



**CAPILANO
UNIVERSITY**

**Space Utilization and Selected
Administrative Components**

RPG – Resource Planning Group Inc.

Vancouver, British Columbia

September 10, 2010



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1. INTRODUCTION

BACKGROUND

Founded in 1968 as Capilano College, classes were originally taught in provisional locations like churches, high schools and other nearby sites. In 1973, the College opened its first campus in North Vancouver. From 1991 to 1996, the College underwent a major expansion which included the opening of a 90 seat lecture theatre, sports complex, Capilano College Child Care Centre and the Birch Building. In 2008, the College received university status and a name change to Capilano University.

CU has developed a superb reputation for quality teaching, successful students and a beautiful campus setting. However, after many years of operation and major operational and infrastructure changes over that time, a wide range of space related issues have incrementally developed that include shortfalls, congestion, inequities and inadequate infrastructure support for new and emerging modes of learning and teaching. These issues are, collectively, limiting opportunities for a flexible response to changing demands of new and emerging pedagogies, student needs and to optimizing the long term operational success of CU.

To partially address these issues, CU identified the need to proceed with a Space Planning Study and requested that Resource Planning Group Inc. (RPG) assist in defining the scope of such a project. A scope document was subsequently completed in early April 2010. In mid-April 2010, Capilano University requested that RPG proceed with a qualified version of the services identified in the scope document, focussing on teaching space and office space utilization as well as space and locational requirements for selected administrative support components. Substantive work began in late April.

PURPOSE OF THIS REPORT

The purpose of this document is threefold, as follows.

- Provide Capilano University with an analysis of classrooms and teaching labs/studios space utilization to better understand how space is currently being utilized, if it could be used more effectively and initial concepts and potential opportunities for re-purposing. This information may form the basis for further work in subsequent studies.
- Provide Capilano University with an analysis of office space utilization to better understand how office space is currently being utilized, if it could be used equitably and initial concepts and potential opportunities for re-purposing. This information may form the basis for further work in subsequent studies.
- For selected administrative support components, develop Master Program information including existing and projected space requirements and locational criteria as well as optional component relocations to improve criteria related to operational efficiency, quality of workspace, etc.

**DESCRIPTION OF THE WORK
PERFORMED**

The three main task groups - office space utilization, teaching space utilization, Master Program development of selected administrative support components - all began concurrently, with the work performed as follows:

- Office space utilization (see section 2): this task began with data collection of existing office space assignments, numbers of desks, department staffing information and existing space inventory analysis. Excepting for the space inventory this information was not provided from a central source and as a result, took considerable time as it was necessarily collected from senior administrative support from the Faculties and in some cases individual departments. Desk counts and desk areas were developed through walkthroughs of all office space on campus. Once all data was collected, the analysis was initiated to compare numbers and sizes of offices/desks with staffing and between Faculties and departments. In addition, for reference, a preliminary Office Space Standards document was developed to assist CU in future planning.
- Teaching space utilization (see section 3): this task began with data collection of current classrooms, teaching labs/studios timetabling, course and section hour information from the Registrar's Office. This collection process took considerable time and interaction with the Registrar's Office in order to ensure that all information was accurate and useable. Once fully collected, various assumptions regarding utilization were reviewed and confirmed with the Registrar's Office and the analysis was initiated. The analysis included two key parts: existing utilization analysis to assess how well these spaces were actually being used and a section hour analysis to assess what the theoretical room requirements might be. For the latter, a brief comparison with existing inventory was then completed for reference.
- Section hour analysis (see section 3): this task summarized the total peak week classroom and teaching lab/studio section hour workload and calculated the theoretical number and capacities of required rooms for daytime (39 hour week) and evening time (15 hour week). Workload information and utilization assumptions were provided by the Registrar's Office. This information, though theoretical provided CU with an objective, idealized model of room requirements to compare with its existing inventory.
- Master Program development of selected administrative support components was initiated by meeting with representatives of each of the six components included:
 - Development & Alumni Relations,
 - Continuing Education,
 - Continuing Professional Studies,
 - Human Resources,
 - Information Technology Services,
 - Marketing & Communications.

These meetings focussed on identifying current and future staffing requirements, space and locational requirements. This information was subsequently summarized along with suggested component relocation options, to be utilized for master plan decision making by CU.

Subsequently, a complete draft document was developed and submitted in early August to the Executive Committee for review and comment.

PARTICIPANTS

Many individuals assisted in the collection of information throughout the study. In addition to members of the CU Executive Committee, the following individuals participated in key meetings:

Development & Alumni Relations

Jessica Thoms, Director, Development & Alumni Relations
Alison Bailey, Development Assistant
Alex Kershaw, Annual Giving Officer
Janis Connolly, Alumni Relations

Continuing Education

Lynn Jest, Director, Continuing Professional Studies Community Programming

Continuing Professional Studies

Lynn Jest, Director, Continuing Professional Studies Community Programming

Human Resources

Barbara Ottley, Manager, Human Resources

Information Technology Services

Steve Gallagher, Director, IT Applications
Francis van Roode, Consultant, IT Operations
Darren Broder, Manager, IT Infrastructure

Marketing & Communications

David DeMuynck, Manager, Marketing and Communication

Registrar, Enrolment Services

Michelle Philippe, Associate Registrar, Systems & Scheduling,
Enrolment Services
Itidal Sadek, Registrar, Enrolment Services

Contract Services & Capital Planning

Mark Clifford, Director, Contract Services & Capital Planning

Resource Planning Group Inc.

