent Seats	Weekly Room Hour Utilization
Music Classroom with Piano									1	754	35	21.5	25%	40%
	Weiss Center	221	210						1	754	35	21.5	25%	40%
	Weiss Center	221		ARTH	205	01	17th c. Dutch and Flemish Art	8					23%	
	Weiss Center	221		ARTH	205	02	American Art in a Global Frame	13					37%	
	Weiss Center	221		ARTH	314	01	Contemporary Art	4					11%	
	Weiss Center	221		FYSM	100	25	First-Year Seminar	15					43%	
	Weiss Center	221		PHIL	261	01	Realism: Theory and Object	5					14%	
	Weiss Center	221		PHIL	275	01	Beauty	7					20%	
	Weiss Center Total								1	754	35	21.5	25%	40%
Painting Studio									1	1,496	20	74.8	75%	5%
	Weiss Center	342	210						1	1,496	20	74.8	75%	5%
	Weiss Center	342		ARTH	227	01	Fundamentals of Painting	15					75%	
	Weiss Center Total								1	1,496	20	74.8	75%	5%
Physics, Introduction to Lab									2	2,074	48	43.2	78%	36%
	Tome Scientific Hall	101	210						1	1,020	24	42.5	82%	43%
	Tome Scientific Hall	101		PHYS	114	01	Climate Change and Renewable Energies	18					75%	
	Tome Scientific Hall	101		PHYS	131	01	Introductory Physics	17					71%	
	Tome Scientific Hall	101		PHYS	131	02	Introductory Physics	24					100%	
	Tome Scientific Hall	103	210						1	1,054	24	43.9	75%	30%
	Tome Scientific Hall	103		FYSM	100	04	First-Year Seminar	16					67%	
	Tome Scientific Hall	103		PHYS	141	01	Physics for the Life Sciences	22					92%	
	Tome Scientific Hall	103		PHYS	141	02	Physics for the Life Sciences	18					75%	
	Tome Scientific Hall	103		PHYS	211	01	Vibrations, Waves & Optics	16					67%	
	Tome Scientific Hall Total								2	2,074	48	43.2	78%	36%
Physiology/Biology Lab									1	1,260	24	52.5	100%	8%
	James Hall, Rector Science Center	2206	230						1	1,260	24	52.5	100%	8%
	James Hall, Rector Science Center	2206		BIOL	333	01	Physiology w/Lab	24					100%	
	James Hall, Rector Science Center Total								1	1,260	24	52.5	100%	8%
Printmaking Studio									1	1,326	10	132.6	90%	11%
	Weiss Center	340	210						1	1,326	10	132.6	90%	11%
	Weiss Center	340		ARTH	228	01	Printmaking Survey	9					90%	
	Weiss Center Total								1	1,326	10	132.6	90%	11%
Psychology Computer Lab									1	1,115	20	55.8	81%	61%
	Kauffman Hall	185	210						1	1,115	20	55.8	81%	61%
	Kauffman Hall	185		ENST	310	01	Methods in Environmental Health Sciences	9					45%	
	Kauffman Hall	185		ENST	330	01	Environmental Policy	15					75%	
	Kauffman Hall	185		ENST	330	01	Environmental Policy	15					75%	
	Kauffman Hall	185		ENST	335	01	Analysis and Management of the Aquatic Environment	20					100%	
	Kauffman Hall	185		ERSC	218	01	Geographic Information Systems	19					95%	
	Kauffman Hall	185		PSYC	340	01	Research Methods in Social Psychology	15					75%	
	Kauffman Hall	185		PSYC	340	01	Research Methods in Social Psychology	15					75%	
	Kauffman Hall	185		PSYC	365	01	Research Methods in Clinical Psychology	19					95%	
	Kauffman Hall	185		PSYC	365	01	Research Methods in Clinical Psychology	19					95%	
	Kauffman Hall Total								1	1,115	20	55.8	81%	61%
Psychology/Biology Lab									1	1,260	24	52.5	79%	13%
	James Hall, Rector Science Center	1206	230						1	1,260	24	52.5	79%	13%
	James Hall, Rector Science Center	1206		PSYC	325	01	Research Methods in Biological Psychology	19					79%	
	James Hall, Rector Science Center	1206		PSYC	325	01	Research Methods in Biological Psychology	19					79%	
	James Hall, Rector Science Center Total								1	1,260	24	52.5	79%	13%
Theatre Design Studio									1	425	15	28.3	93%	12%
	Montgomery House	200	210						1	425	15	28.3	93%	12%
	Montgomery House	200		THDA	210	01	Costumes and Props	14					93%	
	Montgomery House	200		THDA	210	01	Costumes and Props	14					93%	
	Montgomery House Total								1	425	15	28.3	93%	12%
Three-Dimensional Art/Sculpture									1	459	15	30.6	76%	29%
	Goodyear Arts Studio	DOWN	210						1	459	15	30.6	76%	29%
	Goodyear Arts Studio	DOWN		ARTH	123	01	Fundamentals of Sculpture and Three-Dimensional Design	10					67%	
	Goodyear Arts Studio	DOWN		ARTH	160	01	Introduction to Sustainable Practices in Public Art	18					120%	
	Goodyear Arts Studio	DOWN		ARTH	323	01	Sculpture	6					40%	
	Goodyear Arts Studio Total								1	459	15	30.6	76%	29%

Appendices

General-Purpose Classrooms

Specialized Instructional Spaces

Survey Findings: Administrators & Staff

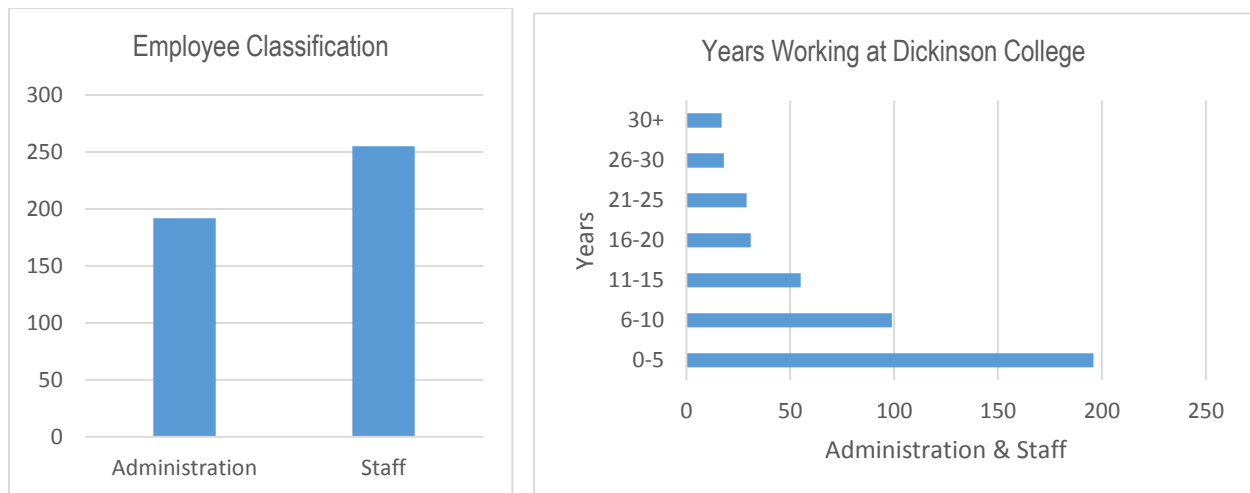
Survey Findings: Faculty

Survey Findings: Students

ADMINISTRATION & STAFF SURVEY

As part of the Educational Space Master Plan for Dickinson College, Rickes Associates conducted three separate surveys, inquiring about space needs, favorite and least favorite classrooms, campus facilities, and campus issues in general. The results to the Staff & Administration survey are discussed below.

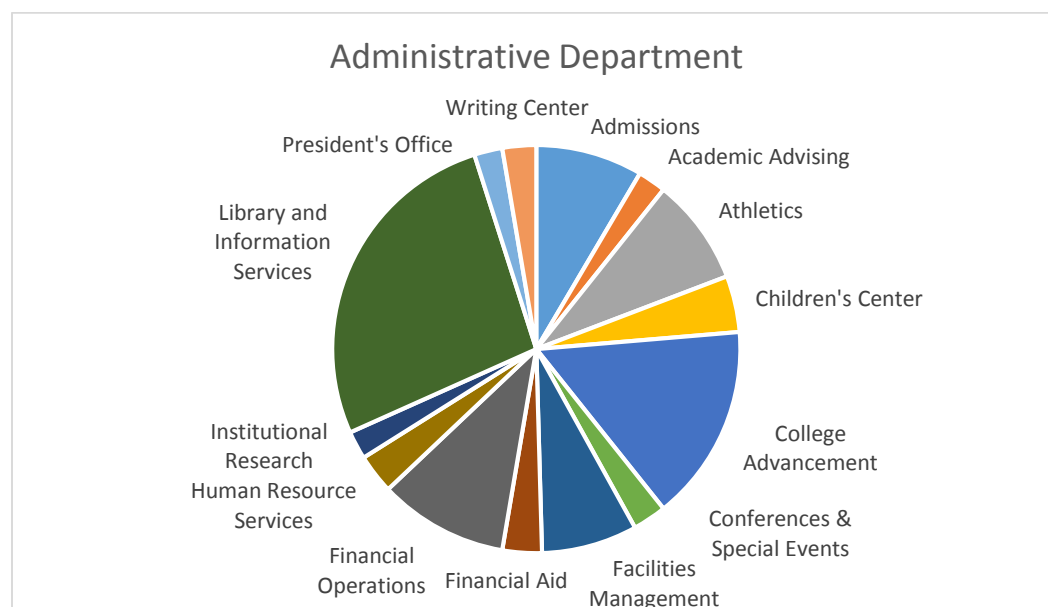
1. Which category best describes your employee classification?
2. How many years have you worked at the College?



