



St. Mary's College of Maryland
at Historic St. Mary's City

**FACILITIES MASTER PLAN
ACADEMIC SPACE ASSESSMENT
PHASE I**

**Prepared by the St. Mary's College of Maryland
Office of Planning and Facilities**

NOVEMBER 2012

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1. INTRODUCTION

The following report defines existing academic space inventories and space deficits throughout different buildings and academic departments. All space deficits are calculated using a combination of the current Maryland Higher Education Commission allocation guidelines and higher education room efficiency standards based upon scheduled occupancy (see Section 3). The figures provided throughout the report utilize *snapshot* data from the fall of 2011, immediately after the end of the add/drop period. However, for several departments notes have been added to acknowledge significant differences in course offerings between semesters.

This report serves as a baseline analysis for academic space planning which will be used in the development of the College's new Facilities Master Plan. The figures presented throughout this report are used by the State to determine the amount and timeliness of state capital funding for future building projects. As such, the development of the campus facilities master plan is strongly linked to demonstrated space deficits (see Section 3). Alternative strategies for addressing space needs will be suggested during the second phase of the 2011-2026 campus master planning process in the spring semester of 2013. Additional anecdotal evidence will also contribute to the development of a final master plan.

2. SUMMARY OF CAMPUS SPACE

The table below provides the College's existing space allowances and deficits per State of Maryland space allocation guidelines. As shown, the predominant academic space deficits on campus are in *Class Lab*, *Open Lab*, and *Reading and Study*, with *Assembly* representing the single largest deficit.

Table 1: Summary of Campus Space

HEGIS CODE	DESCRIPTION	GUIDELINE ALLOWANCE	EXISTING INVENTORY	SURPLUS/ (DEFICIT)	Percent Deficit
100	Classroom	26,632	26,350	(282)	1%
210	Class Laboratory	53,690	39,280	(14,410)	27%
220	Open Lab	11,303	6,519	(4,784)	42%
250	Research Laboratory	5,000	5,651	651	-13%
300	Office & Conference	83,811	68,724	(15,087)	18%
400	Reading & Study	35,013	28,558	(6,455)	18%
520-25	Physical Education	56,031	77,946	21,915	-39%
530-35	Audiovisual	3,646	5,952	2,306	-63%
560-70	Animal Quarters	2,867	2,867	0	0%
580	Greenhouse	1,438	1,438	0	0%
610	Assembly	30,646	15,356	(15,290)	50%
620	Exhibition	1,823	1,821	(2)	0%
650	Lounge	16,286	4,271	(12,015)	74%
670	Recreation	10,520	10,520	0	0%
680	Meeting Rooms	6,252	6,252	0	0%
710	Data Processing	2,500	2,863	363	-15%
720-50	Shop/Stor/Vehic Stor/Center Serv	28,471	18,713	(9,758)	34%
800	Health Care	1,000	1,281	281	-28%
	SUBTOTAL	376,929	324,362	(52,567)	
900	Residence Halls		218,729		
050-90	Unassigned/Inactive		3,994		
	GRAND TOTAL		547,085		

3. SPACE DEFINITIONS & QUANTITATIVE METHODS

As an agency of the State of Maryland, St. Mary's College of Maryland regularly reports the allocation of built spaces throughout the campus. These spaces are separated into distinct "space types" based upon the most common prescribed use of the area. This preliminary academic space report focuses primarily on the allocation of 3 academic facility designations: classrooms, classroom laboratories, and open laboratories. Table 1 above provides an overview of the campus space deficits as they are reported to the State. Capital funding from the State will not exceed the amount necessary to eliminate the space deficits demonstrated in Table 1.

Beyond state guidelines, space formulas have been included to compare course offerings to the number of spaces utilized by specific departments. This second set of formulas develops a space needs recommendation based upon specific academic program requirements.

Terms:

Below is a list of common terms used throughout the space planning process.

Weekly Student Contact Hour (WSCH): One student in one classroom or class lab for one instructional "hour" (50 minutes) per week for all classes ending before 5:00pm. (For example at SMCM a 10:00am- 11:50am course that meets twice per week generates 4.4 WSCH per student)

Weekly Student Contact Hour- Lecture (WSCH-L): Weekly student contact hours for on-campus students in credit courses which are taught in areas designated a *classroom space*.

Weekly Student Contact Hour- Lab (WSCH-LB): Weekly student contact hours for on-campus students in credit courses which are taught in areas designated as laboratories or other non-classroom settings.

Full Time Day Enrollment (FTDE): A measurement of student enrollment based upon credit hours taken during daytime sections (those which end before 5:00pm).

Net Assignable Square Feet (NASF): A measure of area used for assessing a building's space inventory. NASF is particular sort of area measurement which reflects the functional space of buildings, excluding hallways, restrooms, and mechanical rooms.

Academic Planning Precincts: A building, or combination of buildings, where academic departments commonly share instructional spaces. Analysis at the planning precinct level allows for a finer grained analysis of instructional spaces throughout different areas of the campus.

3.1 STATE SPACE DEFINITIONS AND FORMULAS

Below is a list of the definitions for each space type as well their relevant *space allocation* formulas per State of Maryland guidelines. These formulas are used by the State to determine relative surpluses and deficiencies throughout the campus. The allocation formulas shown below are used to create an aggregate figure; representing the total campus allowance for any given space type. The formulas are not intended to define space needs for any specific space. Allowances for different space types are distributed amongst academic departments by the institution based on specific program need within the overall campus allocation. The rationale for each space formula, as provided by the State, is included in Appendix A.

- *110 Space- Classroom*: A room in which the primary usage includes lecture or seminar style teaching.

Allocation Formula:

$$\text{WSCH-L} * 1.11 \text{ NASF} = 110 \text{ Space Allocation}$$

Classrooms are generally not assigned to departments. As such all classroom data is separated into the precinct on campus where the listed departments primarily give instruction.

- *210 Space- Class Laboratory*: Instructional space for uses other than classroom instruction. Generally class labs have unique space characteristics to support specialized instruction. (Examples include art studios, science labs, and computer classrooms used for instruction)

Allocation Formula:

$$\text{WSCH- LB} * 7.0 \text{ NASF} = 210 \text{ Space Allocation}$$

State allocations for both classrooms (110 Space) and class laboratories (210 Space) are calculated based upon the quantity of WSCH. Only WSCH counted ending before 5pm generate demand per State guidelines (see Appendix D). State requirements mandate that any section taught in a space designated as 110 space will be counted towards the WSCH-L and that any section taught in 210 space will be designated as WSCH-LB. For details on which rooms are counted as 110 and 210 space please see Appendix B.

It is important to note that the 7.0 NASF per WSCH of lab instruction is an average. Different class labs will need higher or lower NASF depending on the pedagogy and the equipment needed for instruction. The formula, therefore, provides a total campus allocation but is not intended as a planning tool for individual instructional spaces.