Steve Yeomans, RPG Partner
Mark Mehrer, RPG Partner
Ruth Varvas, RPG Planner/Programmer
Brigid Barriscale, RPG Planner/Programmer
Sherri Slobodian, RPG Technical Support

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**SECTION 2. OFFICE SPACE
UTILIZATION****INTRODUCTION**

This section includes office space utilization information for the North Vancouver campus of Capilano University, developed during the summer of 2010.

In summary, there are approximately 657 desks at the North Vancouver campus, comprised of ~341 desks in single desk offices and 316 desks in open office areas or multi-desk offices. These desks support a diverse and numerous employee population of faculty and staff, totalling 636 ~full time equivalents (FTE) and 860 headcount (HC).

The office space utilization analysis is based on several information sources provided by CU between May and July 2010, including floorplans, space inventories, staff lists and related office assignments, as well as walkthroughs of all buildings and direct measurements of some desk areas. Staff information provided by CU included position type and related Faculty, Department or other affiliation as well as a measure of employment for each position, in terms of RFT, RPT or NREG. For the purposes of this analysis, these latter figures were translated to approximate full time equivalents (FTE), as follows:

*RFT: regular full time employee
RPT: regular part-time employee
NREG: non-regular employee*

- Instructors/Faculty: an RFT or RPT workload of 8.0 sections was viewed as ~full-time or ~1.0 FTE; 4.0 sections was viewed as ~0.5 FTE; etc.
- Other Staff: full-time other staff were viewed as ~1.0 FTE; half-time staff as ~0.5 FTE; etc.

It should be noted that positions and ~FTEs vary from term to term and year to year and the information utilized herein is "snapshot". ~FTE information was based on the academic year 2009-2010, using the Spring semester as a snapshot of time in which to capture information.

Summary graphs in this section include: ¹

GRAPHS

- Graph 1: Frequency of Workstation Sizes at Capilano University
- Graph 2: Average NSM per ~FTE Equivalent by Position Type for Whole Campus
- Graph 3: Average NSM per ~FTE Equivalent by Position Type by Faculty/VP
- Graph 4: Average Number Desks per ~FTE Equivalent by Position Type by Faculty/VP
- Graph 5: Average Number Desks per ~FTE Equivalent and per Headcount (HC) by Position Type

NSM: net square metres, as measured from the inside walls of a particular room or the useable area of a desk in an open area or shared office

¹ See Appendix B for detailed information:

Table 1: Total Faculty & Staff ~FTE Equivalent by Position Type by Faculty/VP and Department

Table 2: Total Number of Desks by Position Type, by Faculty/VP and Department

Table 3: Total NSM by Position Type, by Faculty/VP and Department

Table 4: Average NSM by ~FTE Equivalent by Position Type, by Faculty/VP and Department

Definitions

~FTE: *approximate full time equivalent*
 RFT: *regular full time*
 RPT: *regular part-time*
 NREG: *non-regular*

FTE Equivalent

~FTE Equivalent: based on RFT, RPT, NREG provided by Capilano University. This information was collected from various sources including Human Resources, individual departments and programs, and the CU Phonebook. It represents the approximate North Vancouver campus staffing for the 2009/2010 academic year. An RFT, RPT or NREG workload of 8 courses over the year was considered ~full-time or 1.0 ~FTE.

Workstation or Desk

The term "desk" and "workstation" are used interchangeably. "Desk NSM" is assumed to be either the net measured area of an open office area desk (excluding circulation) or the net room area of an enclosed office divided by the number of desks.

Administrative Categories

Though not comprehensive, Faculty, Program, Department, Vice-President and Other administrative groupings utilized in this document are summarized below.

FACULTIES

Fac of A&S	Faculty of Arts & Sciences
Fac of BUS	Faculty of Business
Fac of F&AA	Faculty of Fine & Applied Arts
Fac of H&E	Faculty of Health & Education
Fac of P&AS	Faculty of Pure & Applied Sciences
Fac of S&IS	Faculty of Student & Institutional Support
Fac of SS&D	Faculty of Student Services & Development
Fac of T&OR	Faculty of Tourism & Outdoor Recreation

VP/OTHER

VP A&AP	VP Education, Academic and Arts Programs
VP EM&IP	VP Education, Management & International Programs
VP F&Admin	VP Finance & Administration
VP HR	VP Human Resources
VP S&IS	VP Student & Institutional Support
D&AR	Development & Alumni Relations

PROGRAM, DEPARTMENT

A&EM	Arts & Entertainment Management
ABE	Adult Basic Education
ABT	Applied Business Technology
AWE	Access Work Experience
CCC	Child Care Centre
CD&O	Community Development & Outreach
CEd	Continuing Education
CFA	Capilano University Faculty Association
COM	Communications
COU	Counselling
CS&S	Costuming for Stage and Screen
CS&CP	Contract Services & Capital Planning
DE	Discover Employability
DIS	Disability Services
DS	Disability Services
DST	Developmental Studies
ECC&E	Early Childhood Care & Education

PROGRAM, DEPARTMENT (cont.)