- Of the Dickinson employees taking part in this survey, 43% are members of the Administration while 57% are members of the Staff. Overall, 447 staff responded to this survey.
- A total of two-thirds (66%) of the survey respondents have worked at the College for less than a decade.

3. Please choose your Administrative Office.

All of the offices that had at least five representatives taking part in this survey are illustrated, by percentage, below.



Library and Information Services overwhelmingly has the greatest number of representatives taking part in this staff & administration survey.

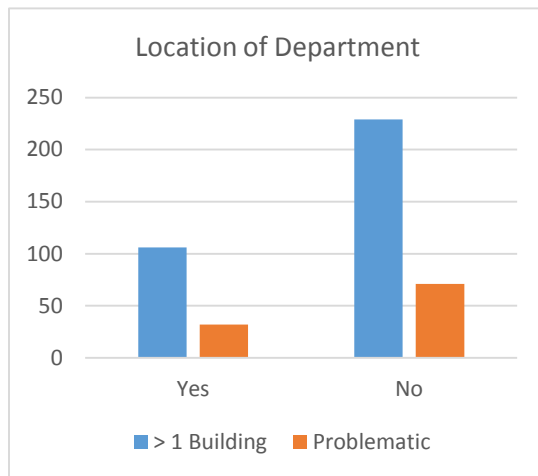
Mutually exclusive to the graph above, the one that follows shows the breakdown specifically of Student Services in which 110 respondents answered. Whether it be dining, residential, public, student life, wellness, etc., Student Services is represented by a significant portion of campus administration.

Student Services Area	# of Responses	Percentage
Asbell Center/Jewish Life	1	1%
Bookstore	7	6%
Career Center	8	7%
Dean of Students Office	1	1%
Dining Services	39	36%
Disability Services	2	2%
Diversity Initiatives	0	0%
LGBTQ Services	1	1%
Public Safety	8	7%
Registrar's Office	7	6%
Religious/Community Life	2	2%
Residential Life	7	6%
Student Activities	10	9%
Student Mailroom	3	3%
Student Life	5	5%
Wellness Center	7	6%
Women's Center	2	2%
Total	110	100%

Of the 400-plus respondents, approximately one-quarter, or 110, provide student services, whether it be dining, public, residential, student life, or wellness.

A diversified range of campus areas were represented in this survey with regards to Student Services. Dining Services seemed to have the majority followed by Student Activities. Responses and opinions of members of Student Services are found throughout the survey analysis.

4. Is your department located in more than one building? Is this problematic?



The majority of Dickinson staff and administration are members of a department located entirely in one building. Of those who are located in more than one building, departmental separation does not appear to be an issue.

Some members responded:

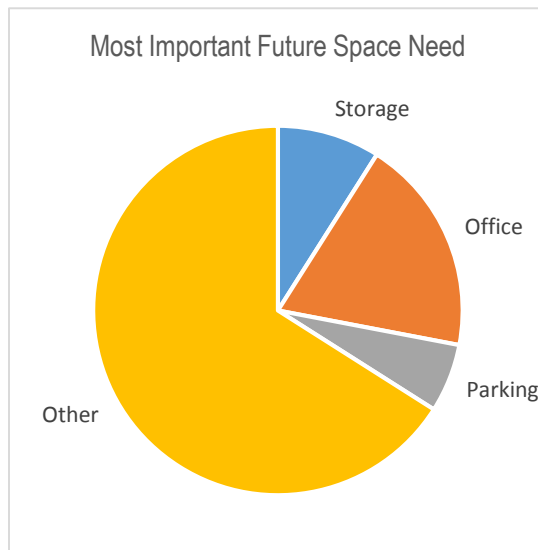
- Two staff member offices and a large technical workspace are located across campus which wastes time in moving resources to and from each location.
- Most of my departmental [Psychology] colleagues are located in Kaufman Hall while a few of us are located in the Rector Science Complex. We are a physically separated department.

5. What are the three most pressing near-term space needs?

Although responses varied greatly here, almost two dozen respondents indicated that they would like to see more office space at Dickinson College. This may have something to do with responses to the preceding. Additional responses included:

- Larger conference rooms with technology available
- Ergonomic furniture
- Quiet study spaces for students
- Storage space

6. What are your three future space needs in the next 5 years?

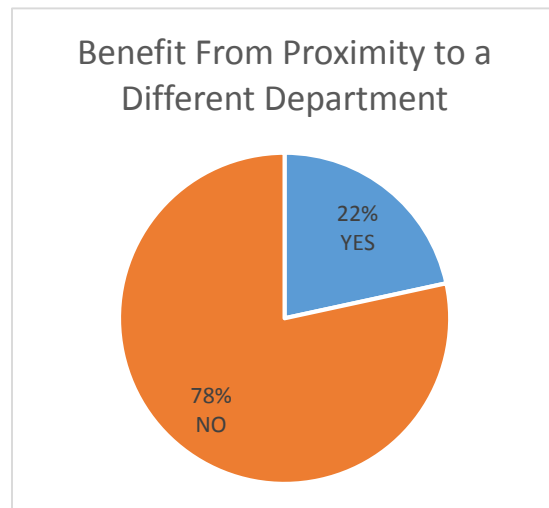


When asked to list and/or discuss their own special future space needs, responses varied greatly. While lack of storage, the need for more office space, and parking issues were cited most consistently, it seemed as if everyone had something different to say. Even when there was apparent agreement -- around the need for storage, for example -- the type of storage varied: some wanted basic storage for supplies, others wanted storage for the radio station, while still others asked for bike storage.

This was not an easy question in which to categorize responses, as only a handful of people referenced the same need. A few additional response clusters included:

- Consolidating the mail center into one facility
- More student space in the library
- Competition gym to allow more indoor gym space
- More computer labs.

7. Would you benefit from closer proximity to another department or unit? If so, with whom?



The majority of administration and staff do not feel the necessity to be located near another department. In fact, almost four out of five answered that this would not be beneficial to them in any visible way. Of those who said yes, some suggested that collaborative office suites would potentially engage students more. Others said that they would like to have improved communication with department coordinators.

The Office of Financial Aid was cited as a “pivotal” office by respondents associated with the Bursar’s Office, the Office of the Registrar, and other student-oriented offices. Being located in close proximity would permit the various offices to pool student information, invoices, forms, etc.

8. Is your office located in an optimal location? If not, where would you prefer to be located?

Of the 322 responses received to this question, 271 indicated that “yes”, the current location of their office was an optimal location.

Of those that indicated they would prefer another location for their office, the preference was to be located near the “center of campus”. This seems to be ideal to most administrative departments, as some of those who do like the location of their office mentioned it *was because* they were located on or near central campus. Other interests include locations closer to:

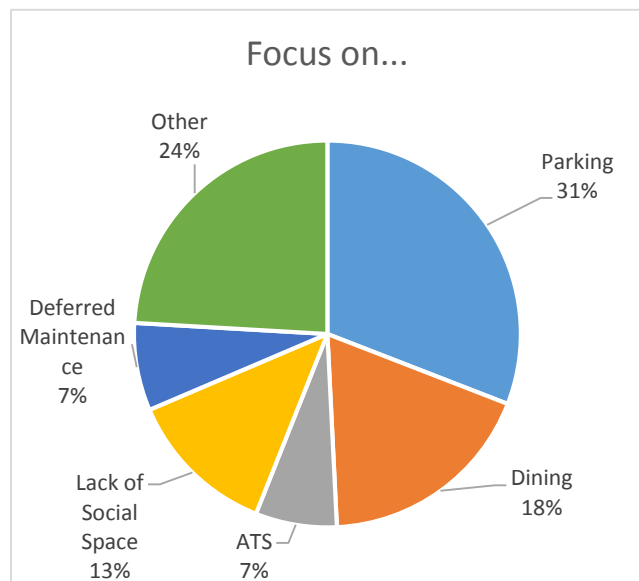
- other professionals who work in departments that commonly collaborate,
- a window for more natural light,
- areas where outside business can be conducted in appropriate space.

9. Are there components of your area that would function in off-campus facilities? If so, please identify how off-campus facilities would be useful.

While a few members of Dickinson College administration and staff answered that indeed, some components of their area could function in off-campus facilities, 85% decided that the functionality of their department would require them to be on-campus. Of the 307 respondents, 260 selected “No.”

Of those who indicated they could function off-campus, several identified themselves as members of the College Farm, which is already located off-campus.

10. What do you think are the major campus-wide facilities needs and issues?



As would be expected, different departments answered this question based upon related needs or issues directly applicable to their area. For example, an administration member stating, “Admissions needs additional office space if the staff is to remain the size it is today,” obviously has some connection to the Admissions Department, and wants to be sure that Admissions-associated needs are addressed or at least discussed.

It is acknowledged that just over 22 percent of the 247 respondents indicated student housing as a major campus-wide challenge. As the housing needs are being addressed, these responses have been excluded reducing the response rate to 191 persons with various other concerns that may otherwise have been masked.

Parking

Deficiencies in parking throughout campus were the most cited issue. Visitor, staff, and student parking are all at a premium.

