

APPENDIX 4 | CLASSROOM ANALYSIS



Classroom Analysis

February 27, 2008

Table of Contents

List of Charts and Tables.....	ii
Introduction	1
Classroom Space Calculation Factors Overview	1
Current Data Profile – Fall 2007	2
Current Classroom Utilization:.....	3
Recommended Adjusted Classroom Supply	3
Future Classroom Needs	4
Classroom Needs Calculation Overview	4
Planning Assumptions.....	5
Optimal Classroom Seats and Square Foot.....	5
Optimal Number of Classrooms.....	6
Number of Classrooms Needed by Capacity Size Range	7
Growth 1 - Enrollment Growth of 500 (7.5% increase)	7
Growth 2 - Enrollment Growth of 1500 (20% increase)	8
Growth 3 - Enrollment Growth of 2500 (35% increase)	9
Conclusions and Recommendations.....	11
Appendix	12
Classrooms Fall 2007.....	12
Classrooms Recommended for Removal	16
Classroom Utilization Report	17
Classroom Utilization Report	17
Time by Data Distribution	20

List of Charts and Tables

Table 1: Current Classroom Supply	2
Table 2: Current Classroom Utilization Data	3
Table 3: Recommended Adjusted Classroom Supply	4
Table 4: Optimal Classrooms Space Compared to Current Supply	6
Table 5 : Number of Classrooms Needed Compared to Current Supply.....	6
Table 6: Size Range Analysis - Growth Option 1.....	7
Table 7: Summary for Growth Option 1	8
Table 8: Size Range Analysis - Growth Option 2.....	8
Table 9: Summary for Growth Option 2	9
Table 10: Size Range Analysis - Growth Option 3.....	9
Table 11: Summary for Growth Option 2	10

Introduction

Shippensburg University retained the services of Comprehensive Facilities Planning, Inc. (CFP) to conduct a study of its space needs, including a comprehensive study of its classroom facilities as part of developing the campus master plan. The purpose of the study is to:

- Evaluate current conditions,
- Identify physical deficiencies,
- Analyze utilization of the classrooms,
- Determine the classroom need to meet current and projected enrollments,
- Recommend strategies for meeting these needs.

The study examined Fall 2007 semester data from the University's space inventory and class files, and analyzed classrooms to determine whether sufficient classroom space exists for the current profile of student population and course offerings. The analysis also included an investigation of whether sufficient classrooms of appropriate size ranges exist. In addition, three future enrollment growth scenarios were factored into the analysis for long-term planning.

Classroom Space Calculation Factors Overview

The square feet of instructional space and the number of rooms and their sizes are determined by four variables as described below.

Weekly Student Contact Hours (WSCH) in classrooms – This is a measure of the instructional load that takes place in classrooms during the week. The WSCH are determined by multiplying the number of students in a class section in a classroom by the number of hours the section meets each week. The sum for all sections is the total WSCH. Dividing the WSCH by the campus FTE provides a ratio generally expected in the range of 10 to 12. This means that a full time equivalent student is in scheduled instruction in classrooms between 10 and 12 hours per week.

For planning purposes it is generally assumed that this ratio will remain constant for a campus over the planning period. However, it could be influenced by changes in instructional methods such as an increase in on-line instruction, more independent instruction or other “non-traditional” instruction that uses less classroom facilities. WSCH is generally reported in a standard classroom utilization report. Many state systems require regular classroom utilization reports which can provide the WSCH data.

Classroom Utilization Rates – The classroom utilization rate is made up of two parts: (1) the Weekly Room Hour Rate and; (2) the Station Occupancy Rate. The product of these two factors is the Classroom Utilization Rate (CUR)

Weekly Room Hour (WRH) Rate - The WRH is the average number of hours per week that the classrooms are used. It is determined by adding up all of the hours each classroom is in scheduled use during the week, including change time, and dividing by the total number of classrooms. Most standard classroom utilization reports provide this number as a measure of how efficiently the classrooms are currently being utilized.

The Pennsylvania State System of Higher Education (PASSHE) has established a WRH rate of 37.5 (50 available room hours per week x 75% room use rate).

Station Occupancy Rate – This is the ratio of the number of seats occupied divided by the seating capacity of the room. Most standard classroom utilization reports provide this ratio or percentage as a measure as to how efficiently the classroom seats are currently being utilized or filled.

The PASSHE guidelines set this rate at 67%.

Station Size – The average station size is a critical factor in determining the square feet of classroom space required. While the station size varies by the type of classroom (seminar, lecture hall, etc.) an average goal is usually established so that the square feet of classroom space can be calculated. It also should be noted that the average station size has been increasing over time to provide more instructional flexibility. Station size has a direct relation to classroom square feet need.

The PASSHE guidelines establish an average station size of 22 ASF/seat (20 ASF per station x 1.1 service space multiplier). It is important to note if the average station size includes a service space factor.

Instructional Patterns (Section Sizes) – The instructional patterns determine the number of classrooms needed and their seating capacity sizes. A change in average section size will have a direct impact on the number of sections to be offered and hence on the number of classrooms needed to meet the demand. A change in instructional patterns that “off-loads” instruction from traditional classroom facilities as discussed above will impact both square feet of classroom need as well as number and size of rooms needed.