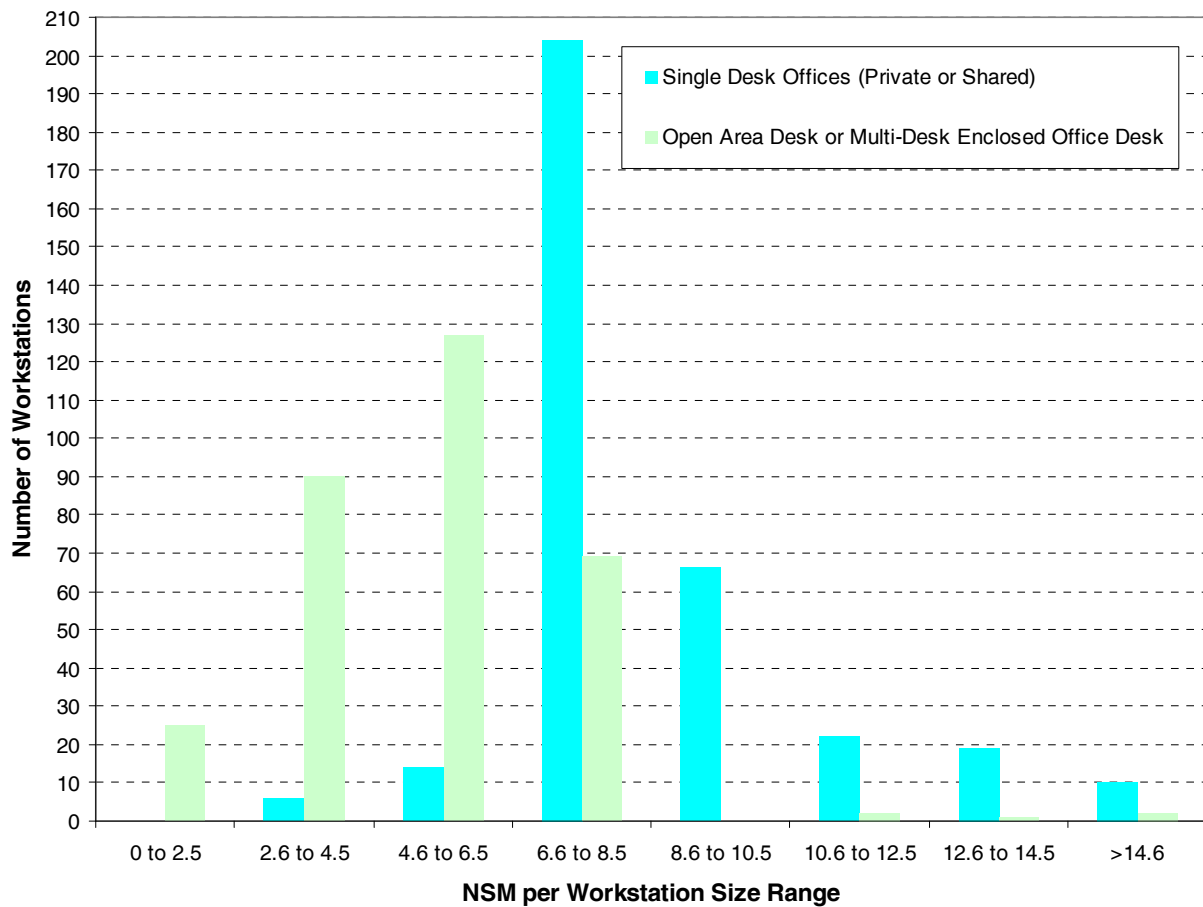
ESL	English as a Second Language
ETRC	Education Technology Resource Centre
FA	Financial Aid & Awards
FIL	Foundation for Independent Living
FNS	First Nations Student Services
FNT	First Nations Transition
HKin	Human Kinetics
HLTH	Health
HUM	Humanities
IDEA	Illustration/Design: Elements & Applications
ID	Interactive Design
IIDF	Indigenous Independent Digital Filmmaking (Dipl & Cert)
ISC	International Student Centre
LIB	Library Services
LST	Legal Studies
MED	Media Arts
MPA	Motion Picture Arts
MUS	Music Therapy
PAT	Performing Arts Theatre
P&AS	Pure & Applied Sciences
PLA	Prior Learning Assessment
PMTI	Private Music Theatre Instruction
PUB	Public Administration
REH	Rehabilitation Assistant
SARAW	Speech Assisted Reading, Writing Program
SCB	School of Business
SES	Student Employment Services
SOC	Social Sciences
SPE	Special Education Assistant
SST	Student Services
STD	Student Discipline
STL	Student Liaison
TOR	Tourism & Outdoor Recreation
UIC	University Information Centre
VPA	Visual & Performing Arts

ANALYSIS

The following graphs and narrative summarize the results of the office utilization analysis documented in more detail in Appendix B.