- *220 Space- Open Laboratory*: Spaces where students work on projects, research, or other academic activities without faculty instruction/oversight.

These are generally not scheduled spaces. Open laboratories serve two purposes:

1. Laboratory space for general student use, primarily open computer or multimedia laboratories.
2. Laboratory and studio space allocated to seniors to support St. Mary's Projects. These are sometimes shared with faculty.

Allocation Formula:

$$(FTDE * 4.2 NASF) + (FTDE * 2.0NASF)^1 = 220 \text{ Space Allocation}$$

Similar to Class Labs, the formula is used to establish a total campus allocation. Allocations per department are based on program need.

3.2 SPECIFIC SPACE REQUIREMENTS

- *Classrooms:* For the purposes of master planning, classroom spaces are considered a shared resource amongst the planning precincts. As such, analysis determining classrooms sufficiency is calculated at the precinct level. Factors considered in determining classroom space sufficiency within planning precincts include:

1. Average scheduled space usage: Measured by both the number sections scheduled within classrooms and the number of instructional hours scheduled within a classroom. The State target room utilization rate is 27 hours of scheduled instruction per classroom per week². Scheduling over 30 hours per classroom per week represents a highly efficient space usage. Given the length of class sections at St. Mary's, classrooms should ideally be scheduled for between 7 and 9 sections per week.
2. Classroom capacity sufficiency: Classrooms within each planning precinct are separated based upon their number of seats. These are then compared to classroom enrollments sizes for departments located principally within the planning precinct.

During the outreach process it was found that enrollment sizes were often capped based upon the availability of classrooms with sufficient seating. A comments section has been added where necessary to note the limitations seating deficiencies have had on academic scheduling.

¹ The standard state allocation for this space is (FTDE * 4.2). In the 1999 Facilities Master Plan, the College transferred square footage from the *Study Space* allocation equal to (FTDE * 2.0) into the *Open Laboratory* category in order to provide additional work space for SMP's.

² Ash, Barbara, David Beard, Mark Beck, et al. State of Maryland. Maryland Higher Education Commission. *Maryland Capital Improvement Process and Capital Facilities Space Guidelines for Higher Education*. 2006. <http://www.mhec.state.md.us/publications/finance/MDCipCapFacRep.pdf>

3. Classroom layout, furniture, and technology: When necessary, academic departments have provided notes on the impacts classroom layouts, furniture, and technology have had on instruction. These notes have been added within the *FEEDBACK FROM BUILDING OCCUPANTS* section for each planning precinct.
- *Class Labs*: Due to their specific design characteristics, instructional labs and studios are analyzed on a department by department basis. Factors considered in determining class lab space sufficiency within departments include:
 1. Average scheduled space usage: Space efficiency ratios for class labs vary depending on the area of study. Appropriate hours of instructional use per lab are based upon industry averages for out of class requirements. In most cases the state guideline average of 15 hours of scheduled use per lab space is used to generate baseline figures (see *Instructional Demand Models* throughout Section 5). The relatively limited hours designated for instruction allow lab and studios to be used for unscheduled work outside of the instruction period as well as provide time for set-up to prepare a lab for class.
 2. Pedagogy specific design characteristics: Many spaces are designed only to accommodate a certain method of instruction. In some cases, particular space characteristics necessitate unique *types* of lab that may not be utilized to its potential but is vital for the academic program. Such labs may be deemed necessary in spite of a relatively light course schedule within the relating subject.

4.1 CLASSROOM SPACE – HISTORIC CAMPUS

Classroom Space Inventory- Per State of Maryland Guidelines (Fall 2011)

1. Anne Arundel Hall:	2,943 NASF
2. Kent Hall:	3,873 NASF
3. <u>Calvert Hall:</u>	<u>854 NASF</u>
TOTAL:	7,670 NASF

<u>FALL 2011</u>	WSCH	NASF ALLOCATION
Anthropology	741	823
Economics	2,115	2,348
History	1,377	1,528
Philosophy & Religious Studies	1,450	1,610
Political Science & Public Policy	1,565	1,737
Sociology	717	796
	<hr/>	
TOTAL:	7,965	8,842

Summary:

Inventory (Fall 2011)	7,670 NASF
<u>Allocation:</u>	<u>8,842 NASF</u>
Net Deficit:	(1,172 NASF)

Note: Margaret Brent added 600 NASF (Spring '12)
Anne Arundel Hall will increase classroom space 1,118 NASF

Distribution of Class Sections and Classroom Sizes (Fall 2011)

Enrollment Size	Number of Sections³	Number of Classrooms
1 to 15	27	0
16 to 25	70	8
26 to 35	11	5
over 35	0	0
TOTAL	108	13

- Average Room Time/ Section/ Week: 3.5 hours
- Average Scheduled Classroom Usage: 8.3 sections/ room
(29.1 hours/ week)

FEEDBACK FROM BUILDING OCCUPANTS

Anne Arundel Hall:

- Space deficit issues will be resolved through the construction of the new Anne Arundel Hall.

Calvert Hall:

- The classroom is not handicap accessible.

Kent Hall:

- Difficult if not impossible to use both the white boards/ blackboards simultaneously with the projector.
- The layout of the classrooms makes it difficult for many to see white boards during instruction.
- Seating within many classrooms has become too compact; seats need to be removed to create a comfortable learning environment.
- At least one additional classroom which can comfortably accommodate 30-35 students is required for larger sections.
- There is a general lack of open lab and study space.

³ Only includes sections scheduled with the registrar.

CONCLUSION

The total number of classroom spaces is sufficient to meet current course offerings in the Historic Campus. However, some classrooms have squeezed in an uncomfortable amount of seating to accommodate enrollment growth. Deficits in classroom space will be fully addressed through the construction of the new Anne Arundel Hall. The configuration of existing classrooms should be studied to determine solutions for furniture layouts and technology issues.

4.2 CLASSROOM SPACE – GOODPASTER & SCHAEFER

Classroom Space Inventory- Per State of Maryland Guidelines (Fall 2011)

1. Goodpaster Hall: 7,459 NASF
 2. Schaeffer Hall: 4,289 NASF
- TOTAL: 11,748 NASF

<u>FALL 2011</u>	WSCH	NASF ALLOCATION
Biology	2,055	2,282
Chemistry & Biochemistry	1,275	1,415
Educational Studies	676	750
Math & Computer Science	1,104	1,225
Physics	590	655
Psychology	3,194	3,545
TOTAL:		8,894
		9,872

Summary:

Inventory: 11,748 NASF
Allocation: 9,872 NASF
Net Surplus: 1,876NASF
Equal to approximately three 25-30 seat classrooms

Distribution of Class Sections and Classroom Sizes (Fall 2011)

Enrollment Size	Number of Sections⁴	Number of Classrooms
1 to 15	23	0
16 to 25	55	4
26 to 40	24	8
over 40	14	2
TOTAL	116	14

- Average Room Time/ Section/ Week: 3.3 hours
- Average Scheduled Classroom Usage: 8.2 sections/ week
(27.3 hours/ week)

FEEDBACK FROM BUILDING OCCUPANTS

Goodpaster Hall:

- Difficult if not impossible to use both the white board/ blackboard simultaneously with the projector in many spaces.
- Group work and instruction would be more effective with white boards on multiple walls.
- The room shape and layout of furniture within some more linear classrooms makes instruction awkward.
- Professors would like to see a more classrooms outfitted with more flexible seating arrangements, including tables and chairs on wheels so that classrooms can be rearranged as needed.
- Education Studies would benefit from a second SmartBoard, a larger gathering space.