Dining

Dining services operate in limited capacity and are outdated. The dining hall regularly fills to capacity at meal time. There is lack of seating, the space is hard to maneuver through, and it feels like a high school cafeteria. The additional areas are generally co-located in the building vs. distributed on campus.

Auditorium

The Anita Tuviv Schlechter Auditorium, known by Dickinson students and staff as ATS, is a versatile space for concerts, performances, lectures, and debates. More than a handful of administration and staff see the need for updates. “The ATS should be updated with more seating, with an updated stage area, better lighting, better acoustics and with better audio/video recording equipment.” This Dickinson “landmark” has a notable presence, with over four decades on campus, but needs renovations and is no longer serving the College well, especially with Dickinson’s expanded enrollment since the building’s dedication in 1971.

Social Space

From additional spaces for student activities such as club meetings and game rooms, to simply places for “students to relax”, respondents would like to see the types and numbers of social spaces increase on campus.

Particular areas noted included:

- “Synergistic spaces for working relationships” and “event space to accommodate both student and staff wellness”
- Space that could be used for professional development training sessions could also be used after hours for book club meetings, team project meetings, and even televised sporting events.
- Existing areas need updating, in particular those that support presentations or plays with better stage areas and lighting and acoustics.

Being able to bring students together in ample space throughout campus is part of a fulfilling college experience, and certainly an aspect many want to see as part of the experience at Dickinson College.

Deferred Maintenance

Deferred maintenance also brought up specific concerns. The HUB was characterized as ‘crumbling’ and being representative of a ‘high school cafeteria’. Option of seeing a more attractive and less cavernous HUB were proposed. Student residence halls, East College, and the ATS were other buildings that seemed to be overdue with regards to renovations.

Specific reference to overlooked areas included updating painting and trim on building exteriors and addressing the “falling veneers in the library interior”. The concern raised was the public impression this leaves, making the campus look run down. The following quote embodies the overall feeling from both the survey and interview findings.

“Deferred maintenance needs are outpacing repair, maintenance and upgrades.

There is a need for an increased budget for deferred infrastructure maintenance and overhaul of Holland Union Building, for example, to make it a more useable space and attractive centerpiece for tours.”

Other

Responses found in ‘Other’ identified additional need for faculty offices to support increasing personnel numbers; desire for indoor and outdoor sporting areas; upgraded classroom spaces, additional recreational space.

- Classroom space needs to be upgraded across the campus with contemporary furnishing to allow for dynamic learning spaces. For example, Denny Hall’s classroom furniture is about 30 years old, and it creates significant problems for learning.
- There is a lack of space for intramural sports, as most gymnasium space is allotted to varsity sports.

While responses varied, many allude to a desire to make parts of campus more contemporary.

What do you see as the potential needs for various other space types for the institution as a whole?

When asked to discuss issues with ‘other’ space types, many faculty reiterated answers to previous questions, once again citing parking, dormitory, and dining problems. However, almost one-fifth of staff and administration did mention they would like to see more social spaces on the Dickinson campus. Whether they are meeting spaces for clubs/organizations, student and staff gathering spaces, or simply places to relax, it appears that Dickinson College would benefit from additional such spaces.

Appendices

General-Purpose Classrooms

Specialized Instructional Spaces

Survey Findings: Administrators & Staff

Survey Findings: Faculty

Survey Findings: Students

FACULTY SURVEY

Three surveys were developed and electronically distributed to Administrators and Faculty, Staff, and Students, to garner their input on space needs for the College. A total of 132 faculty responded to the survey and the findings are summarized below.

1. Please indicate your Faculty Rank.

Faculty Rank	Count	Percentage
Professor	30	23%
Associate Professor	46	35%
Assistant Professor	30	23%
Visiting Assistant Professor	10	7%
Lecturer	7	5%
Adjunct Instructor	9	7%
Total	132	100%

2. How many years have you worked at the College?

Years	Count	Percentage
0-5	35	27%
6-10	27	20%
11-15	27	20%
16-20	10	8%
21-25	16	12%
26-30	10	8%
30+	7	5%
Total	132	100%

Respondents ranged from faculty members that are fairly new to others that have been with the College for a significant amount of time. Fully one-quarter of the faculty members responding to the survey have been with the College for more than 20 years.

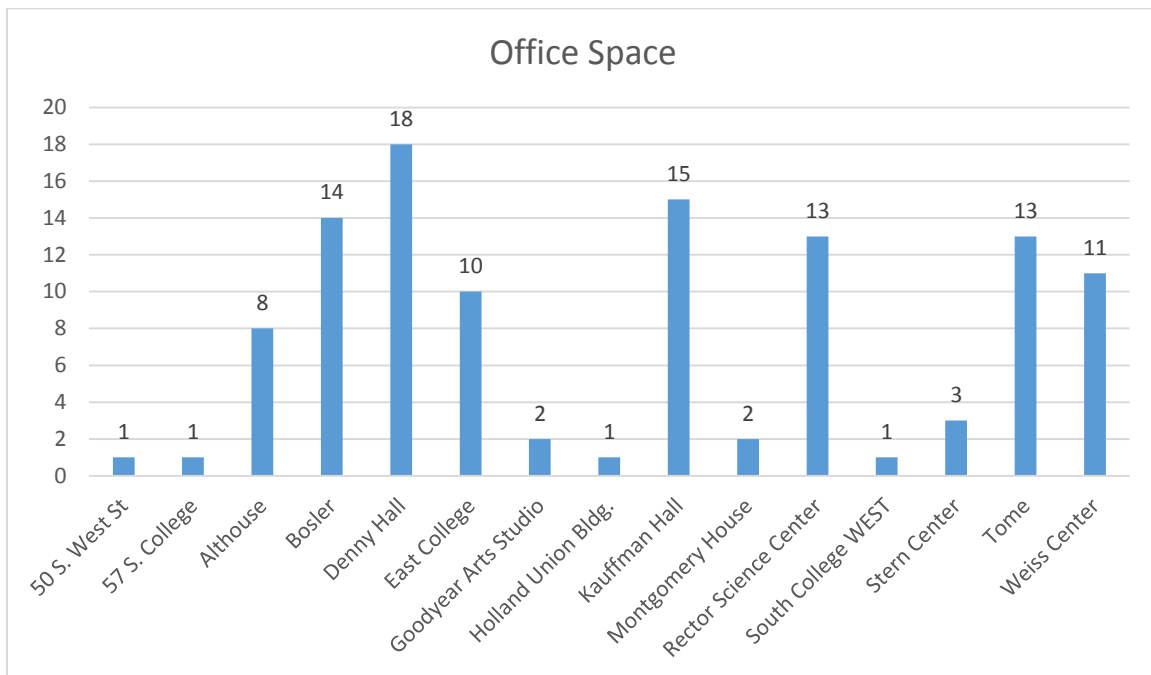
3. Please indicate your Academic Program (please select all that apply).

Academic Area	Count
African Studies	3
American Studies	3
Anthropology	4
Archaeology	1
Art & Art History	6
Biochemistry & Molecular Biology	1
Biology	7
Chemistry	6
Chinese	1
Classical Studies	1
Computer Science	3
Earth Sciences	4
East Asian Studies	2

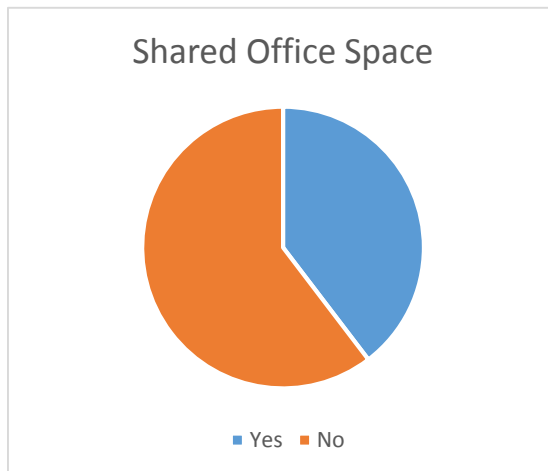
Academic Area	Count
Economics	6
Education	2
English	9
Environmental Studies/Science	7
Film Studies	4
French	1
German	1
Health Studies	2
History	5
International Business & Management	3
International Studies	1
Italian and Italian Studies	4
Journalism	1
Latin	1
Latin American, Latino & Caribbean	5
Mathematics	5
Medieval & Early Modern Studies	1
Middle East Studies	5
Music	11
Neuroscience	1
Philosophy	2
Physics and Astronomy	5
Policy Studies	1
Political Science	6
Portuguese and Brazilian Studies	2
Psychology	10
Religion	1
Sociology	5
Spanish and Portuguese	7
Theatre & Dance	4
Women's and Gender Studies	2
Writing Program	1
TOTAL	163

The survey respondents hailed from a wide range of disciplines. It also appears that faculty members elected more than one discipline, in some instances. Music and Psychology were indicated most often.

4. In which building is your unit offices/space physically located on campus (please only indicate your primary building)?