GRAPH 1: Frequency of Workstation Sizes at Capilano University

The following Graph 1 illustrates the distribution of workstations by size in terms of net square metres (NSM) with workstations categorized as either "open area desk or multi-desk enclosed office" or as "single desk offices". The graph indicates that there is a significant range, but that the most common size ranges are respectively 4.6 to 6.5 nsm and 6.6 to 8.5 nsm.



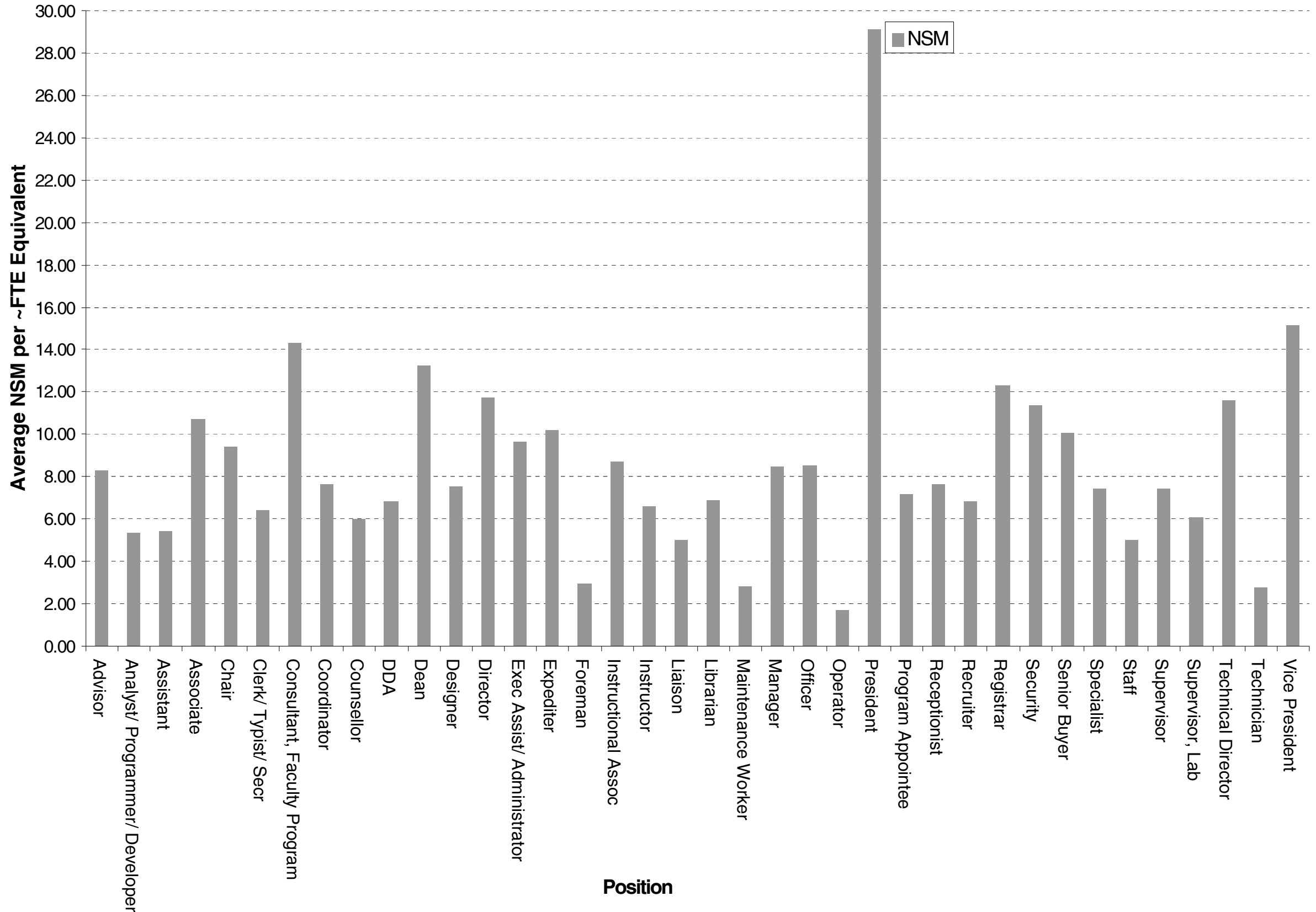
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GRAPH 2: Average NSM per ~FTE Equivalent by Position Type for Whole Campus

Graph 2 summarizes average NSM (net square metres) per ~FTE (full time equivalent) by position type for the North Vancouver Campus as a whole.

This summary graph clearly illustrates that desk areas range considerably in size across the 38 position types. Excluding the President's large office as an exception due to its large meeting area, the range in desk size is approximately <2.0 nsm to >15.0 nsm. Some of this range reflects the difference between a small open office type desk and a private enclosed office. However, these figures are averages per ~FTE and it is surprising that there is as much range as there is, illustrating a general lack of equity in office assignments. A careful review of the more detailed Tables identifies where these disparities lie on a Faculty and Department level.