Schaefer Hall:

- Difficult if not impossible to use both the white board/ blackboard simultaneously with the projector in many spaces.
- Group work and instruction would be more effective with white boards on multiple walls.
- Math professors would like to see more classrooms outfitted with tables and chairs similar to those in rooms 161 and 165.
- Professors would like to see more classrooms outfitted with flexible seating arrangements, including tables and chairs on wheels so that classrooms can be rearranged as needed.

⁴ Only includes sections scheduled with the registrar. Biology has 8 workshops/ week meeting for 1 hour each not shown in the current count.

CONCLUSION

Goodpaster and Schaeffer Hall currently have enough classroom spaces to accommodate the numbers of sections being taught. However recent enrollment increases in the physical sciences, particularly within prerequisite courses, necessitate the addition of a 40+ seat lecture space. The configuration of existing classrooms should be studied to determine solutions for furniture layouts and technology issues.

4.3 CLASSROOM SPACE – MONTGOMERY & LIBRARY

Classroom Space Inventory- Per State of Maryland Guidelines (Fall 2011)

1. Montgomery Hall: 4,652 NASF
 2. Library: 1,270 NASF
- TOTAL: 5,922 NASF

<u>FALL 2011</u>	WSCH	NASF ALLOCATION
Art & Art History	412	457
English	2,079	2,308
International Languages & Cultures	2,093	2,323
Music	500	555
Theatre, Film & Media Studies	741	823
College Funded Space (Montgomery 111)		616
	TOTAL:	
	5,825	7,082

Summary:

Inventory: 5,922 NASF
Allocation: 7,082 NASF

Net Deficit: (1,160 NASF)

Equal to approximately two 25-30 seat classrooms

Distribution of Class Sections and Classroom Sizes (Fall 2011)

Enrollment Size	Number of Sections	Number of Classrooms
1 to 15	49	1
16 to 25	33	6
26 to 35	3	3
over 35	0	0
TOTAL	85	10

- Average Room Time/ Section/ Week: 3.5 hours
- Average Scheduled Classroom Usage: 8.5 sections/ week
(29.8 hours/ week)

FEEDBACK FROM BUILDING OCCUPANTS

Montgomery Hall:

- The majority of instruction for the arts occurs in lab spaces. Classrooms within Montgomery Hall are scheduled predominantly by the English and foreign languages departments.
- Some introductory level arts course such as *Intro to Photography* and *Intro to Art History* would benefit from having instructional spaces co-located with lab facilities and/ or relevant storage areas.
- Many classrooms still have outdated projector systems.

Library:

- Library staff request at least one classroom that can accommodate up to 25-30 students. The space should include computer work stations for small groups.

CONCLUSION

Tight scheduling in Montgomery Hall has sometimes forced faculty members to provide instruction within other buildings. Furthermore, the Library requires additional study to determine the correct balance of instructional, support, and study spaces throughout the building.

4.4 CLASSROOM SPACE – OTHER

Classroom Space Inventory- Per State of Maryland Guidelines (Fall 2011)

1. ARC: 460 NASF
 2. River Center: 550 NASF
- TOTAL: 1,010 NASF

<u>FALL 2011</u>	WSCH	NASF ALLOCATION
All Athletics/ Sailing	258	286
College Funded Space (Muldoon River Center)		550
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TOTAL:	258	836

Summary:

Inventory: 1,010 NASF
Allocation: 836 NASF
Net Surplus: 174 NASF

4.5 CLASSROOM SPACE – SUMMARY

SUMMARY OF CLASSROOM SPACE PER STATE GUIDLINES			
PRECINCT	Allocation	Inventory (Fall 2011)	Surplus / (Deficit)
Historic Campus	8,842	7,670	(1,172)
Schaefer & Goodpaster	9,872	11,748	1,876
Montgomery & Library	7,082	5,922	(1,160)
Other	836	1,010	174
TOTALS	26,632	26,350	(282)

COMPARISON OF SCHEDULING BETWEEN PLANNING PRECINCTS				
PRECINCT	Number of Classrooms	Number of Sections	Average Room Time/ Section/ Week	Average Scheduled Classroom Usage
Historic Campus	13	108	3.5	8.3 sections (29.1 hours)
Goodpaster & Schaefer	14	116	3.3	8.2 sections (27.3 hours)
Montgomery & Library	10	85	3.5	8.5 sections (29.8 hours)
Other ⁵	1	5	3.9	5 sections (19.5 hours)
TOTALS	39	314	--	--

CONCLUSION

The College has a sufficient number of classroom spaces campus-wide, however planning precincts experience issues related to classroom seating capacity, layout, furniture, and technology. Space deficits in the Historic Campus will be well served through the construction of the new Anne Arundel Hall. The swelling of enrollments in prerequisite courses in the physical sciences necessitates the addition of a 40+ seat lecture space on the north campus.

⁵River Center classroom is the only 110 space scheduled with the registrar in this precinct.

5.1: CLASS LAB SPACE- HISTORIC CAMPUS

Class Lab Space Inventory

1. Anne Arundel Hall:	0 NASF
2. Library:	0 NASF
3. <u>Kent Hall:</u>	<u>1,367 NASF</u>
TOTAL:	1,367 NASF

<u>FALL 2011</u>	WSCH	NASF ALLOCATION
Anthropology	255	1,785
Economics	50	350
History	67	469
International Languages & Cultures	0	0
Philosophy & Religious Studies	0	0
Political Science & Public Policy	106	742
Sociology	88	616
TOTAL:		3,962

Summary:

Inventory:	1,367 NASF
<u>Allocation:</u>	<u>3,962 NASF</u>
Net Deficit:	(2,595 NASF)

Note: The new Anne Arundel Hall provides a net increase of 1,352 NASF.

CONCLUSION

Class labs for the departments in Anne Arundel and Kent Halls generally require less square footage per student station in comparison to the physical sciences or the arts. With the addition of the New Anne Arundel Hall, class lab needs within the Historic Campus will be satisfied.