Current Data Profile – Fall 2007

The University’s space inventory and schedule of classes (class file) databases were used to develop a current profile of the number of classrooms available (supply) and the instructional demand for classrooms as of the Fall 2007 semester. This data provides a baseline from which the future classroom needs are developed. Summary tables of the data acquired from these files are shown below:

Table 1: Current Classroom Supply

	Current Rooms	Square Feet	Total Seats	Average Classroom Size (sq ft)	Average Seats per Room	Average Station size
Active	72	62,388	3,302	867	46	18.9
Inactive or under renovation	30	20,625	1,207	688	40	17.1
Total Classrooms	102	83,013	4,509	814	44	18.4
Service Rooms	39	1,957				0.4
Totals	102*	84,970	4,509	833	44	18.8

*Excludes services rooms.

The total number of available classrooms is 102, which includes 72 rooms with scheduled use during the Fall 2007 semester as well as rooms in Dauphin Humanities Center and Henderson Gymnasium that were under renovation at the time of this study but will be reactivated during 2008. The total available assignable square feet is 84,970, which includes classroom service space. Two rooms used by Exercise Science in the Conference Center during Fall 2007 are not included in the above classroom supply.

Current Classroom Utilization:

Table 2 below displays scheduled classroom utilization data for 74 rooms, which includes the demand for Exercise Sciences accommodated in the two Conference Center rooms. The instructional demand data of WRH, WSCH, total enrollments, average section size and average WRH per section provide a basis from which future instructional demand is calculated

Table 2: Current Classroom Utilization Data

	Total Weekly Room Hours (WRH) (1)	Average WRH per Room	Station Occupancy %	Weekly Student Contact Hours (WSCH)	
8am-6pm	2,243	30.3	66.20%	67,478	
8am-10pm	2,669	36	64.80%	78,487	
(1) Includes 2 rooms in the Conference Center temporarily used by Exercise Science fall 2007					
	Total Sections	Total Enrollment in Sections	Average Section Size	Average WSCH per Enrollment	Average WRH per Section
8am-6pm	840	24,758	29.5	2.7	2.7
8am-10pm	954	27,986	29.3	2.8	2.8

Observations:

- The average weekly room hours for the 8 AM to 10 PM time frame is 36 as compared to the PASSHE guideline of 37.5.
- Station Occupancy (SO) is 64.8% compared to the PASSHE guideline of 67%.
- Based on Fall 2007 FTE of 6,601, the ratio of Weekly Student Contact Hours per FTE student is 12, which is at the upper range of the expected ratio.

Recommended Adjusted Classroom Supply

Part of the scope of work for the space assessment portion of the campus master plan included a detailed evaluation of the condition of the classroom supply based on a set of criteria used to define a quality classroom facility. Classroom attributes not matching these criteria were scored as being deficient and are presented in a separate report. This evaluation has been used to identify eighteen rooms that are considered to be poor quality instructional spaces and should be considered for removal from the classroom supply, and may be available for reuse to meet other campus needs. These rooms are located in Horton Hall, Gilbert Hall, Stewart Hall, the Faculty Office Building and Wright Hall. Besides being determined as most deficient, reuse or removal of these rooms from the supply is suggested because rooms in Horton and Gilbert are remote from the academic core, while the rooms in the Faculty Office Building and Wright are in facilities being considered for future demolition.

Table 3 below summarizes the changes to the classroom supply if these eighteen rooms are removed:

Table 3: Recommended Adjusted Classroom Supply

	Current Rooms	Square Feet	Total Seats	Average Classroom Size (sq ft)	Average Seats per Room	Average Station size
Fall 2007 CR Supply	102	83,013	4,509	814	44	18.4
Removed Rooms	18	10,065	603	559	34	16.7
Adjusted Current Supply	84	72,948	3,906	868	47	18.7
Adjusted Service Space		1,525				
Total Adjusted CR Space		74,473				

The calculated future classroom needs in the following sections will be compared to the adjusted current classroom supply.

Future Classroom Needs

Classroom Needs Calculation Overview

This analysis is being used as part of developing a new long-term campus master plan, and therefore three potential enrollment growth options were evaluated to develop scenarios to identify future facilities needs. Enrollment growth rates of 500 (7.5%), 1,500 (20%) and 2,500 (35%) additional students have been analyzed. These possible enrollment increases can be addressed in several ways:

- increase the class section enrollments (increases the station occupancy rate);
- add new sections (increases the weekly room hour utilization);
- increase the classroom supply;
- or, combinations of these options.

The number of classrooms required and square feet of classroom space is dependent on the following factors:

- Instructional demand (number of hours per week students spend in classrooms – WSCH),
- The utilization rate of the classrooms (average hours per week the classrooms are expected to be used – WRH times the expected station occupancy rate – SO),
- The average station size and
- The average section size.

To evaluate options it is useful to calculate the optimal (minimum) number of classroom seats required to meet the teaching demand (WSCH) for the planned classroom utilization rate (CUR) goal. When planning the classroom supply, the total number of seats should be as close to the optimal number as possible for the most efficient use of space. However, as is usually the case, the actual number of classroom seats is likely to vary from the optimal calculation because of existing classroom supply and the reality of not being able to match all classroom sections to the ideal classroom capacity. Hence the actual classroom utilization rate will be higher or lower than the planned CUR. The square feet of classrooms space is determined by multiplying the number of seats by the planned station size.

The second part of the calculation is to determine the optimal number of classrooms. In addition to the above factors used to determine the number of seats, the average section size is the important variable in this calculation.

The final part of the analysis is to determine the number of classrooms within various seating capacity size ranges that meet the current or projected instructional patterns.