Note: definitions of abbreviations are included in the introduction section of this appendix.



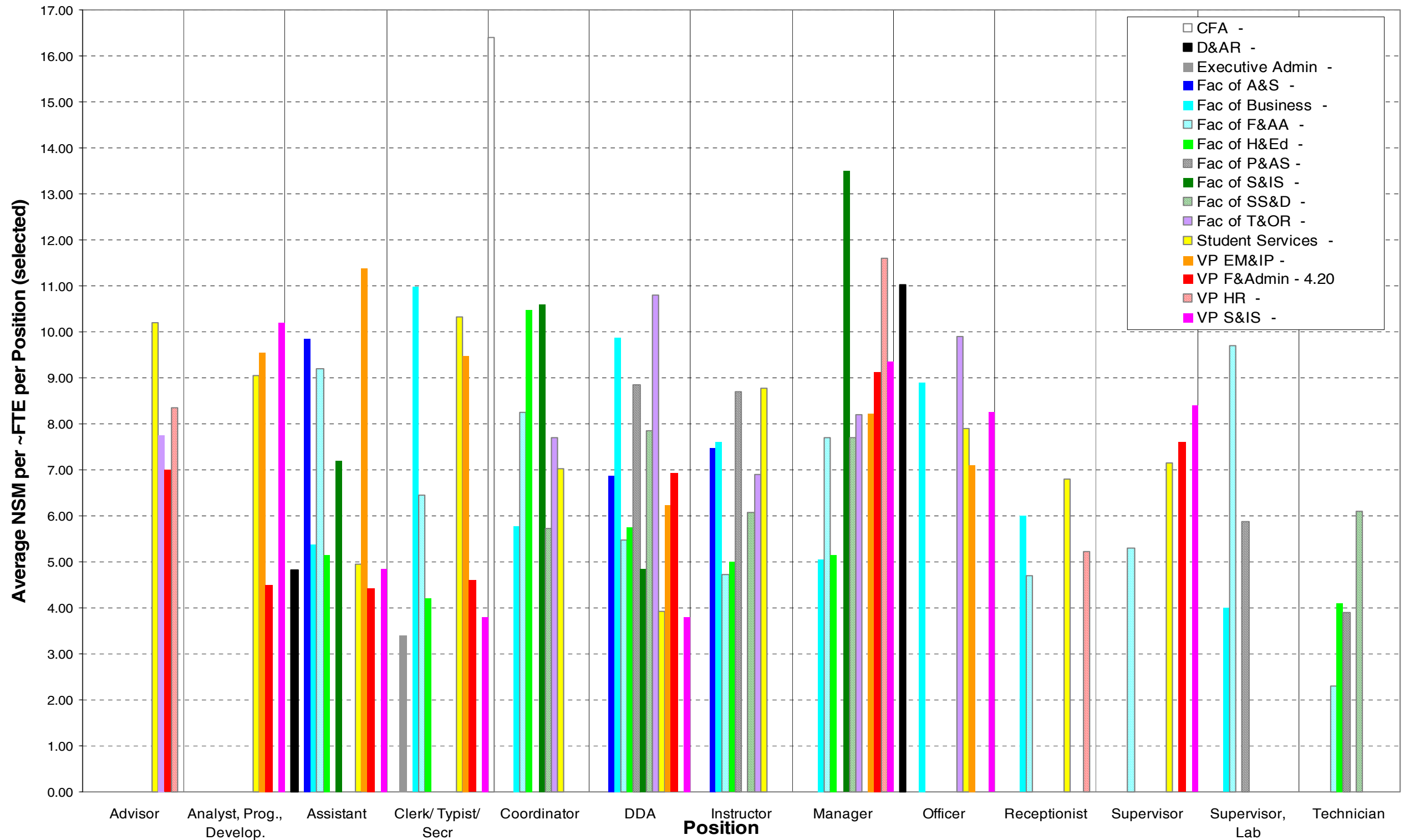
GRAPH 3: Average NSM per ~FTE Equivalent by Position Type by Faculty/VP

Graph 3 summarizes average NSM per ~FTE equivalent by position type by Faculty or VP. In this graph, only position types with greater than 1% of all FTE of the campus are included, to assist in simplifying the graph.

As with Graph 2, this summary graph clearly illustrates that space allocations per desk range considerably in size across the 13 position types included. The range in this graph is approximately >2.0 nsm to >13.0 nsm per ~FTE, with significant variances within position types across the Faculties. For example, DDA space allocations vary from ~<4.0 nsm to >10.0 nsm per ~FTE. Some of this range reflects the difference between a small open office type desk and a private enclosed office. However, like with Graph 1, these figures are averages per ~FTE and it is surprising that there is as much range as there is, illustrating a general lack of equity in office assignments.

A careful review of the more detailed Tables identifies where these disparities lie on a Faculty and Department level.

Note: definitions of abbreviations are included in the introduction section of this appendix.