5.2 CLASS LAB SPACE- GOODPASTER & SCHAEFER

Class Lab Space Inventory

1. Goodpaster Hall: 12,339 NASF
 2. Schaefer Hall: 16,543 NASF
- TOTAL: 28,882 NASF

FALL 2011

	WSCH	NASF ALLOCATION
Biology	1,341	9,387
Chemistry & Biochemistry	876	6,132
Education	12	84
Math & Computer Science	1,601	11,207
Psychology	606	4,242
Physics	631	4,417
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TOTAL:	5,067	35,469

Summary:

Inventory: 28,882 NASF
Allocation: 35,469 NASF
Net Deficit: (6,587 NASF)

Biology

Distribution of Lab Sizes:

Enrollment Size	Number of Sections	Number of Class Labs
1 to 15	13	0
16 to 25	12	5 (SB108,112, 221, 224, 246)
26 to 35	2	0
over 35	0	0
TOTAL	27	5

Instructional Demand Model:

Lab Space Demand		
	Current	Projected
Total Sections (Fall 2011)	27	29
Average Hours/ Section/ Week	2.3	2.4
Total Instructional Hours	62	70
Guideline Hours Occupied/ Week/ Room	15	15
Labs Needed	4	5
Existing Number of Class Labs	5	5
Surplus/ (Deficit)	1	0

Notes:

- Biology will add a new faculty line in fall 2013, adding 2 sections/ semester of lab instruction (see *Projected* column in table above).
- Biology currently shares SB 253 with other departments.
- Lab sections generally require 2 hours of prep time in which the space is off limits for other purposes.
- Course offerings vary between semesters. Peak course offerings, before the addition of a new faculty lines, total 30.
- In addition to the sections above, Biology holds 8 weekly workshops, lasting 1 hour each.
- Biology labs will be at peak capacity after the addition of the new faculty member.

Chemistry & Biochemistry

Distribution of Lab Sizes:

Enrollment Size	Number of Sections	Number of Class Labs
1 to 15	13	0
16 to 25	5	3 (GH 200, 207, 216)
26 to 35	0	0
over 35	0	0
TOTAL	18	3

Space Demand Model:

Lab Space Demand		
	Current	Projected
Total Sections (Fall 2011)	16	18
Average Hours/ Section/ Week	3.0	3.0
Total Instructional Hours	48	54
Guideline Hours Occupied/ Week/ Room	15	15
Class Labs Needed	3	4
Existing Number of Class Labs	3	3
Surplus/ (Deficit)	(0)	(1)

Notes:

- Chemistry will add a new faculty line in fall 2013, adding 2 sections/ semester of lab instruction (see *Projected* column in table above).
- Chemistry currently shares SB 253 with other departments.
- Lab sections generally require 2 hours of prep time in which the space is off limits for other purposes.
- Course offerings vary between semesters. Peak course offerings, before the addition of the new faculty line, total 20 sections as compared to the 16 sections shown above.
- Chemistry requires 1 additional instructional lab, including additional storage space, to meet current and projected demands (this is distinct from the additional *open lab space* requirements).

Math & Computer Science

Distribution of Lab Sizes:

Enrollment Size	Number of Sections	Number of Class Labs
1 to 15	3	0
16 to 25	5	1 (SB160)
26 to 35	1	0
over 35	2	1 (SB 165)
TOTAL	11	2

Space Demand Model:

Lab Space Demand		
	Current	Projected
Total Sections (Fall 2011)	11	11
Average Hours/ Section/ Week	3.6	3.6
Total Instructional Hours	39.6	39.6
Guideline Hours Occupied/ Week/ Room	20	20
Class Labs Needed	2	2
Existing Number of Class Labs	2	2
Surplus/ (Deficit)	(0)	(0)

Notes:

- Labs frequently receive additional scheduling from the physical sciences, sometimes causing scheduling difficulties.
- Computer Science requires one additional small bench lab for robotics and electronics specific work.

Physics

Distribution of Lab Sizes:

Enrollment Size	Number of Sections	Number of Class Labs
1 to 15	7	0
16 to 25	2	1 (SB 151)
26 to 35	0	0
over 35	0	0
TOTAL	9	1

Space Demand Model:

Lab Space Demand		
	Current	Projected
Total Sections (Fall 2011)	9	10
Average Hours/ Section/ Week	3.3	3.3
Total Instructional Hours	29.7	33.0
Guideline Hours Occupied/ Week/ Room	15	15
Class Labs Needed	2	2
Existing Number of Class Labs	1	1
Surplus/ (Deficit)	(1)	(1)

Notes:

- Physics will add a new faculty line in the near future, adding 1 sections/ semester of lab instruction (see *Projected* column in table above).
- Physics currently shares SB 160 with Computer Science and SB 253 with Biology and Chemistry to meet their existing space needs.
- Physics requires one additional *General Physics* lab space with computer work stations for student groups.

Psychology

Distribution of Lab Sizes:

Enrollment Size	Number of Sections	Number of Class Labs
1 to 15	10	0
16 to 25	3	3 (GH 60,70,72)
26 to 35	0	0
over 35	0	0
TOTAL	13	3

Space Demand Model:

Lab Space Demand		
	Current	Projected
Total Sections (Fall 2011)	13	13
Average Hours/ Section/ Week	3.0	3.0
Total Instructional Hours	39	39
Guideline Hours Occupied/ Week/ Room	15	15
Class Labs Needed	3	3
Existing Number of Class Labs	3	3
Surplus/ (Deficit)	0	0

Notes:

- Psychology is generally well served by their lab spaces.
- The department has some concerns related to lighting, computer station designs, and projector systems.

5.3 CLASS LAB SPACE- MONTGOMERY HALL

Class Lab Space Inventory

1. Montgomery Hall: 9,031 NASF

TOTAL: 9,031 NASF

<u>FALL 2011</u>	WSCH	NASF ALLOCATION
Art & Art History	747	5,229
Music	541	3,787
Theatre, Film & Media Studies	749	5,243
English	0	0
TOTAL:		14,259

Summary:

Inventory: 9,031 NASF

Allocation: 14,259 NASF

Net Deficit: (5,228 NASF)

Art & Art History

Description of Class Labs:

Room #	Description	Number of Sections
MH 129	Drawing Studio	3
MH 132	Painting / Printmaking Studio	2
MH 135	Sculpture Studio	2
MH 119	Photography Studio	2
MH 105	Design Studio	3
MH 49	Digital Media Lab	2

Instructional Demand Model:

Lab Space Demand		
	Current	Projected
Total Sections (Fall 2011)	14	14
Average Hours/ Section/ Week	4.8	4.8
Total Instructional Hours	67	67
Guideline Hours Occupied/ Week/ Room	13	13
Class Labs Needed	5 ⁶	5
Existing Number of Class Labs	5	5
Surplus/ (Deficit)	0	0

Notes:

- Currently the instructional labs listed above are used extensively during non-instructional hours.
- The size and layouts of MH 129, 132, and 135 are inadequate (the studios lack a separated hallway, reducing seating capacities)
- Painting and printmaking are distinctively different spaces that currently share a single studio. These areas should be separated into two distinct lab spaces that can accommodate full course sizes.
- MH 129, 132, and 135 struggle with significant lighting and storage issues.
- The photography studio would benefit from having an instructional space directly attached to the lab.