Planning Assumptions

- Plan for instructional demand increases from Fall 2007 enrollment by 7.5%, 20% and 35% across the board.
- The Fall 2007 class file is used to determine base classroom data from which future classroom instructional demand is determined by applying the three enrollment growth scenarios.
- The Adjusted Current Supply (84 rooms) is based on the recommended removal of 18 rooms as outlined in Table 3 above and is the classroom supply used in this analysis.
- Weekly Room Hour use goal is 37.5 hours per week (50 available room hours per week x 75% room use rate)
- Station Occupancy goal is 67%
- PASSHE average station size is 20 square feet (excludes service space)
- Section size goal is about 30 students per section which is near the current average of just over 29 students.
- The calculation is based on the *instructional activity in classrooms* for the entire day (8am to 10pm) Monday through Friday.
- A 6% contingency is included in the calculations to provide some flexibility so that classrooms can be removed periodically (about once every 5 years) for maintenance or renovation.

Optimal Classroom Seats and Square Foot

The primary determinant of the amount of classroom space required is the number of classroom seats or stations needed to meet a certain enrollment level and utilization goal. The following table summarizes the optimum (minimum) calculated square feet of classroom space needed to meet the projected instructional demand using the PASSHE classroom utilization factors and station size. A 6% contingency is included in the calculation. This demand is compared to the adjusted classroom supply ASF to determine surplus or deficient space.

Table 4: Optimal Classrooms Space Compared to Current Supply

Classroom Space	Fall 2007	Enrollment Growth Options		
		7.5%	20.0%	35.0%
WSCH	78,487	84,374	94,184	105,957
WRH Goal	37.5	37.5	37.5	37.5
Station Occupancy Goal	67%	67%	67%	67%
Utilization Rate	25.1	25.1	25.1	25.1
Calculated Seats	3,124	3,358	3,749	4,217
Station Size	20	20	20	20
ASF Classrooms (PASSHE Factors)	62,477	67,163	74,973	84,344
Contingency %	6%	6%	6%	6%
Total ASF Need	66,226	71,193	79,471	89,405
Adjusted Current Supply (Actual)	72,948	72,948	72,948	72,948
Classroom Surplus or deficit - ASF	6,722	1,755	(6,523)	(16,457)
Service Space				
Service Space @ 10% of Total ASF Need	6,623	7,119	7,947	8,940
Adjusted Current Service Space	1,525	1,525	1,525	1,525
Service Space Surplus or deficit	(5,098)	(5,594)	(6,422)	(7,415)
Total CR Surplus of Deficit	1,625	(3,839)	(12,945)	(23,872)

Note: the PASSHE guidelines allocate a much higher amount of service space than currently exists and is a significant part of the total classroom space deficits as shown in the last line of the above table.

Optimal Number of Classrooms

In addition to the above factors used to determine the number of seats, the average section size is the important variable in calculating the optimal number of rooms. In the following calculation an average section size of about 30 students is assumed. This is just above the current average of 29.3 students.

Table 5 : Number of Classrooms Needed Compared to Current Supply

	Fall 2007	Enrollment Growth Options		
		7.5%	20%	35%
Section Enrollment	27,986	30,085	33,583	37,781
Average Section Size	29.3	30	30	30
Number of Sections	954	1,003	1,119	1,255
Weekly Room Hours	2,669	2,806	3,132	3,512
WRH Goal Assumption		37.5	37.5	37.5
Calculated Number of Rooms		75	84	94
Contingency %		6%	6%	6%
Required Rooms		79	89	99
Current Rooms		84	84	84
Difference		5	(5)	(15)

Summary

Based on the planning assumptions stated above, the optimal calculations show:

- At a growth of 7.5%, there is a surplus of 5 classrooms but a total deficit of 3,429 square feet a result of the shortfall of service space.
- At a growth of 20%, there is a deficit of 5 classrooms and a total deficit of 12,535 square feet including service space.
- At a growth of 35%, there is a deficit of 15 classrooms and a total deficit of 23,462 square feet including service space.

Number of Classrooms Needed by Capacity Size Range

The final component of the classroom analysis is to determine the suitability of the existing classroom capacity size mix for meeting future instructional demand and determine the sizes of additional rooms needed to meet this demand. This comparative evaluation reviews the adjusted current classroom supply based on several groupings of seating capacities to determine how appropriate the “fit” is between the course section size limits and the room sizes for the three enrollment options.

The tables display the number of classrooms required (Calculated Need) applying across-the-board classroom enrollment increases for each of the three enrollment projection options based on current section size limits as reported in the University’s class file. In the following tables:

- Calculations include a 6% contingency and assume a utilization rate of 37.5 hours per week
- Current Rooms = Adjusted Current Supply (84 classroom)
- Needed Rooms = the calculated classrooms needed to meet the schedule demand for sections with enrollments in that size range.
- Difference = Current Rooms – Needed Rooms. A negative number indicates that the demand exceeds the supply. Generally the unmet demand is shifted to a larger size range. However, if the cumulative sum of the current rooms exceeds the cumulative sum of the calculated needed rooms then the smaller rooms can not be used to meet the for the larger room need.
- Recommended Supply adds rooms if needed to meet the calculated demand only where the Current Rooms can not meet the demand.