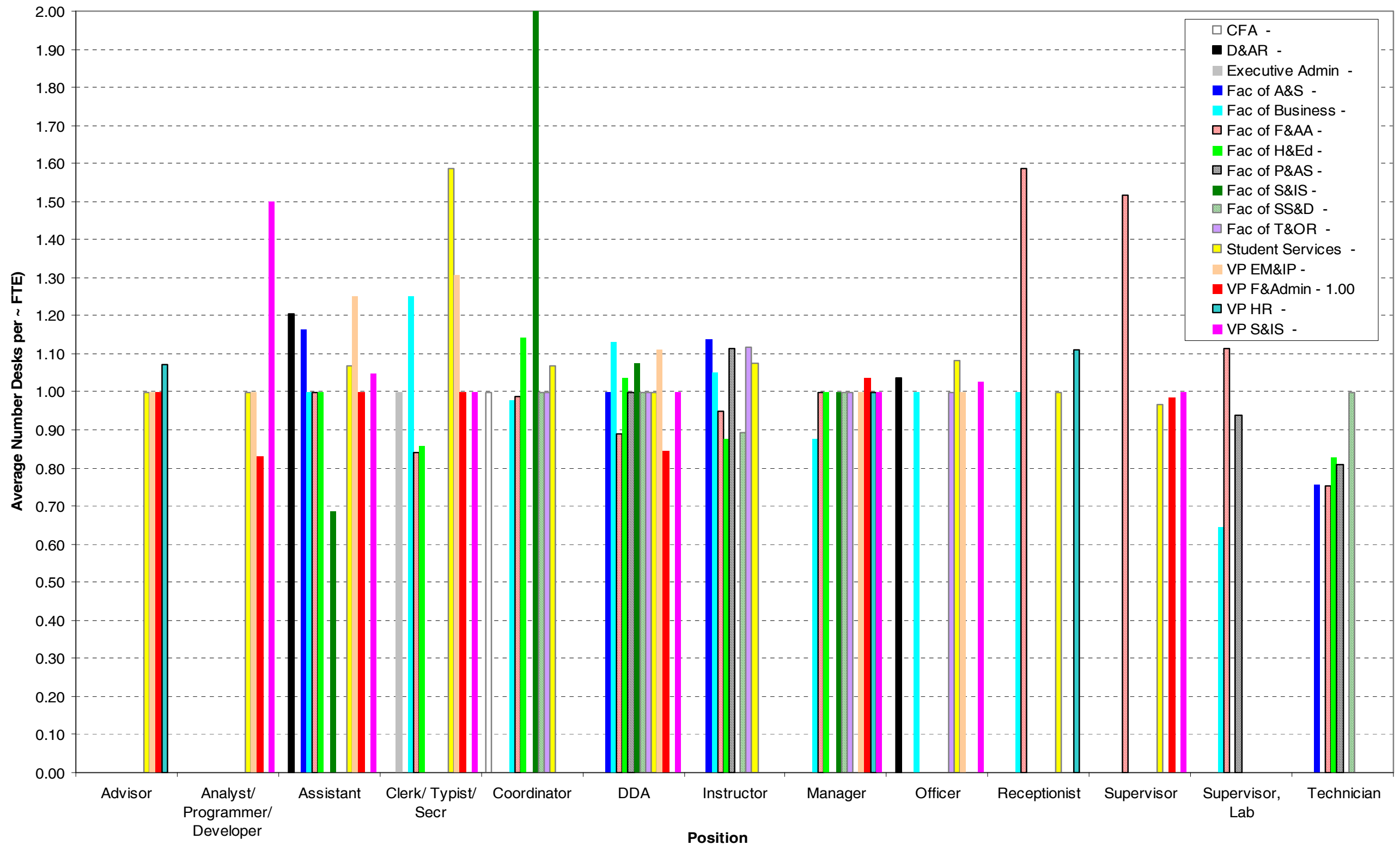
GRAPH 4: Average Number Desks per ~FTE Equivalent by Position Type by Faculty/VP

Graph 4 summarizes average number of desks per ~FTE equivalent by position type by Faculty or VP. As with Graph 3, in this graph, only position types with greater than 1% of all FTE of the campus are included, to assist in simplifying the graph.

This summary graph clearly illustrates that desk numbers of desks per ~FTE is typically close to 1. This ratio would be expected for position categories where people are mostly full time, but would not generally be expected where there are a range of part time people. The latter case is typical for many positions at Capilano University, indicating a very high ratio of sharing desks. This is particularly the case for Technicians in general and for various other position types within selected Faculties. A careful review of the more detailed Tables identifies where these disparities lie on a Faculty and Department level.

The graph also illustrates several anomalous ratios where there appear to be more than 1 desk per FTE on average. In these cases, a desk is typically assigned to an individual who is not full time, and the desk is not shared, resulting in an apparent higher figure.

Note: definitions of abbreviations are included in the introduction section of this appendix.