⁶ MH 49 is a shared by between departments (It is not counted against the Art Department in the *Instructional Demand Model* above).

Music

Distribution of Lab Spaces:

Room #	Description	Capacity
MH19	Small Teaching Studio	3
MH20a	Small Teaching Studio	3
MH21	Small Teaching Studio	3
MH25	Recital/ Rehearsal Room	60 ⁷
MH26	Medium Teaching Studio	10
MH30	Electronic Music Lab	2

Instructional Demand Models:

Private Lessons and Small Groups (1 to 10 students)		
	Current	Projected ⁸
Total Sections (Fall 2011)	108	108
Average Hours/ Section/ Week	1.5	1.5
Total Instructional Hours	162	162
Guideline Hours Occupied/ Week/ Room	15	15
Small/Medium Class Labs Needed	11	11
Existing Number of Small/Medium Class Labs	5	5
Surplus/ (Deficit)	(6)	(6)

⁷ The space is considered highly flexible. The exact capacity changes depending on the furniture arrangement and type of instruction.

⁸ The total number of music lab sections is projected to stay flat over the next 10 years.

Large Courses (10+ students)		
	Current	Projected ⁹
Total Sections (Fall 2011)	8	8
Hours/ Section/ Week	2.4	2.4
Total Instructional Hours	19.2	19.2
Guideline Hours Occupied/ Week/ Room	15	15
Class Labs Needed	1.28	1.28
Existing Number of Large Class Labs	1	1
Surplus/ (Deficit)	0	0

Notes:

- Deficits are currently accommodated by teaching in open lab spaces, faculty offices, and through late night scheduling. The use of open lab spaces as instructional labs has had a significant impact on the ability of students to find studio space for practice needs.
- While adequate for instruction, MH 25 is inadequate as a performance venue. Furthermore, heavy co-curricular scheduling within the space interferes with the department's ability to meet non instructional space demands for larger groups.
- The department experiences significant storage issues. Currently, pianos, bleachers and other large pieces of equipment are stored within hallways or are cluttered into rooms designated for other purposes. This storage interferes with traffic through the building, and allows for equipment and instruments to become more easily damaged. The configuration of storage spaces also causes significant difficulties when setting up rooms for different purposes.
- The current electronic music lab is inadequate both in its size and equipment offerings to accommodate current demands.
- The music department requires 5 to 6 additional small instruction studios, a reconfigured electronic music lab, a performance venue and additional storage.

⁹ The total number of music lab sections is projected to stay flat over the next 10 years.

Theatre, Film & Media Studies

Distribution of Lab Sizes:

Enrollment Size	Number of Sections	Number of Class Labs
1 to 15	7	1 (MH 172)
16 to 25		
26 to 35	8	2 (THEA, MH 107)
over 35		
TOTAL	15	3

Space Demand Model:

Lab Space Demand		
	Current	Projected
Total Sections (Fall 2011)	15	15
Average Hours/ Section/ Week	3.6	3.5
Total Instructional Hours	54	54
Guideline Hours Occupied/ Week/ Room	15	15
Small/Medium Class Labs Needed	4	4
Existing Number of Class Labs	3	3
Surplus/ (Deficit)	(1)	(1)

Notes:

- The current theatre is adequate as a performance space. However, the area is frequently used for scene production and general shop work, limiting the number of hours it may be used for practice and performance.
- The Theater is also a popular space for non-instructional demands, such as admissions open houses, causing a general shortage of performance areas. A rehearsal room is needed to alleviate the pressure from co-curricular programs and practice demands.
- The department has general lack of storage space for seating, scenery, props costumes and video equipment.
- A larger dance studio is needed to accommodate current enrollments.
- A dedicated space for film/ video production is required.

5.4 CLASS LAB SPACE – SUMMARY

SUMMARY OF CLASS LAB SPACE PER STATE GUIDELINES			
PRECINCT	Allocation	Inventory (Fall 2011)	Surplus / (Deficit)
Historic Campus	3,962	1,367	(2,595)
Schaefer & Goodpaster	35,469	28,882	(6,587)
Montgomery	14,259	9,031	(5,228)
TOTALS	53,690	39,280	(14,410)

CONCLUSION

The College has varying levels of class lab deficits throughout the different academic departments. Recent enrollment growth in the physical sciences necessitates the addition of new instructional labs in Physics and Chemistry, and an additional robotics bench lab. Music, Art, and Theatre each experience significant crowding in existing spaces as well as numerous qualitative issues. New instructional studios are needed in music, art, and theater, film, and media studies. Departments in the Historic Campus should be well served by through the construction of the new Anne Arundel Hall.

6. OPEN LAB SPACE- EXISTING AND PROPOSED

	Spring '11 SMP's	Existing NASF	Future NASF	Notes
Montgomery & Cobb				
Art & Art History ¹⁰	11	1,612	1,564	Maintenance
English	25	0	0	
International Languages & Cultures	14	0	221	future AAH
Music ¹¹	4	547	547	
Theater, Film, and Media Studies ¹²	4	795	795	
Schaefer				
Biology ¹³	40	932	1,432	SMP research
Math & Computer Science	5	342	742	robotics lab
Physics	6	0	0	
Goodpaster				
Chemistry & Biochemistry ¹⁴	18	0	0	
Psychology & Neurosciences	42	1,496	1,496	
Educational Studies	4	0	0	
Margaret Brent				
Philosophy & Religious Studies	15	0	0	
Kent & Anne Arundel				
Anthropology	12	0	243	future AAH
Economics, History, Political Science, Sociology	44	0	400	combined
<hr/>				
Sub-total:	244	5,724	7,440	
Non-Departmental Open Labs				
Library & Baltimore Hall		795	795	
Additional Open Computer Lab		0	800	
<hr/>				
Sub-total:		795	1,595	
<hr/>				
Grand Total:		6,519	9,035	
Allowance:		11,303	11,303	
<hr/>				
Surplus/(Deficit):		(4,784)	(2,268)	

¹⁰ Art & Art History space includes MH 138 and space in AAH through December 2012. Future space to be relocated from new SMP space provided in the Maintenance Building

¹¹ Represents the 6 practice studios. These spaces are currently used as 210 space due to space shortages.

¹² Represents the *White Room*.

¹³ Biology is assigned 2,647 NASF of faculty *research space* which supports SMP's (Schaefer and River Center).