Growth 1 - Enrollment Growth of 500 (7.5% increase)

Table 6: Size Range Analysis - Growth Option 1

	Size Range	Current Rooms	Calculated Need	Difference	Recommended Supply	Recommended - Current Supply
1	1-19	3	6	-3	3	0
2	20-24	1	15	-14	1	0
3	25-29	9	16	-7	9	0
4	30-34	3	14	-11	3	0
5	35-39	12	7	5	12	0
6	40-44	43	16	27	43	0
7	45-49	0	5	-5	0	0

	Size Range	Current Rooms	Calculated Need	Difference	Recommended Supply	Recommended - Current Supply
8	50-79	3	1	2	3	0
9	80+	10	1	9	10	0
Total		84	81	3	84	0

With a 7.5% enrollment growth the above table shows there is a surplus of 3 rooms and that the demand can be met in the current supply of rooms. However, the classroom mix is not the most efficient combination to meet the assumed demand but making changes to the existing classroom mix is not practical. Although not recommended, if rooms were to be removed from service they would need to be in size range 8 or 9.

Summary

While this growth option can be met with slightly few classrooms and space than the adjusted current supply, no changes are recommended to the current supply if the larger growth options are likely to be achieved.

The PASSHE guidelines allocate 10% of the classroom square feet for classrooms service space, therefore the adjusted current classroom supply generates 7,295 square feet for service space. Currently the adjusted service space is 1,525 square feet, a shortfall of 5,770 square feet of service space. The following table summarizes the space for this scenario.

Table 7: Summary for Growth Option 1

	ASF	Rooms	Seats
Adjusted Current Supply	72,948	84	3,906
Calculated Service Space @ 10 of ASF	7,295		
Recommended Classroom Space Need	80,243	84	3,906
Current Classroom Space including Service Space	74,473	84	
Difference from Current	(5,770)	-	3,906

Growth 2 - Enrollment Growth of 1500 (20% increase)

Table 8: Size Range Analysis - Growth Option 2

	Size Range	Current Rooms	Calculated Need	Difference	Recommended Supply	Recommended - Current Supply
1	1-19	3	6	-3	3	0
2	20-24	1	16	-15	1	0
3	25-29	9	16	-7	9	0
4	30-34	3	14	-11	3	0
5	35-39	12	13	-1	12	0
6	40-44	43	16	27	43	0
7	45-49	0	5	-5	4	4
8	50-79	3	1	2	3	0
9	80+	10	1	9	10	0
Total		84	88	-4	88	4

With a 20% enrollment growth there is a need for 4 additional rooms. As stated above, the classroom mix is not the most efficient combination to meet the assumed demand but making changes to the existing classroom mix is not practical. It is recommended that the 4 additional rooms be added in size 7 (45-49) but they could range between 49 and 80 in capacity.

Summary

This growth option recommends adding four 50 seat classrooms totaling 4,000 square feet (station size of 20 ASF) to the current supply bringing the classroom space to 76,948 square feet.

The PASSHE guidelines allocate 10% of the classroom square feet for classrooms service space, therefore the calculated classroom ASF generates 7,695 square feet for service space. Currently the adjusted service space is 1,525 square feet, a shortfall of 6,170 square feet.

This brings the recommended classroom space need to 84,643, a shortfall of 10,170 from the adjusted current space. This square feet need is less than the optimal calculation shown earlier because the adjusted current supply has an average station size of 18.7 square feet as compared to the 20 square feet used in the optimal calculation.

The following table summarizes the space for this scenario.

Table 9: Summary for Growth Option 2

	ASF	Rooms	Seats
Adjusted Current Supply	72,948	84	3,906
Additional Rooms (Capacity =50)	4,000	4	200
Classroom ASF	76,948	88	4,106
Calculated Service Space @ 10% of Total CR ASFF	7,695		
Recommended Classroom Space Need	84,643	88	4,106
Current Classroom Space including Service Space	74,473	84	
Difference from Current	(10,170)	(4)	4,106

Growth 3 - Enrollment Growth of 2500 (35% increase)

Table 10: Size Range Analysis - Growth Option 3

	Size Range	Current Rooms	Calculated Need	Difference	Recommended Supply	Recommended - Current Supply
1	1-19	3	10	-7	3	0
2	20-24	1	15	-14	1	0
3	25-29	9	18	-9	9	0
4	30-34	3	16	-13	3	0
5	35-39	12	12	0	12	0
6	40-44	43	20	23	43	0
7	45-49	0	6	-6	8	8
8	50-79	3	1	2	10	7
9	80+	10	1	9	10	0
Total		84	99	-15	99	15

With a 35% enrollment growth the above table shows there is a need for 15 additional rooms. As stated above, the classroom mix is not the most efficient combination to meet the assumed demand but making changes to the existing classroom mix is not practical. It is recommended that 8 rooms in size range 7 (45-49) and 7 in size range 8 (50-79) be added to meet the demand.

Summary

This growth option recommends adding eight 50 seat classrooms and seven 70 seat classrooms totaling 17,800 square feet (station size of 20 ASF) to the current supply bringing the classroom space to 90,748 square feet.

The PASSHE guidelines allocate 10% of the classroom square feet for classrooms service space, therefore the calculated classroom ASF generates 9,075 square feet for service space. Currently the adjusted service space is 1,525 square feet, a shortfall of 7,550 square feet.

This brings the recommended classroom space need to 99,823, a shortfall of 25,359 from the adjusted current space. This square feet need is different from the optimal calculation shown earlier because the adjusted current supply has an average station size of 18.7 square feet as compared to the 20 square feet used in the optimal calculation.

The following table summarizes the space for this scenario.