5. Do you share any of your space with other academic or administrative units?

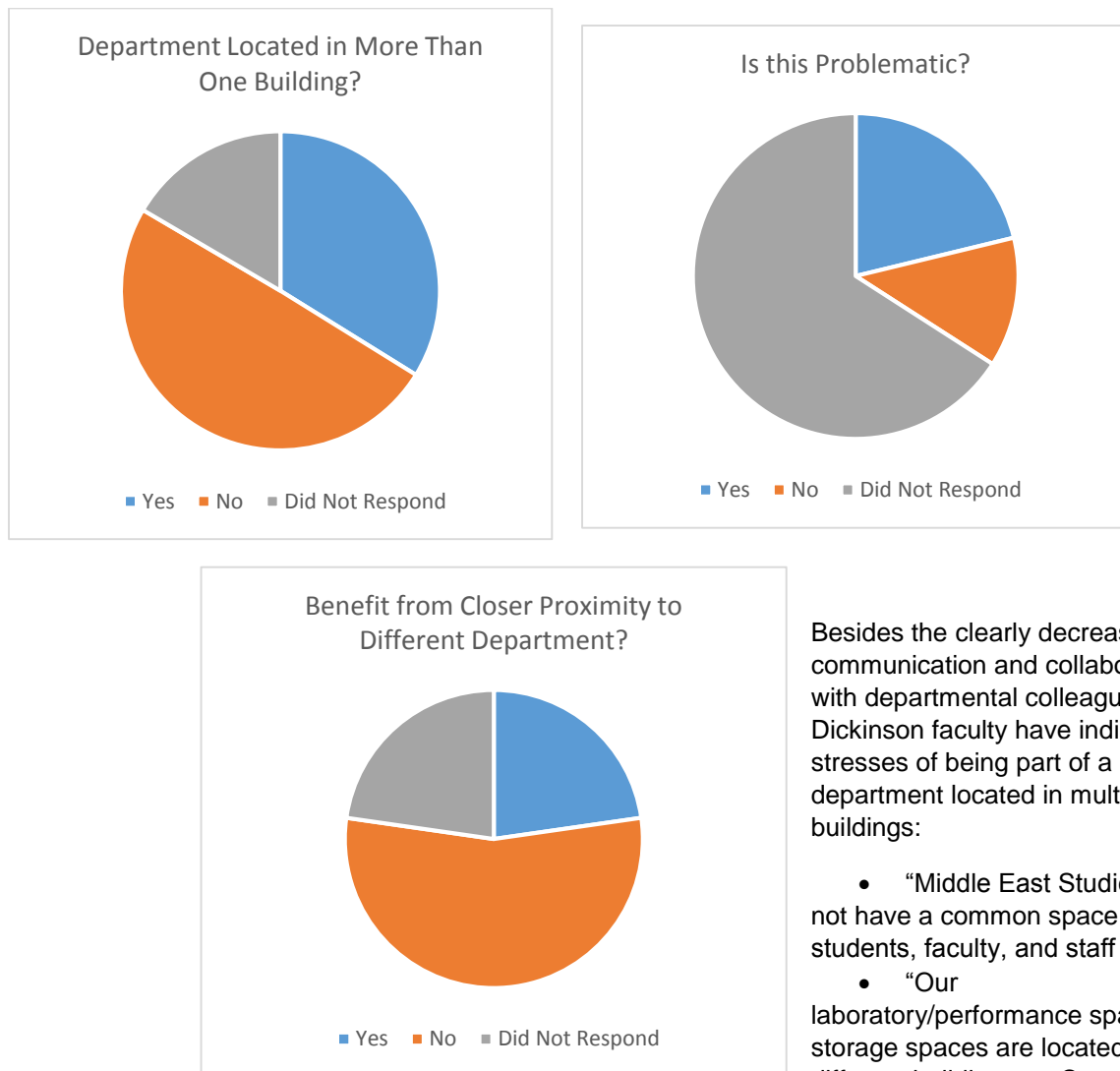


Denny Hall is in high demand with regards to classroom and office space. The lounge area, copy area, and mailboxes are shared among different departments. Closet space and seminar rooms have been converted into office space and scheduling classes is seen as extremely difficult because of overlapping requests by departments. Political Science and Film Studies share an administrative office in Denny Hall.

Whether in Denny Hall or not, two-fifths of faculty respondents indicated that they do in fact share office space with other departments. Economics and African Studies share office space, Art & Art History share a building with Music, foreign

languages share with other foreign languages, and similar areas of academia share office space, such as Earth Science and Environmental Studies.

6. Is your department located in more than one building? Is this problematic?| Would/Do you benefit from closer proximity to another department or unit?



Besides the clearly decreased communication and collaboration with departmental colleagues, Dickinson faculty have indicated the stresses of being part of a department located in multiple buildings:

- “Middle East Studies does not have a common space for students, faculty, and staff to meet.”
- “Our laboratory/performance spaces and storage spaces are located in five different buildings on Campus and

on High Street. It is time-consuming and logistically difficult to navigate between these spaces and especially to move equipment between these spaces.”

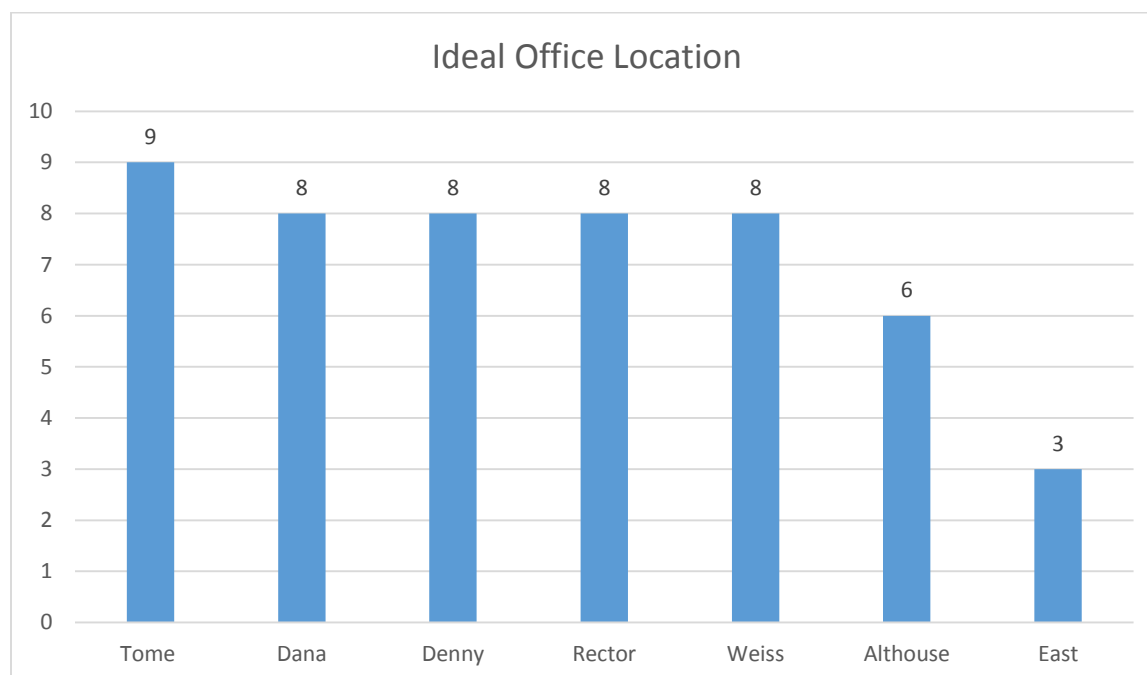
With this said, while several survey respondents answered the question of whether his/her department was located in one building, many chose not to respond to the question as to whether or not this was a problem. There really is no complete ‘Yes’ or ‘No’ answer to this question. For example, the Music department must be concerned about acoustics, and would not want to have all of its departmental instruments in the same building and the same location. However, it is a challenge to move instruments, costumes, and other items of production from building to building, especially taking weather into account.

Similar sentiment is shared among other departments:

- “We love our spaces that are off campus, but it can be a challenge to coordinate meetings, consultations, and other things when faculty can be at one of several locations at any given time.”
- “The space works for our needs; the archaeology labs are crucial to the teaching and scholarship done by our Archaeology faculty and students in their classes. At the same time, these labs are spatially segregated from the department, resulting in a sense of remoteness.”

While explaining whether or not a department in multiple buildings is or is not beneficial, faculty overwhelmingly indicated that they would/do not benefit from a different academic department being located near their own. Less than one-quarter (23%) of the total faculty who submitted this survey indicated they would benefit from the proximity of a different department.

7. Where is the best physical location on campus for your office and support spaces?



Those who like Tome enjoyed how it is well-designed for Physics, as it has equipment, classrooms, labs, and several faculty offices utilized by the Physics department. Those Physics faculty members who chose Tome selected it for reasons similar to why Psychology and/or Archaeology faculty chose Dana: it already houses some faculty, it would bring the department closer together, and it supports the pedagogical needs of the department. The underlying interpretation of faculty responses to this question is that faculty want to be situated in a space where they can easily collaborate and connect with one another.

8. What are the three most pressing near-term space needs?

Dickinson faculty members conveyed a myriad of dissatisfaction with regards to current space issues. The most alluded to was office space, as nearly one-fourth (24%) of faculty made reference to the need for more office space throughout the College campus.

Another request from Dickinson's faculty was for additional laboratory space for research, teaching, and student projects. It was also observed that computer labs seem to be over-utilized and are frequently "annexed" by certain departments.

Other space needs discussed by faculty included:

- Space for students to convene to build a sense of community
- Classrooms for language classes; preferably ones with movable chairs
- Smart rooms
- Larger classrooms

Common areas and break out rooms for students were also requested by faculty members responding to the survey.

9. What are your three future space needs in the next five years?

The responses to this question mirrored the prior question, which asked about the most pressing near-term space needs. Many faculty members gave very similar answers to both questions. Commonly discussed topics, once again, included the need for more office space, a desire for more laboratory space, and a preference for a department to be "whole" in a single building, where feasible.