¹⁴ Chemistry is assigned 2,502 NASF of faculty *research space* which supports SMP's

CONCLUSION

Open lab space has been provided to departments on an *ad hoc* basis based upon specific departmental needs. Current plans for additions to department open space, listed under the *Future NASF* column on the table on the previous page currently do not fill out the total deficit per state guidelines. Additional study is needed to determine the best practical application of the remaining deficit.

7. RESEARCH LAB SPACE

Faculty research space is currently assigned to physical sciences on an ad hoc basis. State guidelines provide only 5,000 NASF of total research space which is far short of the demand. To compensate, departments in the physical sciences often combine faculty research and student SMP research into shared facilities. Pedagogically, this practice works well as faculty often mentor SMP students within the combined student/faculty research lab.

The studio art faculty have had temporary use of Anne Arundel Hall over the past few years for research space. This space will be vacated at the end of the fall 2012 semester as the College prepares to demolish the building. While State financial support of art faculty research space is difficult to achieve, the academic program would clearly benefit from research space on campus. Enabling faculty to work on projects on campus enriches the undergraduate experience through exposure to the creation of professional work as well as having faculty spend more time on campus.

Appendix A: State Space Formula Rationale

*Appendix A is a direct excerpt from the *2006 Maryland Capital Improvement Planning Process and Capital Facilities Space Guidelines for Higher Education Report*.

Citation:

Ash, Barbara, David Beard, Mark Beck, et al. State of Maryland. Maryland Higher Education Commission. *Maryland Capital Improvement Process and Capital Facilities Space Guidelines for Higher Education*. 2006.
<http://www.mhec.state.md.us/publications/finance/MDCipCapFacRep.pdf>

.03 Capital Guidelines Factor Development.

A. The elements for computing the space factor used for determining space needs for classrooms and laboratories are the net assignable square feet per student station (NASF/SS), the number of hours in a 45-hour week the space will be used (hours/week), and the percent of student occupancy of the room when space is in use. These elements are expressed in the formula:

(NASF/SS Space Factor = hours/week X percent of occupancy)

B. 100—Classroom.

- (a) Assume 20 NASF—average station size;
- (b) Assume 27 hours per week—target room utilization rate;
- (c) Assume 66.7 percent—expected seat occupancy rate; and
- (d) 20 divided by (27 X .667) yields 1.11

C. 210—Laboratory.

- (a) Assume 50 NASF—average station size for natural and social science labs;
- (b) Assume 115 NASF—average station size for technical and career labs;
- (c) Assume 80 percent of lab contact hours are generated in natural and social sciences labs, and 20 percent in technical and career labs;

- (d) Assume 15 hours per week—target room utilization rate;
- (e) Assume 60 percent—expected seat occupancy rate;
- (f) For natural and social sciences labs, 50 times 0.80 divided by (15 X 0.60) yields 4.45;
- (g) For technical and career labs, 115 times 0.20 divided by (15 X 0.60) yields 2.55; and
- (h) The sum of 4.45 and 2.55 is 7.0.

Appendix B: Scheduled Classrooms & Class Labs on the SMCM Campus

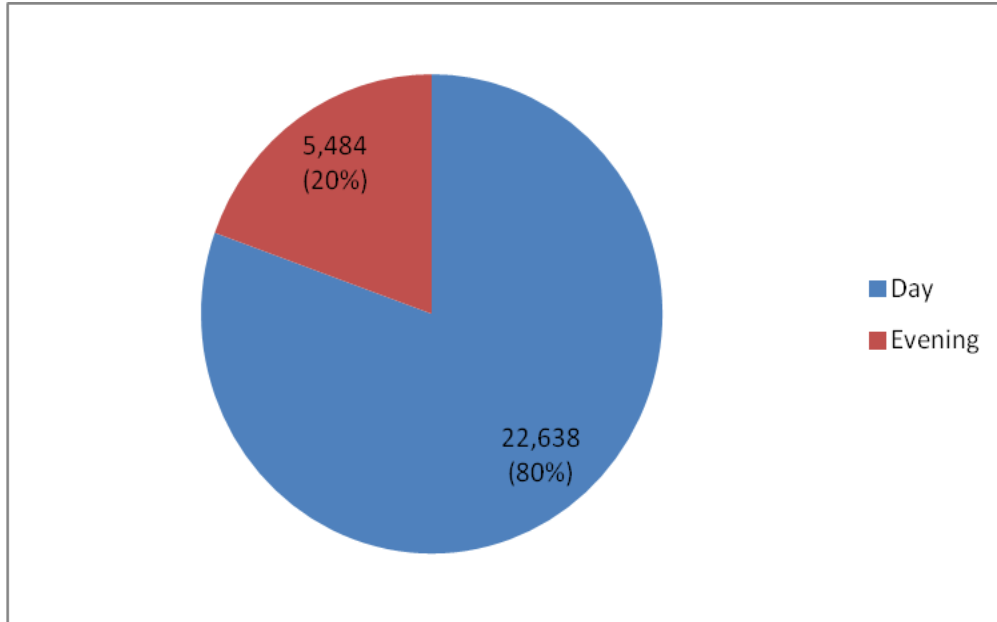
<u>Room</u>	<u>Type</u>			<u>Room</u>	<u>Type</u>
AA101	Class			MH135	Lab
AA103	Class			MH151	Class
AA107	Class			MH166	Lab
AA118	Class			MH172	Lab
AA120	Class				
				SB106	Class
BH001	Class			SB108	Lab
				SB109	Class
CH001	Class			SB111	Class
				SB112	Lab
GH060	Lab			SB132	Class
GH070	Lab			SB134	Class
GH072	Lab			SB151	Lab
GH081	Lab			SB158	Lab
GH103	Lab			SB160	Lab
GH109	Class			SB161	Lab
GH117	Class			SB163	Lab
GH184	Class			SB165	Lab
GH185	Class			SB209	Lab
GH186	Class			SB217	Lab
GH195	Class			SB221	Lab
GH197	Class			SB224	Lab
GH198	Class			SB246	Lab
GH200	Lab			SB251	Lab
GH207	Lab			SB253	Lab
GH216	Lab			SB256	Lab
<u>Room</u>	<u>Type</u>				
GH237	Class				