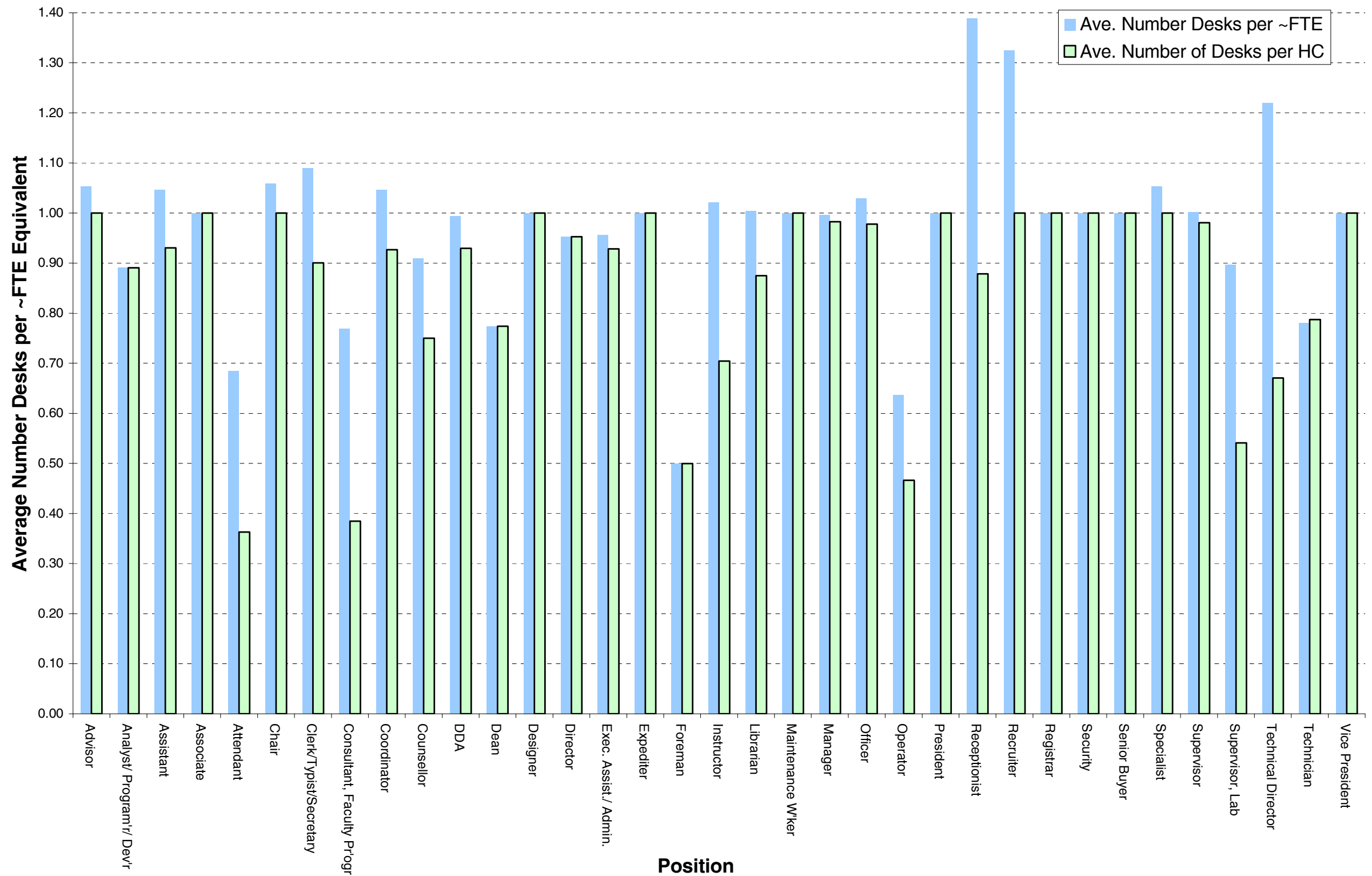
GRAPH 5: Average Number Desks per ~FTE Equivalent and per Headcount (HC) by Position Type

Graph 5 summarizes average number of desks per ~FTE equivalent and per Headcount by position type. As with Graph 2, all position types are included.

As would be expected, this summary graph clearly illustrates that desk allocations per ~HC are generally lower than for ~FTE, which again illustrates a high level of sharing. A careful review of the more detailed Tables identifies where these disparities lie on a Faculty and Department level.

As with Graph 3, the graph also illustrates several anomalous ratios where there appear to be more than 1 desk per FTE on average. In these cases, a desk is typically assigned to an individual who is not full time, and the desk is not shared, resulting in an apparent higher figure.

Note: definitions of abbreviations are included in the introduction section of this appendix.



**CONCLUSIONS AND
CONSIDERATIONS**

The office space utilization analysis indicates that there is considerable inequity in current office assignments and that there is a significant shortfall overall in office space. The latter issue can only be addressed by developing additional space (see short term mid-term, long term considerations below). In addition, there is a general shortfall of meeting rooms in most buildings.

Office Space Committee

Before undertaking any significant changes, several considerations and processes should first be considered to ensure that any changes are thoughtful and in the best interests of Capilano University and its employees. These may include establishing a Office Space Committee, possibly comprised of members of the Executive Group and Faculty/Instructors. Properly instructed and working under a clear mandate and protocol, some of the optional mandates for this Committee include:

1. to clearly define principles and criteria for office space allocation for enclosed, shared, open office areas, private and shared desks, etc. and what additional supports to space reassignment processes and campus communications need to be put in place.
2. clearly define design and assignments criteria for any additional office space that becomes available as a result of implementing other conclusions and considerations of this study.
3. allocation and re-purposing of space using a well defined, transparent and respected process.
4. undertaking a workplace development process where office and office support facilities design and management is based on evaluation of functional requirements, service delivery models and the associated work processes, workstyles, user needs and technological enablers.