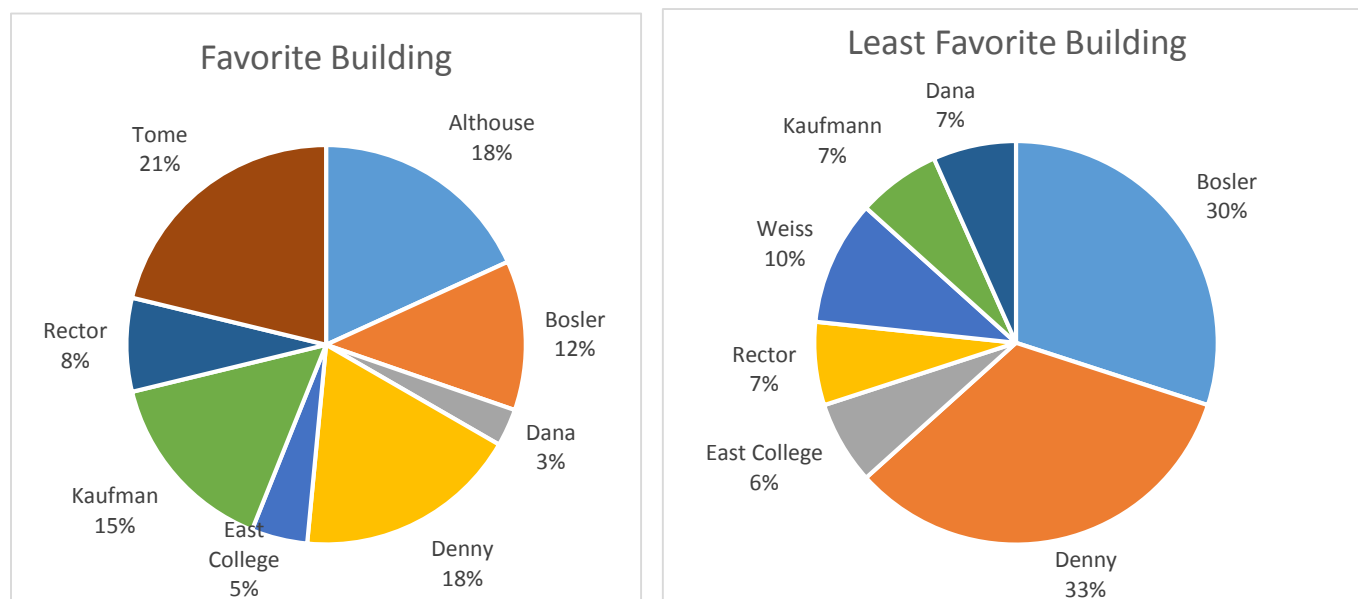
10. In general, how did the following factors influence your request for particular classrooms or lecture halls for your courses in Fall 2013?

Influential Factor	High Priority	Medium Priority	Low Priority	Not a Priority
Course Size Relative to Classroom Capacity	68	26	4	6
Proximity to My Office	27	38	22	16
Proximity to My Other Classrooms	17	31	26	30
Technology Available	84	15	4	1
Environmental Factors such as Heat, Lighting, Natural Light	32	37	24	10
Classroom Type/Furniture Works with My Pedagogical Approach	65	27	7	4

The leading components affecting faculty decisions on classroom requests overwhelmingly appear to be the technology available, course size compared to classroom capacity, and classroom design. Whereas faculty contended earlier in the survey that they would like to see their office space closer to their classroom, here there are other priorities that clearly supersede that preference, including a desire for natural light.

11. Do you have a favorite building to teach in and why?

12. Do you have a least favorite building to teach in and why?



Tome, Althouse, and Denny were the three most popular building to teach in among Dickinson faculty. While Tome was selected for a wide variety of reasons, respondents who chose Althouse and Denny seemed to be in consensus. Althouse is viewed as appealing to faculty due to its modern technology and classroom layouts. As one faculty member noted, “It does not look like it was last renovated in 1968.” Denny, on the other hand, appealed to those faculty members with an office in close proximity. Some of these same faculty members also commented on Denny’s aesthetically pleasing classrooms.

Ironically, while Denny was reported as one of the more popular buildings because of its proximity to certain faculty offices, it was also selected by faculty as a least preferred building. Survey respondents indicated their dislike of Denny for a few reasons: the classrooms in the basement are viewed as, “depressing, dark, and creepy;” the furniture is inflexible, and there are HVAC issues with some of the classrooms. Meanwhile, classrooms in Bosler were viewed as too small and in need of renovation.

13. Do you have a favorite general-assignment classroom to teach in and why?

Sixty-nine faculty members responded to this question, almost all of which referenced a unique general-purpose classroom in their response. However, while the room numbers differ from faculty member to faculty member, the reasoning behind each one's decision-making demonstrates a few overlapping themes:

Available, Updated Technology

- *Tome 121*: "It is the only PC lab in Tome"
- *Tome 115*: "Multiple projectors and ease of seeing all students and them seeing the screens"
"...has physics' equipment nearby, has good natural light, and is a smart classroom"
- *Kaufman 186*: "Good technology, enough space for students"
- *Althouse G08*: "It has enough space and all the technology works"

Appropriate Classroom Style for Pedagogical Approach

- *Denny 212*: "The seats are all body size friendly; the tables can be rearranged in many forms"
- *Althouse 07*: "Conference table allows for more egalitarian space use and facilitates discussion"
- *East College 300*: "I really like the movable desks"

Ample Space

- *Bosler 319*: "It has a great shaped space. Can form a real circle with chairs for discussion"
- *East College 406*: "Spacious but works for small seminars"
- *Althouse 204*: "Only lab with 40 seats"

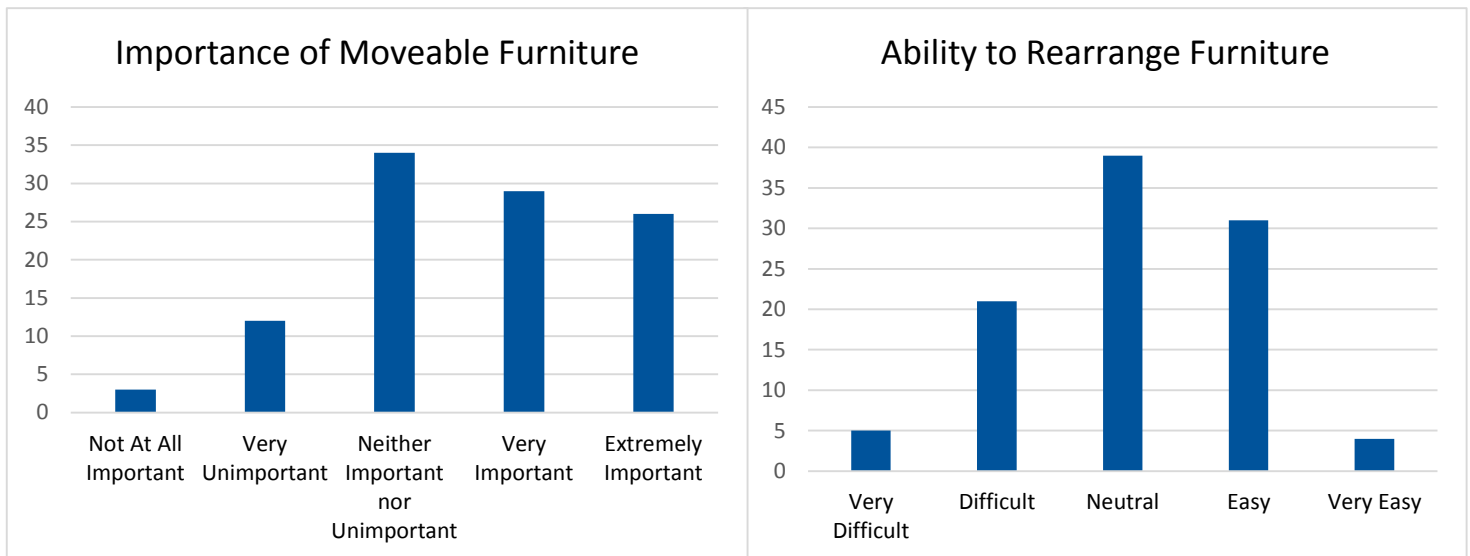
Although Dickinson faculty most likely answered this question with a general-purpose classroom they had utilized or been located near, modern technology, agreeable classroom style, and spaciousness were the three major premises used to evaluate favorite general-assignment classrooms.

14. Do you have a least favorite general-assignment classroom to teach in and why?

Just as faculty responses varied greatly when queried about favorite classroom, the question of least favorite classroom elicited a similarly broad range of responses. With this said, over 25% of respondents to this question did state that their least favorite general-assignment classroom was located in Bosler. Of those who discussed Bosler, almost all of them made reference to the lack of windows creating a depressing atmosphere. Faculty who selected classrooms in Denny (212 and 317), Kaufman (186), Weiss (221), and Tome (124) also cited the lack of natural lighting.