Table 11: Summary for Growth Option 2

	ASF	Rooms	Seats
Adjusted Current Supply	72,948	84	3,906
Additional Rooms (Capacity =50)	8,000	8	400
Additional Rooms (Capacity =70)	9,800	7	490
Classroom ASF	90,748	99	4,796
Calculated Service Space @ 10% of Total CR ASFF	9,075		
Recommended Classroom Space Need	99,823	99	4,796
Current Classroom Space including Service Space	74,473	84	
Difference from Current	(25,350)	(15)	4,796

Conclusions and Recommendations

The University should reduce its classroom supply to remove rooms in poor condition. The consultants recommend that the 18 classrooms in Horton Hall, Gilbert Hall, Stewart Hall, the Faculty Office Building and Wright Hall be removed from service and made available for other uses. Besides being determined as most deficient, Horton Hall, Gilbert Hall and Stewart are remote from the academic core and the Faculty Office Building and Wright Hall are being considered for future demolition. Removal of these rooms would bring the number of classroom to 84 rooms (Adjusted Current Supply).

The PASSHE guidelines recommend an average station size of 20 square feet (excluding service space), while the revised classroom supply averages about 18.7 square feet per station. To implement the PASSHE guideline could require adding up to about 5,000 square feet. Rather than building additional square feet just to meet this goal the consultants recommend addressing this goal over time. As classrooms are remodeled or renovated the station sizes should be increased as much as practical.

Summary of Recommended Classroom Space

All growth options retain the existing adjusted current supply of 84 classrooms even though the existing classroom supply is not the most efficient mix of rooms. Making changes to the current supply to improve the “fit” between classrooms and section sizes is simply not cost effective or practical. Because the current classroom supply has an average station size of 18.7 square feet as compared to the 20 square feet in the PASSHE guidelines, the recommended classroom square feet is slightly different from the optimal calculation.

Enrollment Growth of 500 (7.5% increase)

While this growth scenario can be met with slightly few classrooms and space than the adjusted current supply, no changes are recommended to the current supply if the larger growth options are likely to be achieved. However there is calculated shortfall of 5,770 square feet for service space.

- Retain the current adjusted supply of 84 rooms
- Add 5,770 square feet of service space

Enrollment Growth of 1500 (20% increase)

- Retain the current adjusted supply of 84 rooms
- Add 4 rooms of capacity 50 students with a station size of 20, totaling 4,000 square feet
- Add 6,170 square feet of service space

Enrollment Growth of 2500 (35% increase)

- Retain the current adjusted supply of 84 rooms
- Add 8 rooms of capacity 50 students with a station size of 20, totaling 8,000 square feet
- Add 7 rooms of capacity 70 students with a station size of 20, totaling 9,800 square feet
- Add 7,550 square feet of service space

Appendix

Classrooms Fall 2007

Bldg Name	Room Num	ASF	Seats	Assignment Name	Comment
Dauphin Humanities	DHC002	755	41	English	Inactive or under renovation
Dauphin Humanities	DHC004	572	35	English	Inactive or under renovation
Dauphin Humanities	DHC051	1,860	130	English	Inactive or under renovation
Dauphin Humanities	DHC102	738	40	English	Inactive or under renovation
Dauphin Humanities	DHC104	655	40	English	Inactive or under renovation
Dauphin Humanities	DHC106	665	40	English	Inactive or under renovation
Dauphin Humanities	DHC108	665	40	English	Inactive or under renovation
Dauphin Humanities	DHC110	655	40	Mathematics	Inactive or under renovation
Dauphin Humanities	DHC151	1,975	114	English	Inactive or under renovation
Dauphin Humanities	DHC202	738	40	History/Philosophy	Inactive or under renovation
Dauphin Humanities	DHC204	655	40	History/Philosophy	Inactive or under renovation
Dauphin Humanities	DHC205	408	27	English	Inactive or under renovation
Dauphin Humanities	DHC206	665	40	History/Philosophy	Inactive or under renovation
Dauphin Humanities	DHC207	405	27	English	Inactive or under renovation
Dauphin Humanities	DHC208	665	40	History/Philosophy	Inactive or under renovation
Dauphin Humanities	DHC210	655	40	History/Philosophy	Inactive or under renovation
Dauphin Humanities	DHC302	738	40	Sociology/Anthropology	Inactive or under renovation
Dauphin Humanities	DHC304	655	40	Sociology/Anthropology	Inactive or under renovation
Dauphin Humanities	DHC305	407	27	History/Philosophy	Inactive or under renovation
Dauphin Humanities	DHC306	665	40	Political Science	Inactive or under renovation
Dauphin Humanities	DHC307	405	27	Human Communication Studies	Inactive or under renovation
Dauphin Humanities	DHC308	665	40	Human Communication	Inactive or under