Appendix C: Open Labs & Faculty Research Space on the SMCM Campus

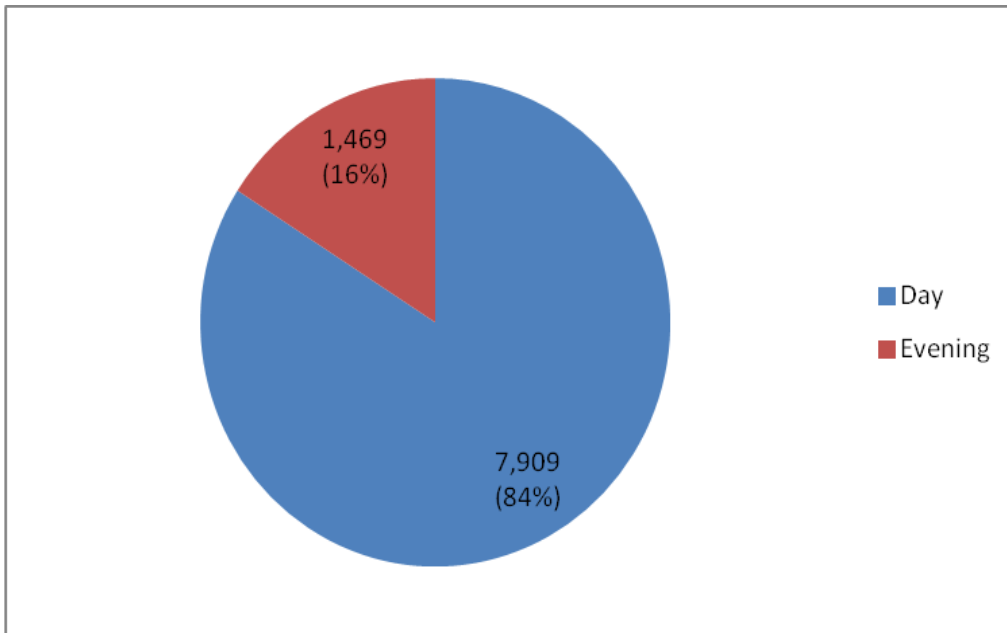
<u>Room</u>	<u>Type</u>	<u>Room</u>	<u>Type</u>	<u>Room</u>	<u>Type</u>
AA 203	Open Lab	GL 240	Open Lab	SB 119	Research
AA 260	Open Lab	GL 243	Open Lab	SB158	Open Lab
				SB 210	Research
GH B24	Research	KH 320	Research	SB 220	Research
GH B63	Open Lab	KH 595	Open Lab	SB 230	Research
GH B65	Open Lab			SB 250	Research
GH B67	Open Lab	LI 111	Open Lab	SB 251C	Open Lab
GH B71	Open Lab	LI 113	Open Lab	SB 252	Research
GH 105	Open Lab	LI 163	Open Lab	SB 254	Research
GH 107	Open Lab			SB 257	Open Lab
GH 118	Open Lab	MH 9	Open Lab	SB 264	Research
GH 120	Open Lab	MH 11	Open Lab		
GH 123	Open Lab	MH12	Open Lab		
GH 129	Open Lab	MH 14	Open Lab		
GH 132	Open Lab	MH15	Open Lab		
GH 134	Open Lab	MH16	Open Lab		
GH 136	Open Lab	MH17	Open Lab		
GH 138	Open Lab	MH19	Open Lab		
GH 140	Open Lab	MH20	Open Lab		
GH 142	Open Lab				
GH 211	Research	RC 213	Research		
GH 222	Research				
GH 228	Research				

Appendix D: Fall '11 Day vs. Evening Classroom & Class Lab WSCH
(*Sections must end by 5pm to be counted as daytime)