15. How important to your teaching style is being able to easily rearrange the furniture?

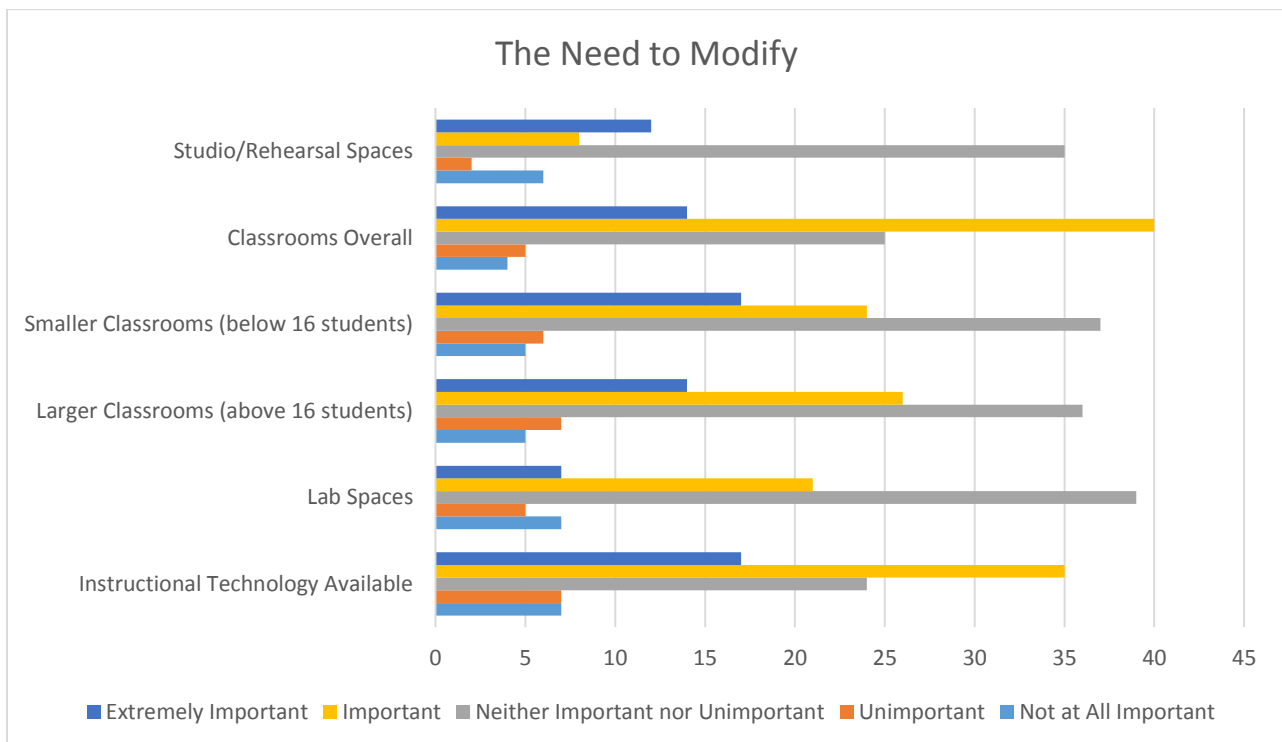
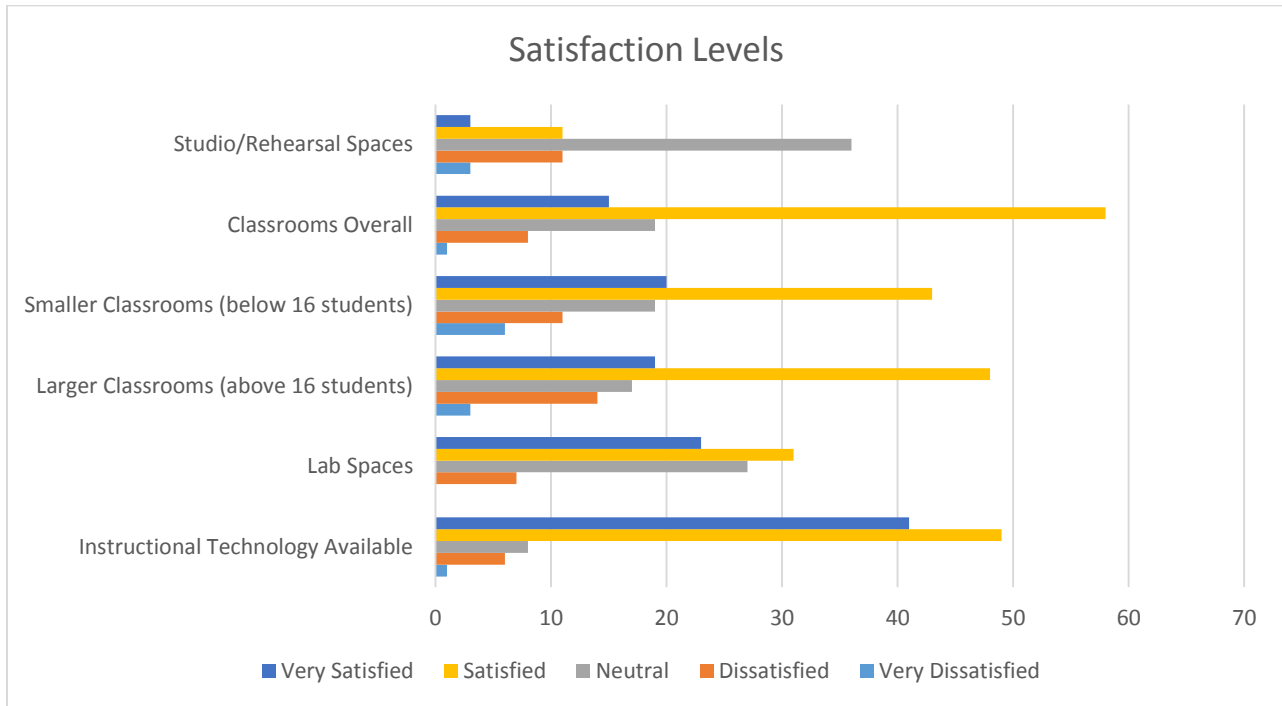
16. If/When you wish to rearrange the furniture, typically how difficult is it to do so?



As clearly illustrated in the first of the two graphics, furniture that can be rearranged is a must. Less than 15% of respondents indicated that moveable furniture was, to some degree, unimportant while well over half of faculty viewed it as 'Very Important' or 'Extremely Important'.

The graph of the 'Ability to Rearrange Furniture' shows that it is apparently a challenging proposition for one-quarter of the faculty.

17. How would you describe your satisfaction with the following? How important is the need to modify the following instructional spaces?



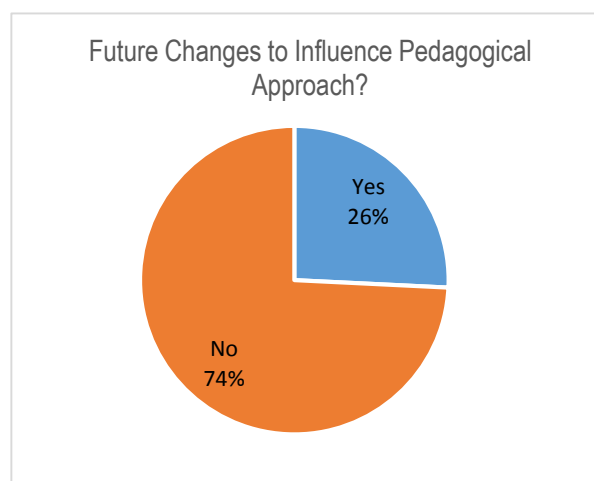
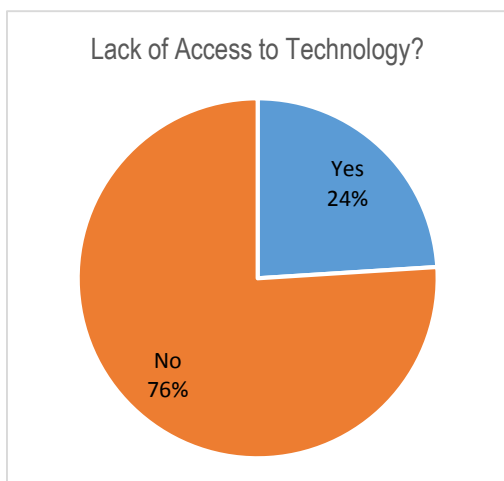
Dickinson College faculty were not afraid to indicate that although they might be generally satisfied with certain instructional space types, there was still room for improvement. For example, 'Classrooms Overall' and 'Instructional Technology Available' not only received the most 'Satisfied to Very Satisfied' votes, but also the most 'Important to Extremely Important' votes in the need for modification.

When asked to elaborate on their responses, faculty presented a continuum of thoughts:

- We need more seminar rooms, with tables to sit around, that are technologically smart.
- We have no “Smaller Classrooms” in Rector if it is defined as below 16 students.
- In Denny Hall, smaller classrooms (below 16 students) uniformly do not have technology support.
- I do have technology in my classroom, but when it doesn’t work, it is very disruptive to my class. I need more responsive support. Also, the dance studio has experienced SEVERE heating problems this winter which were not adequately addressed.
- Currently, the instructor computer in K186 and K178 are very slow -- they take almost 10 minutes to start-up and often freeze when opening internet explorer links or Adobe PDF files. Not optimal for teaching!
- The biggest problem is the lack of sufficient seminar rooms (below 16 students).
- The Physics department had the opportunity to design its educational space when the new Tome was built. They did an excellent job, and I am very happy with the space I have available.
- The classrooms in Denny are fine for lecture and discussion classes.
- I am very satisfied with the above. The library offers everything I need, plus the classrooms are pleasant, comfortable, and long tables are conducive to discussion, which in my area of teaching, is essential.