				Studies	renovation
Dauphin Humanities	DHC310	655	40	Human Communication Studies	Inactive or under renovation
Dauphin Humanities	DHC312	755	40	Human Communication Studies	Inactive or under renovation
Faculty Office Bldg	FOB101	1,052	50	Swing Space	Classroom
Franklin Science Ctr	FSC012	620	15	Psychology	Classroom
Franklin Science Ctr	FSC016	644	40	Biology	Classroom
Franklin Science Ctr	FSC030	1,890	121	Psychology	Classroom
Franklin Science Ctr	FSC104	1,285	71	Physics	Classroom
Franklin Science Ctr	FSC108	1,286	71	Physics	Classroom
Franklin Science Ctr	FSC156	1,745	109	Biology	Classroom
Franklin Science Ctr	FSC226	749	40	Psychology	Classroom
Franklin Science Ctr	FSC228	697	40	Psychology	Classroom
Franklin Science Ctr	FSC256	1,743	109	Biology	Classroom
Franklin Science Ctr	FSC312	798	41	Chemistry	Classroom
Franklin Science Ctr	FSC336	800	40	Psychology	Classroom
Franklin Science Ctr	FSC356	1,851	109	Chemistry	Classroom
Gilbert Hall	GIL001	293	20	Swing Space	Inactive or under renovation
Gilbert Hall	GIL110	420	20	Swing Space	Inactive or under renovation
Gilbert Hall	GIL210	545	46	Swing Space	Classroom
Gilbert Hall	GIL220	636	40	Swing Space	Classroom
Gilbert Hall	GIL230	609	40	Swing Space	Classroom
Gilbert Hall	GIL240	587	40	Swing Space	Classroom
Grove Hall	GRH201	772	36	Management and Marketing	Classroom
Grove Hall	GRH202	1,504	80	Management and Marketing	Classroom
Grove Hall	GRH203	754	36	Management and Marketing	Classroom
Grove Hall	GRH206	774	36	Accounting and Management Information Systems	Classroom
Grove Hall	GRH208	776	36	Accounting and Management Information Systems	Classroom
Grove Hall	GRH303	755	36	Finance and Supply Chain Management	Classroom
Grove Hall	GRH306	774	40	Economics	Classroom
Grove Hall	GRH308	776	40	Economics	Classroom
Grove Hall	GRH404	768	40	Management and Marketing	Classroom
Grove Hall	GRH406	751	42	Political Science	Classroom
Grove Hall	GRH408	756	40	Sociology/Anthropology	Classroom
Huber Arts Center	HAC301	1,819	106	Art	Classroom
Heiges Field House	HFH220	1,193	40	Sociology/Anthropology	Classroom
Heiges Field House	HFH230	1,178	52	Political Science	Classroom

Henderson Gymnasium	HEN101	951	35	Exercise Science	Inactive or under renovation
Henderson Gymnasium	HEN101A	386	1	Exercise Science	Inactive or under renovation
Horton Hall	HOR020	463	25	Swing Space	Classroom
Horton Hall	HOR022	516	29	Swing Space	Classroom with Computers
Horton Hall	HOR128	495	26	Dean, School Academic Programs and Services	Classroom
Ezra Lehman Library	LIB016	513	24	Library	Classroom
Ezra Lehman Library	LIB205	1,349	27	Library	Classroom
Memorial Auditorium	MEM100	1,230	40	Swing Space	Classroom
Memorial Auditorium	MEM210	804	40	Swing Space	Classroom
Math & Comp Tech Bld	MCT258	668	40	Mathematics	Classroom
Math & Comp Tech Bld	MCT262	773	40	Mathematics	Classroom
Math & Comp Tech Bld	MCT265	826	40	Mathematics	Classroom
Performing Arts Ctr	PAC121	679	44	Music/Theatre	Classroom
Rowland Hall	RLH100	693	40	Modern Languages	Classroom
Rowland Hall	RLH101	481	25	Communications/Journalism	Classroom
Rowland Hall	RLH106	711	40	Modern Languages	Classroom
Rowland Hall	RLH200	2,391	150	Geography/Earth Sciences	Classroom
Rowland Hall	RLH209	647	41	Communications/Journalism	Classroom
Stewart Hall	STW100	466	17	Communications/Journalism	Classroom
Stewart Hall	STW101	496	34	Swing Space	Inactive or under renovation
Stewart Hall	STW200	873	53	Swing Space	Classroom
Stewart Hall	STW209	403	29	Swing Space	Inactive or under renovation
Shippen Hall	SPH110G	449	12	Counseling and College Student Personnel	Classroom
Shippen Hall	SPH150	755	28	Educational Leadership and Special Education	Classroom
Shippen Hall	SPH160	760	28	Educational Leadership and Special Education	Classroom
Shippen Hall	SPH200	969	34	Teacher Education	Classroom
Shippen Hall	SPH220	880	40	Teacher Education	Classroom
Shippen Hall	SPH224	1,636	130	Teacher Education	Classroom
Shippen Hall	SPH230	657	30	Teacher Education	Classroom
Shippen Hall	SPH250	755	30	Teacher Education	Classroom
Shippen Hall	SPH260	724	35	Teacher Education	Classroom
Shippen Hall	SPH300	712	38	Criminal Justice	Classroom
Shippen Hall	SPH320	764	42	Criminal Justice	Classroom
Shippen Hall	SPH340	764	42	Criminal Justice	Classroom

Shippen Hall	SPH370	895	35	Social Work/Gerontology	Classroom
Shippen Hall	SPH380	764	35	Social Work/Gerontology	Classroom
Shearer Hall	SRH107	724	42	Geography/Earth Sciences	Classroom
Shearer Hall	SRH109	558	40	Geography/Earth Sciences	Classroom
Shearer Hall	SRH202	903	36	Geography/Earth Sciences	Classroom
Shearer Hall	SRH205	602	40	Geography/Earth Sciences	Classroom
Shearer Hall	SRH206	441	28	Geography/Earth Sciences	Classroom
Wright Hall	WRI012	584	35	Provost	Classroom
Wright Hall	WRI016	616	35	Military Science	Classroom
Wright Hall	WRI017	602	34	Provost	Classroom
Wright Hall	WRI106	409	30	Swing Space	Classroom
Total Rooms = 102		83,013	4,509		