Lecture

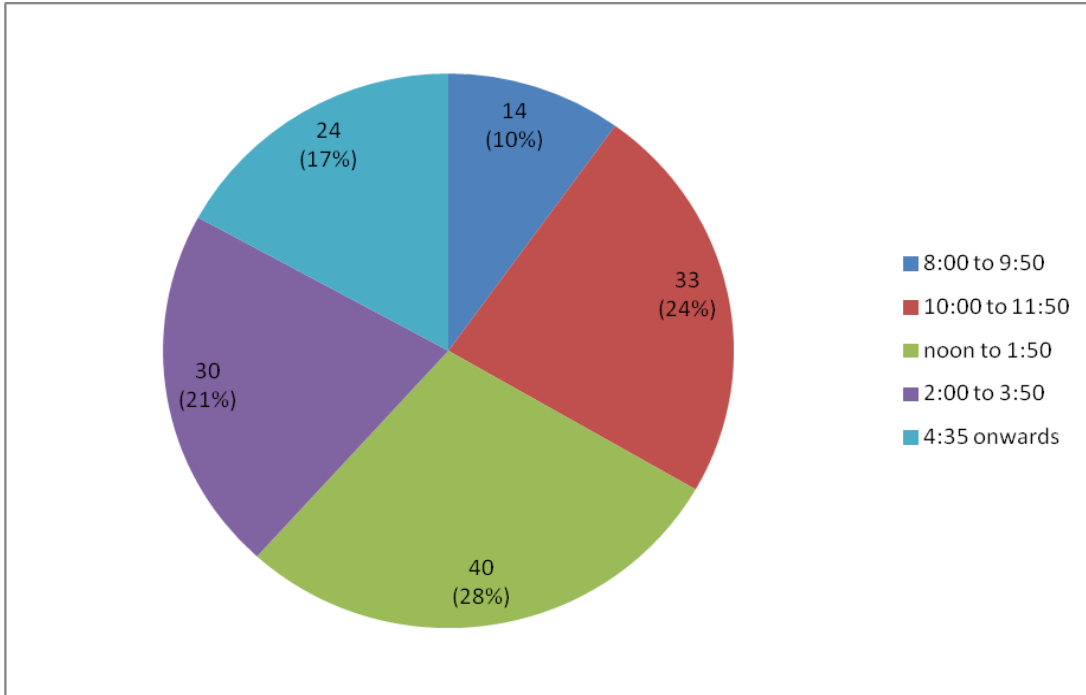


Lab

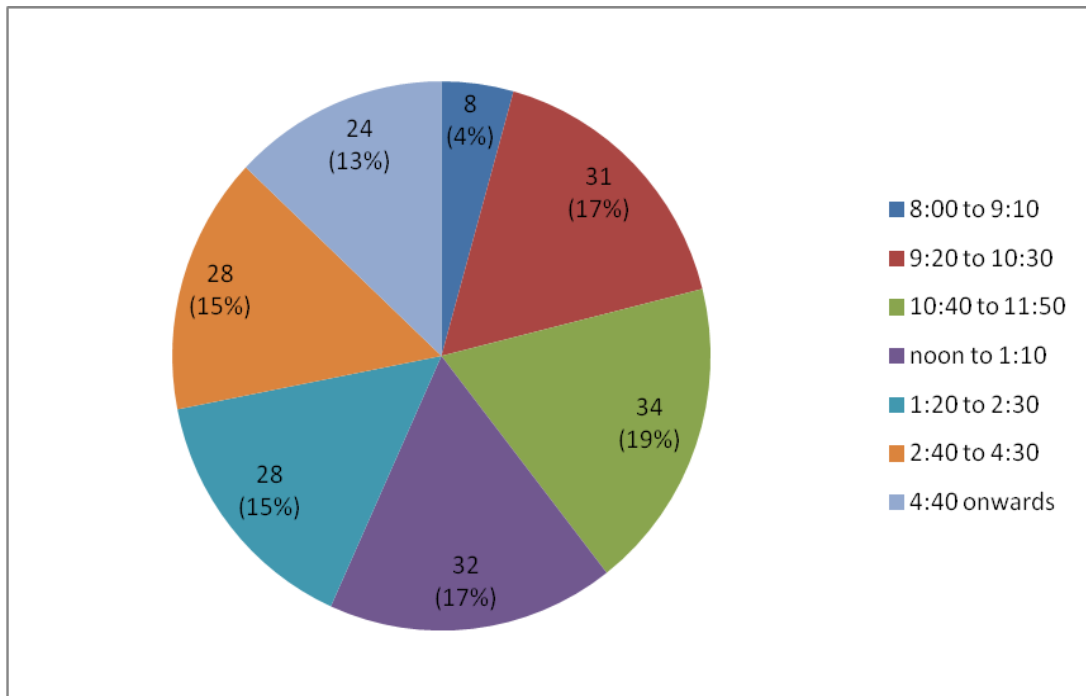


Appendix E: Fall '11 Sections Taught by Timeslot

Class Sections- Tuesdays & Thursdays

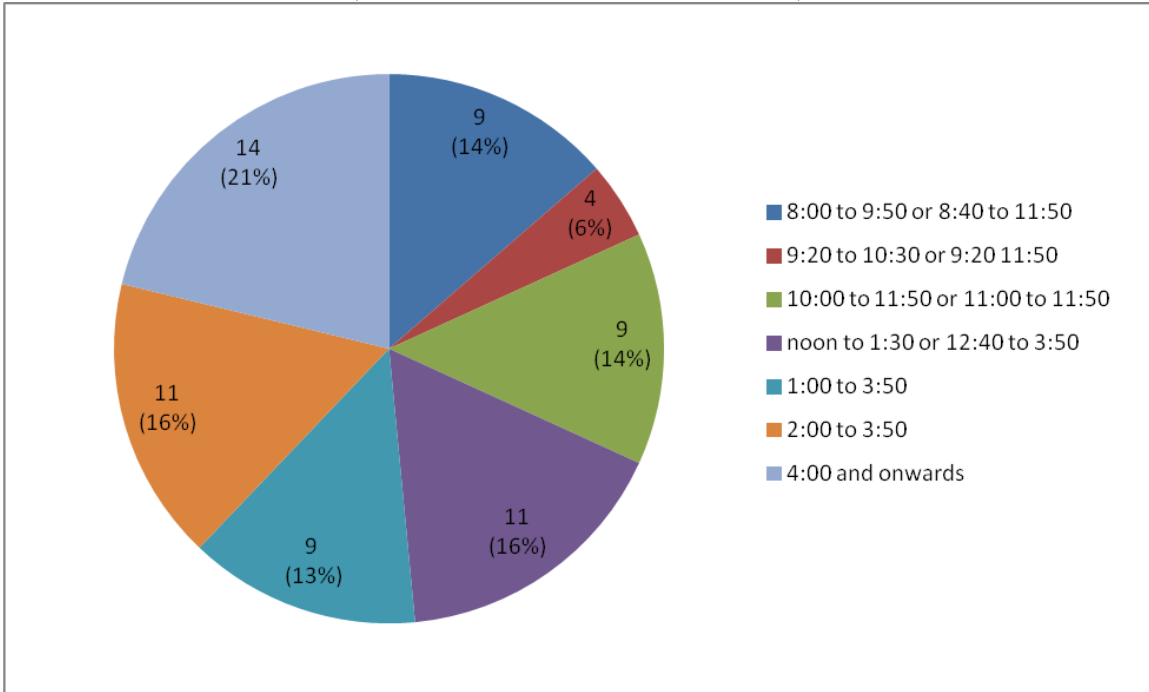


Class Sections- Mondays, Wednesdays, & Fridays



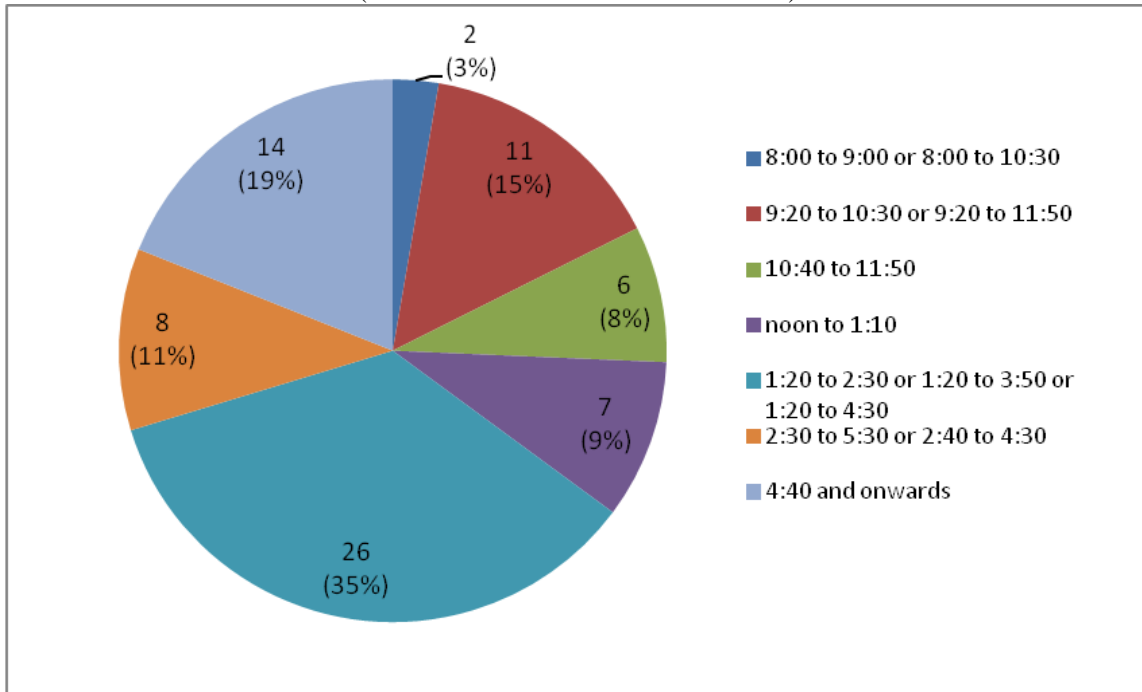
Lab Sections- Tuesdays & Thursdays

(*Does not include 1 on 1 music lessons¹⁵)



Lab Sections- Mondays, Wednesdays, & Fridays

(*Does not include 1 on 1 music lessons)



¹⁵ 1 on1 music lessons could not be counted as their beginning and end times are not recorded by the registrar.