18. Is there a lack of access to technology in the classroom that prevents you from teaching as you would like to? What would you like to have access to?

19. Do you foresee any changes in the future (new degree of course offerings, technology) that will influence your approach to instruction? If so, how will it change?



Slightly over three-quarters of Dickinson faculty do not feel limited by access to technology. A few faculty requested smart boards and projectors in small seminar-rooms, while a few others asked for more computers in computer labs. Some others wanted to see more Smart classrooms.

Many Dickinson faculty feel that their pedagogical approach will not change in the foreseeable future. Of those who did, the majority referenced that changes in technology will require them to adapt their instructional approach. Greater laptop use by students in classrooms is anticipated and some faculty observed that their pedagogical approach is already adapting.

20. What is the greatest limitation currently associated with student learning spaces (studios, practice rooms, collaborative learning spaces)?

The greatest limitation currently associated with student learning spaces, according to faculty, is the lack of learning spaces. Comments included:

- There is currently no space for students whose main fields of study are located in Denny Hall to study, collaborate, and build community
- Aside from our labs, which are function-specific spaces, student majors currently lack shared space for studying/tutoring, research and group activities
- We have 6 practice rooms, we should have 30. We have one rehearsal room, we should have 2-3
- There is not enough lab space for social science departments

21. If you could change one thing about the classrooms and lecture halls in which you teach, what would it be?

Two issues discussed in many sections of this survey are heavily represented in response to this particular question, namely, lighting and space. Quite a few faculty members indicated that 'No natural lighting' was a great concern. While Bosler and Dana seem to be the two academic buildings most alluded to, it appears there are classrooms throughout campus with this issue. The general statement, "More space," also appears several times throughout this section of the survey.

22. What do you think are the major campus-wide facilities needs and issues? What do you see as the potential needs for various other space types for the institution as a whole?

A number of faculty were very clear that the next major renovation to take place at Dickinson College should be the residence halls. As one faculty member stated, "They are shabby and antiquated." Another referred to the residence halls as "Dismal."

Others discussed renovations to buildings they deemed in need. A few faculty members wanted to see renovations to the dining hall at Dickinson. Other responses ranged from more parking to more integrated social and academic life.

Appendices

General-Purpose Classrooms

Specialized Instructional Spaces

Survey Findings: Administrators & Staff

Survey Findings: Faculty

Survey Findings: Students

OVERVIEW

Rickes Associates, with thanks to the Office of Institutional Research for formatting and hosting the survey.

Three surveys were developed and electronically distributed to Administrators and Faculty, Staff, and Students, to garner their input on space needs for the College. A total of 544 students responded to the survey. The results of the Student survey are highlighted below.

1. Please select your Major.

Academic Area	Count
African Studies	3
American Studies	11
Anthropology	5
Archaeology	12
Art & Art History	13
Biochemistry & Molecular Biology	19
Biology	28
Chemistry	6
Classical Studies	2
Computer Science	13
Earth Sciences	9
East Asian Studies	4
Economics	19
Educational Studies	2
English	21
Environmental Studies	23
Environmental Science	11
French	3
German	5
History	21
International Business & Management	40
International Studies	18
Latin American, Latino & Caribbean	4
Law & Policy	9
Mathematics	10
Medieval & Early Modern Studies	1
Middle East Studies	4
Music	4
Neuroscience	21
Philosophy	6
Physics	9
Policy Studies	9
Political Science	34
Psychology	34
Religion	1
Russian	2
Sociology	17
Undeclared	86
Women's and Gender Studies	5
TOTAL	544

Question: 2, 3:

What is your current year? Do you live in campus housing?

Description	Count	Percentage
First Year	183	26%
Sophomore	180	26%
Junior	168	24%
Senior	166	24%
Total	697	100%

With responses from almost all majors at Dickinson College, and a distribution of students proportional by year, the survey respondents appear to be representative of the student body's opinion as a whole. The majority of the respondents live on or adjacent to the campus.

Question: 4, 5, 6:

In general, please indicate the relative importance of each of the following for creating a successful learning environment for courses held in classrooms and lecture halls? How would you describe your satisfaction with the following areas concerning classrooms? Provide additional input.

- a. Technology
- b. Maintenance
- c. HVAC
- d. Furniture
- e. Location (proximity to other classes)
- f. Other:

In ascending order of priority, environmental factors was number one followed closely by physical maintenance of the space. There was considerable consternation as to the variations in building temperatures across campus.

Technology and flexible furniture were mentioned third and fourth most frequently, with proximity to other classes a distant fifth (although when comments were reviewed in detail, proximity was more related to a student's major).

Specific areas that need to be addressed to promote a better environment included:

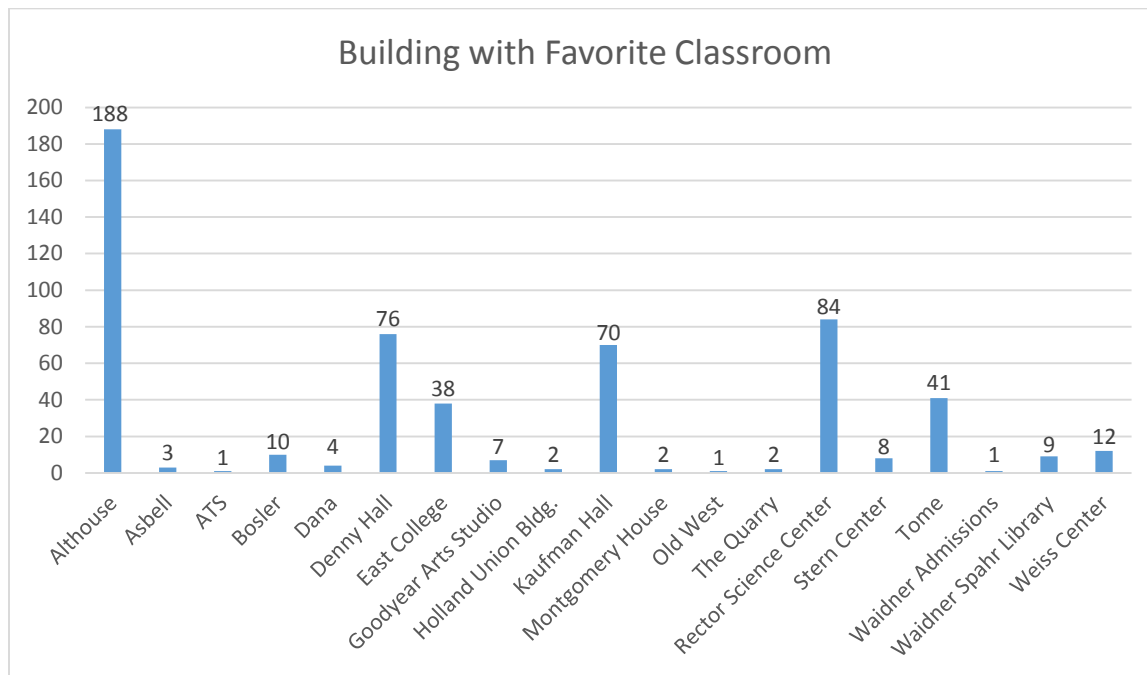
- More appropriately sized (adult) furniture
- Ability to move furniture around in the classroom
- Furniture that can support books, computers, and a writing area
- Ability to see and use the board while the screen is down
- Better Wi-Fi access; spotty service now
- Need access to more outlets

In terms of overall satisfaction, most students indicated "satisfied" or "neutral". Only some 90 of the respondents were very satisfied with maintenance, technology, and proximity.

The following are selected quotes or thematic findings indicative of the overall tone of the responses:

- "The buildings vary drastically in temperature – it would be lovely if all of the academic buildings at least were a similar temperature so you're not constantly going back and forth from overheating to freezing."
- "Comfortable seating – example Denny: awful, back-aching chairs ... Kauffman: ergonomic, allows me to focus."
- Accessible unlocked rooms for study and working on assignments past normal hours.
- Access to printers in all academic is paramount and should be a top priority.
- "Please fix Denny!"

Question: 7, 8, 9:
Where and which is your favorite classroom? Why?