Classrooms Recommended for Removal

Bldg Name	Room Num	ASF	Seats	Assignment Name	Comment
Faculty Office Bldg	FOB101	1,052	50	Swing Space	Classroom
Horton Hall	HOR020	463	25	Swing Space	Classroom
Horton Hall	HOR022	516	29	Swing Space	Classroom with Computers
Horton Hall	HOR128	495	26	Dean, School Academic Programs and Services	Classroom
Stewart Hall	STW100	466	17	Communications/Journalism	Classroom
Stewart Hall	STW101	496	34	Swing Space	Inactive Classrooms
Stewart Hall	STW200	873	53	Swing Space	Classroom
Stewart Hall	STW209	403	29	Swing Space	Inactive Classrooms
Gilbert Hall	GIL001	293	20	Swing Space	Inactive Classrooms
Gilbert Hall	GIL110	420	20	Swing Space	Inactive Classrooms
Gilbert Hall	GIL210	545	46	Swing Space	Classroom
Gilbert Hall	GIL220	636	40	Swing Space	Classroom
Gilbert Hall	GIL230	609	40	Swing Space	Classroom
Gilbert Hall	GIL240	587	40	Swing Space	Classroom
Wright Hall	WRI012	584	35	Provost	Classroom
Wright Hall	WRI016	616	35	Military Science	Classroom
Wright Hall	WRI017	602	34	Provost	Classroom
Wright Hall	WRI106	409	30	Swing Space	Classroom
Total rooms = 18		10,065	603		

Classroom Utilization Report

Fall 2007 Time Period (24 hour): 800 – 2200 (62 Available Weekly Room Hours)

110 Classrooms

Bldg Num	Bldg Code	Room Num	Dept	Cap	ASF	WRH	WRH%	Station Occupancy	Hrs Below 40% Occ
021D	CFC	CFC250	ESC	30	600	27.1	43.8%	66.3%	0.0
021D	CFC	CFC251	ESC	30	600	28.1	45.4%	65.4%	5.7
015	FOB	FOB101	SWING	50	1,052	43.7	70.4%	74.2%	0.0
526	FSC	FSC012	PSY	15	620	14.1	22.8%	124.3%	0.0
526	FSC	FSC016	BIO	40	644	33.2	53.5%	67.7%	3.0
526	FSC	FSC030	PSY	121	1,890	35.0	56.4%	27.8%	35.0
526	FSC	FSC104	PHY	71	1,285	23.5	37.9%	51.6%	6.0
526	FSC	FSC108	PHY	71	1,286	28.3	45.7%	53.7%	7.8
526	FSC	FSC156	BIO	109	1,745	38.9	62.7%	41.2%	13.6
526	FSC	FSC226	PSY	40	749	43.6	70.3%	78.2%	2.9
526	FSC	FSC228	PSY	40	697	43.7	70.5%	64.1%	3.0
526	FSC	FSC256	BIO	109	1,743	35.8	57.8%	37.4%	13.7
526	FSC	FSC312	CHM	41	798	39.8	64.2%	70.2%	2.9
526	FSC	FSC336	PSY	40	800	32.0	51.6%	85.2%	0.0
526	FSC	FSC356	CHM	109	1,851	39.8	64.2%	32.6%	31.1
520	GH	GIL210	SWING	46	545	34.8	56.1%	85.2%	0.0
520	GH	GIL220	SWING	40	636	52.1	84.0%	91.3%	0.0
520	GH	GIL230	SWING	40	609	49.2	79.4%	94.7%	0.0
520	GH	GIL240	SWING	40	587	49.3	79.5%	90.6%	0.0
529	GRH	GRH201	MGT	36	772	37.5	60.4%	92.8%	0.0
529	GRH	GRH202	MGT	80	1,504	40.3	65.0%	43.9%	14.1
529	GRH	GRH203	MGT	36	754	43.2	69.7%	96.3%	0.0
529	GRH	GRH206	ACC	36	774	43.1	69.6%	81.4%	0.0
529	GRH	GRH208	ACC	36	776	37.5	60.4%	77.6%	0.0
529	GRH	GRH303	FIN	36	755	40.4	65.1%	89.6%	0.0
529	GRH	GRH306	ECO	40	774	49.3	79.5%	72.8%	0.0
529	GRH	GRH308	ECO	40	776	46.3	74.7%	83.5%	2.8
529	GRH	GRH404	MGT	40	768	34.7	55.9%	76.0%	0.0
529	GRH	GRH406	PLS	42	751	40.7	65.6%	79.9%	0.0
529	GRH	GRH408	SOC	40	756	47.2	76.2%	86.1%	2.8
525	HAC	HAC301	ART	106	1,819	28.7	46.4%	42.4%	3.0
215	HFH	HFH220	SOC	40	1,193	34.7	56.0%	83.6%	0.0
215	HFH	HFH230	PLS	52	1,178	26.3	42.5%	73.3%	0.0
018	HH	HOR020	SWING	25	463	29.0	46.7%	76.0%	0.0
018	HH	HOR128	APS	26	495	17.3	27.8%	82.9%	0.0
414	LL	LIB016	LIB	24	513	4.0	6.5%	74.0%	0.0
414	LL	LIB205	LIB	27	1,349	45.4	73.2%	130.4%	0.0
560	MA	MEM100	SWING	40	1,230	37.5	60.4%	65.7%	2.8
560	MA	MEM210	SWING	40	804	17.5	28.2%	80.4%	0.0
531	MCT	MCT258	MAT	40	668	34.0	54.8%	81.4%	0.0
531	MCT	MCT262	MAT	40	773	31.3	50.5%	81.4%	0.0
531	MCT	MCT265	MAT	40	826	47.0	75.8%	96.3%	0.0
561	PAC	PAC121	MUS	44	679	28.9	46.6%	90.4%	0.0
521	RLH	RLH100	LANG	40	693	37.8	61.0%	63.9%	6.0

Bldg Num	Bldg Code	Room Num	Dept	Cap	ASF	WRH	WRH%	Station Occupancy	Hrs Below 40% Occ
521	RLH	RLH101	COM	25	481	26.4	42.6%	72.8%	0.0
521	RLH	RLH106	LANG	40	711	26.3	42.5%	71.2%	3.0
521	RLH	RLH200	GEO	150	2,391	35.1	56.6%	25.6%	35.1
521	RLH	RLH209	COM	41	647	40.6	65.4%	59.2%	5.8
120	SH	STW100	COM	17	466	8.0	12.9%	85.3%	0.0
120	SH	STW200	SWING	53	873	10.5	16.9%	60.4%	2.8
523	SPH	SPH110G	CNS	12	449	13.6	21.9%	104.3%	0.0
523	SPH	SPH150	ELP	28	755	52.3	84.4%	87.4%	2.9
523	SPH	SPH160	ELP	28	760	55.2	89.0%	83.3%	0.0
523	SPH	SPH200	TCH	34	969	49.6	80.1%	74.2%	0.0
523	SPH	SPH220	TCH	40	880	48.7	78.5%	63.0%	5.8
523	SPH	SPH224	TCH	130	1,636	35.7	57.6%	24.8%	33.7
523	SPH	SPH230	TCH	30	657	44.2	71.2%	81.5%	2.8
523	SPH	SPH250	TCH	30	755	43.4	70.0%	81.6%	5.8
523	SPH	SPH260	TCH	35	724	50.1	80.8%	67.0%	0.0
523	SPH	SPH300	CRJ	38	712	43.7	70.5%	62.8%	0.0
523	SPH	SPH320	CRJ	42	764	43.7	70.4%	46.0%	14.8
523	SPH	SPH340	CRJ	42	764	40.7	65.7%	54.2%	8.7
523	SPH	SPH370	SWK	35	895	38.1	61.4%	70.0%	0.0
523	SPH	SPH380	SWK	35	764	35.2	56.7%	53.3%	5.8
522	SRH	SRH107	GEO	42	724	41.9	67.6%	90.9%	0.0
522	SRH	SRH109	GEO	40	558	40.7	65.6%	78.7%	8.8
522	SRH	SRH202	GEO	36	903	34.7	56.0%	81.7%	3.0
522	SRH	SRH205	GEO	40	602	22.8	36.8%	74.2%	0.0
522	SRH	SRH206	GEO	28	441	23.0	37.1%	69.2%	0.0
528	WRI	WRI012	PRO	35	584	37.8	61.0%	60.4%	0.0
528	WRI	WRI016	MIL	35	616	37.5	60.5%	52.1%	14.8
528	WRI	WRI017	PRO	34	602	43.5	70.1%	49.3%	6.0
528	WRI	WRI106	SWING	30	409	46.4	74.8%	62.8%	0.0
Total Rooms: 73				3,333	63,072	2,640.8	58.3%	64.6%	316.0

110 Classrooms Summary

Average Weekly Room Hours:	36.2	Total Enroll	27,782	Average Section Size:	29.4
Weekly Student Contact Hours:	77,899	Total Section Count	945	Low Hour Percent:	12.0%

113 Classroom with Computers

Bldg Num	Bldg Num	Room Num	Dept	Cap	ASF	WRH	WRH%	Station Occupancy	Hrs Below 40% Occ
018	HH	HOR022	SWING	29	516	26.0	41.9%	78.1%	0.0

Fall 2007 Time Period (24 hour): 800 – 2200 (62 Available Weekly Room Hours)

Summary Total Classrooms

	Cap	ASF	WRH	WRH%	Station Occupancy	Hrs Below 40% Occ
Total Rooms : 74	3,362	63,588	2,666.8	58.1%	64.8%	316.0

Average Weekly Room Hours:	36	Total Enroll	27,986	Average Section Size:	29.3
Weekly Student Contact Hours:	78,488	Total Section Count	954	Low Hour Percent:	11.8%

Time by Data Distribution

Classroom Time by Day Distribution: Campus Summary Fall 2007

24 HR Time		Mon	Tue	Wed	Thur	Fri	Total Contact Hrs.	Hour Percent
800	8:00 AM	33	34	36	34	34	171	6.4%
900	9:00 AM	54	47	57	47	55	260	9.7%
1000	10:00 AM	65	61	66	62	63	317	11.8%
1100	11:00 AM	58	62	57	63	53	293	11.0%
1200	12:00 PM	53	58	50	59	48	268	10.0%
1300	1:00 PM	55	62	56	62	49	284	10.6%
1400	2:00 PM	65	64	65	64	6	264	9.9%
1500	3:00 PM	54	25	53	26	0	158	5.9%
1600	4:00 PM	51	0	50	1	0	102	3.8%
1700	5:00 PM	35	33	32	33	0	133	5.0%
1800	6:00 PM	31	35	28	31	0	125	4.7%
1900	7:00 PM	33	41	29	35	0	138	5.2%
2000	8:00 PM	26	34	23	29	0	112	4.2%
2100	9:00 PM	11	15	10	12	0	48	1.8%
Total Contact Hrs		624	571	612	558	308	2673	
Day Percent		23.4%	21.3%	22.9%	20.9%	11.5%		