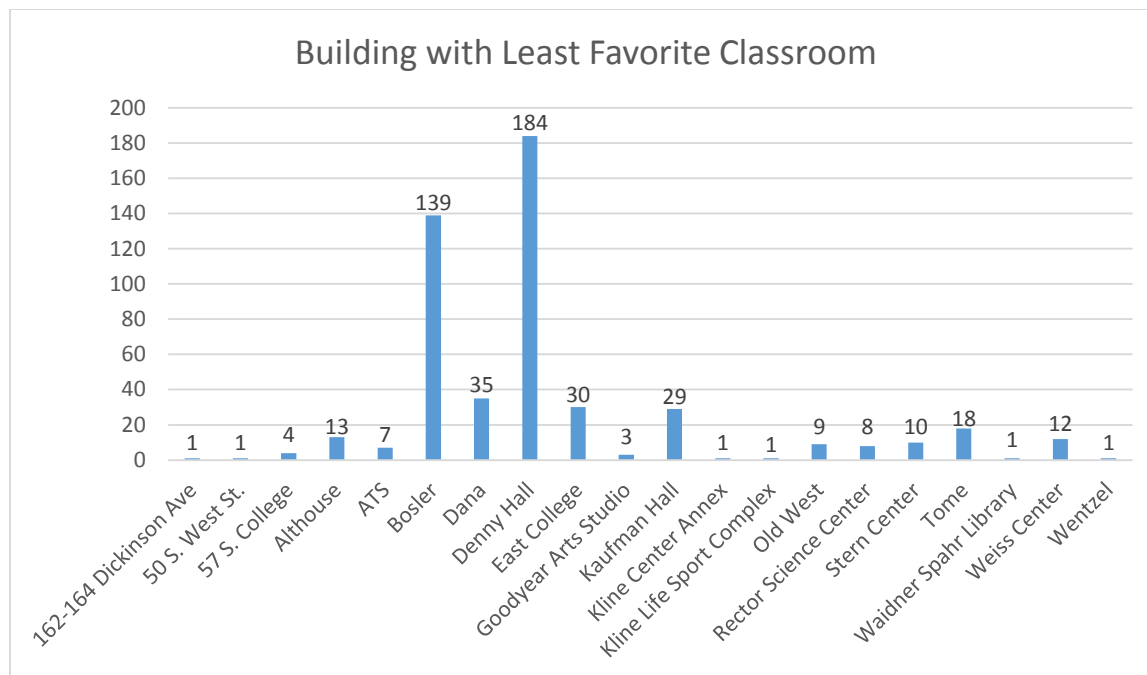


While responses varied widely -- and often dictated by major -- Althouse was overwhelmingly the building that students selected as a favorite, followed by Rector Science Center, Denny Hall, and Kaufman. It is interesting to see Denny indicated as a favorite space and yet it is also the building consistently identified as needing the most updates in terms of furniture and design.

The reasons that buildings are liked include: access to outlets, comfortable chairs, spaciousness, large screens, aesthetics, and good technology.

Question: 10, 11, 12:

Where and which is your *least* favorite classroom? Why?



The two least liked buildings on campus are Denny Hall and Bosler. South College was also listed separately as a least favorite building/classrooms. While buildings were liked because of furniture and HVAC, the inverse was true of those buildings that were disliked.

The following are selected quotes or thematic findings indicative of the overall tone of the responses:

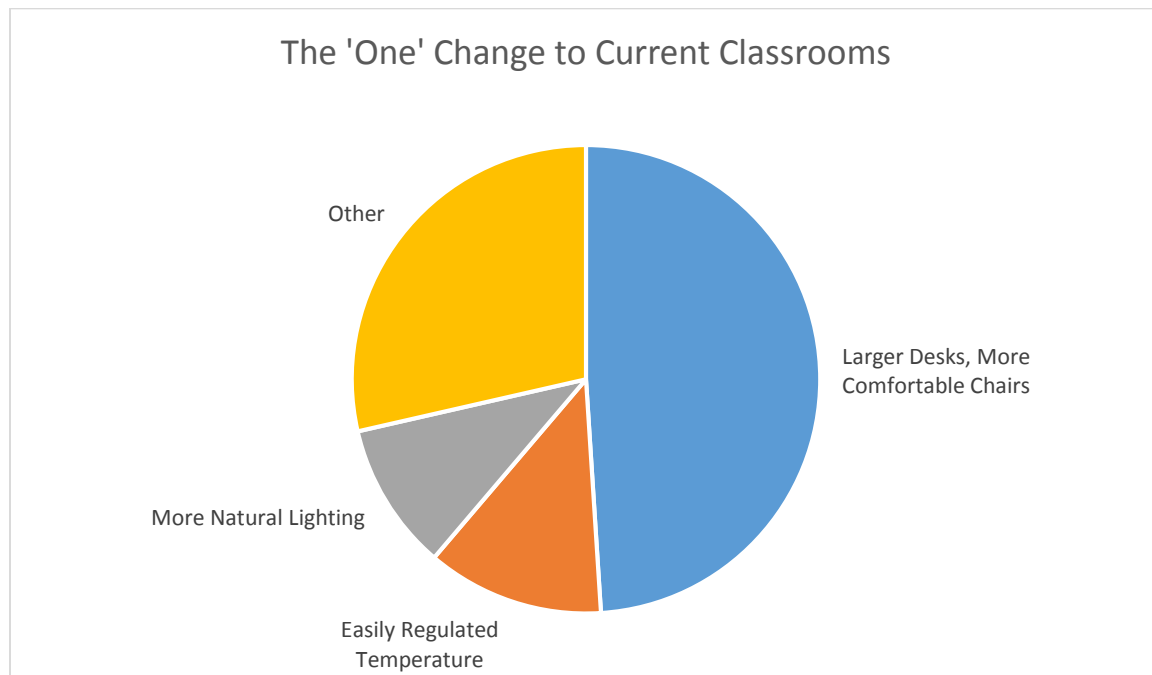
Denny Hall is the home to many least favorite classrooms, in particular room 311. This building is full of old, small desks that offer very little space to work. This room, along with other rooms on the third floor of Denny, contains very little natural lighting and broken furniture. Bosler is cited as having poor lighting, awkward set-up, old furniture, and terrible environment.

Both Bosler and Denny seem to be very unappealing to Dickinson students, some of whom **only** have classes in one or both of those buildings. Regardless of the classroom chosen, students seemed to select their least favorite classroom based on problems with HVAC just as much as a dislike for desks and furniture.

- “Denny needs some serious renovations. Tome is great for science students. Althouse is great for everyone there. Denny and even East College are miles behind them. No one takes tours into Denny or East.”
- “Desks are old and creaky and loud.”
- Rooms have a strange smell.
- Tiny desks, no natural light.

Question: 13

If you could change one thing about the classrooms and lecture halls, what would it be?



- Almost half (47%) of the student respondents indicated the major change would be in the type of furniture, both in terms of ergonomics and flexibility.
- Almost one-quarter identified HVAC and lighting issues in the classrooms.
- Other areas listed included assigning courses to appropriately sized rooms, the need for more flexible spaces, and a desire to see more uniform technology across campus.

Question: 14, 15, 16, 17

How would you describe your overall satisfaction with the following spaces on campus? How could these spaces be improved?

- a. Dining
- b. Social
- c. Event
- d. Study
- e. Recreational
- f. Academic
- g. Lab
- h. Studio

Dining:

Students found most dissatisfaction with current dining spaces on campus than with any other areas. “The Caf”, as it is referred to, offers insufficient space and food choice. Students discussed how there are no real alternatives to The Caf, as “The Snar”, “The Quarry,” and “The Underground” have no real meal options other than sandwiches.

- “We need more dining areas that are more flexible and open. For instance, the dining hall is where most people eat, but because the space is so enclosed and only open at certain times, it’s very unwelcoming if someone wants to go in there alone. The Snar could have more options for food. We could also use more spaces like the Underground, where students can study, hang out, or eat quietly and casually individually.”
- “The dining spaces are insufficient for the number of students on this campus. The choices available daily are minimal -- specifically if the students are expected to eat all meals on campus when on a traditional meal plan.”
- Distribute dining on campus so there is not one large cafeteria...similar to high school.
- Need larger space, very crowded. Need flexible and open dining options.

Social, Event, Club Space.

Students indicated they were neutral or dissatisfied with social and event space on campus. Although dining rated the highest in the “extremely important” for improvement category, social spaces appeared most frequently in the “Important” category. The following provide additional insights:

- “...it has always been a struggle to find event spaces. HUB side rooms are usually available but aren’t big enough for large groups.”
- Need more space for cubs and sport activities
- “Event spaces are so hard to book and range from huge to tiny.”
- Events are often scheduled simultaneously and so students can only participate in one event at one time.
- The process to schedule space is confusing.
- Many times student groups are competing with administrative / academic / and non-college events for the same space at prime time.
- Very hard to find a space to meet as a small group in a comfortable setting.
- The dance studio is overbooked.

Many students felt challenged in finding spaces because they are either booked in advance (up to a year), overbooked, not the correct format, and the reservation process is confusing. Students requested modernized spaces of various sizes, and an easier scheduling process with CASE.

Study Space

Students were generally satisfied with study space available on campus, although there was a desire to see the type and amenities improved. The general consensus is for:

- More outlets available in the library.
- More comfortable furniture throughout the campus, such as random chairs in quiet corners, similar to the library.
- The library should have dedicated quiet space and not be the social hub for the campus at night.
- "More nooks for studying."

While the use of the library as a social space hub has been a trend in higher education, at least some students at Dickinson College perceive it to be a potential conflict.

Recreational Space

Students indicated they were mostly "satisfied" with the existing recreational space and did not see it as requiring significant modification. This is a result of the update to the Kline Center, which will begin to alleviate the pressure on the gym. It is hoped the renovations and possible expansion will provide additional space for club activities.

Academic Space

Although "satisfied" as indicated previously, especially in relation to furniture, HVAC, flexibility, etc., it is still "Important" that the spaces be upgraded.

Lab & Studio Space

In terms of lab and studio spaces, most were "satisfied" with the labs, but neutral on studio spaces. Most comments related specifically to the need for additional / appropriate studio spaces for dance and a cappella groups.

SUMMARY

Students are justifiably proud of Dickinson College but were also not shy about indicating areas that needed improvements or where there was great dissatisfaction with process or policy. The success of Dickinson has also begun to place pressure on existing campus space.

Perhaps the following quote from a student that sums it up best:

"The spaces are all crowded; there's no room to even stand in the cafeteria or the union station, there are few available tables in the libraryparticularly during exam times. Even spaces are basically limited to the social hall or ATS, making events either tiny or huge in scale. The academic spaces are also crowded -- to put it simply, the campus is still designed for 1,000 students when the student body is clearly expanding."



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