Short Term

Several short term considerations are summarized below.

1. Cedar Building CE300C: CE300C is currently underutilized and consideration should be made for repurposing to:
 - increased staff density (3 to 6 people),
 - informal student learning space,
 - small meeting rooms (2),
 - Combination of the above (e.g. small meeting room plus open office area for 2 staff.
2. Administrative Support: to relieve very significant congestion and spatial organization issues in the Birch Building, it is suggested that CU remove one classroom (e.g. BR424) and one to two of the nine ABE/Career Access classrooms (e.g. BR321-324, 342, 343, 377, 381, 382) from the teaching space inventory (see Section 4: Conclusions and Considerations - Component Re-location Options Summary).

This conclusion was developed in Section 3, repeated herein for reference. For additional information, see Section 4: Conclusions and Considerations - Component Re-location Options Summary - Other Possible Relocation Concepts Outside the Scope of this Document.

*This conclusion was developed in Section 3,
repeated herein for reference.*

3. ABT Computer Lab: the analysis indicates that one of the three ABT Computer labs in the Fir Building (e.g. FR210) is not required. In addition, walkthrough observations indicated that the six adjacent office/storage spaces FR 215D through FR213A are either not used or are underutilized. Consider reassigning these areas to one or more of the following:
 - office suite for faculty/ instructors and/or small Music practice studios,
 - informal student learning,
 - additional Theatre rehearsal or studio space,
 - general classrooms displaced by other initiatives.

Mid-Term

Several mid-term considerations are summarized below.

*This conclusion was developed in Section 3,
repeated herein for reference.*

4. Cedar Building CE344: consider reassigning this classroom to:
 - faculty/instructor offices and/or,
 - informal learning facility and/or,
 - faculty/ instructor support centre for the building or campus as a whole (e.g. comprised of seminar/ meeting rooms, resources and perhaps a complement of staff).
5. Film Centre: occupation of the new Film Centre will free up a considerable amount of office and classroom space for repurposing. In addition to the considerations identified in Section 3, some of this freed up space should be reassigned to office space to help deal with both inequity and shortfalls. However, before repurposing this space, it is suggested that CU undertake a thorough review of office space purpose, employee work practices and space allocations, possibly through the suggested Office Space Committee. This review should consider alternatives to current office space designs which are predominantly enclosed and inflexible.
6. Faculty/ Instructor Offices: reassign several classrooms in buildings with concentration of faculty/ instructor offices, to accommodate additional faculty/ instructor offices and/or related amenity or teaching development resource areas. As these areas may best lend themselves to a mix of open area and enclosed office arrangements and so a change from the current model, this initiative would require a process of faculty/ instructor and staff engagement and a thorough review of furniture and equipment options.

*This conclusion was developed in Section 3,
repeated herein for reference.*

SECTION 3. CLASSROOMS, TEACHING LABS & STUDIOS UTILIZATION AND SECTION HOUR ANALYSIS

INTRODUCTION

This section includes summary teaching space utilization and section hour analysis information for general classrooms and specialized teaching labs & studios for the North Vancouver campus of Capilano University, developed during the summer of 2010.

For reference, space utilization and section hour analysis are defined as follows for the purposes of this document:

- **Utilization Analysis:** analyzes existing room use in terms of time (average hours per week used) and/or seats (average number of occupied seats within the room). This analysis can be used to identify room capacities and types that are experiencing scheduling pressure or are underutilized.
- **Section Hour Analysis:** analyzes current course workloads (section hours, hours per week, room types required) to assess the theoretical number of required rooms by seat capacities and room types. This analysis can be compared with existing space inventory to identify shortfalls or surpluses and opportunities for improving the "fit" between resources and requirements.

See Appendix C for detailed information.

Summary graphs in this section include:

EXISTING INVENTORY

Graph 1: Existing and New Film Centre Classrooms Space Inventory, Summarized by Seat Capacity (excluding P-Bldg)

Graph 2: Existing and New Film Centre Teaching Labs & Studios Space Inventory, Summarized by Seat Capacity (excluding P-Bldg)

UTILIZATION

Graph 3: Overall Classrooms Utilization by General Activity Type

Graph 4: Classroom Time Utilization Summary

Graph 5: Classroom Time Utilization Summary by Room Capacity

Graph 6: Classroom Seat Utilization Summary

Graph 7: Classroom Seat Utilization Summary by Room Capacity

Graph 8: Teaching Labs & Studios Time Utilization Summary by General Room Type

Graph 9: Teaching Labs & Studios Seat Utilization Summary by General Room Type

SECTION HOUR ANALYSIS AND ROOM REQUIREMENTS

Graph 10: Classroom Requirements INCLUDING School of MPA/Film Centre Workload and Space Inventory

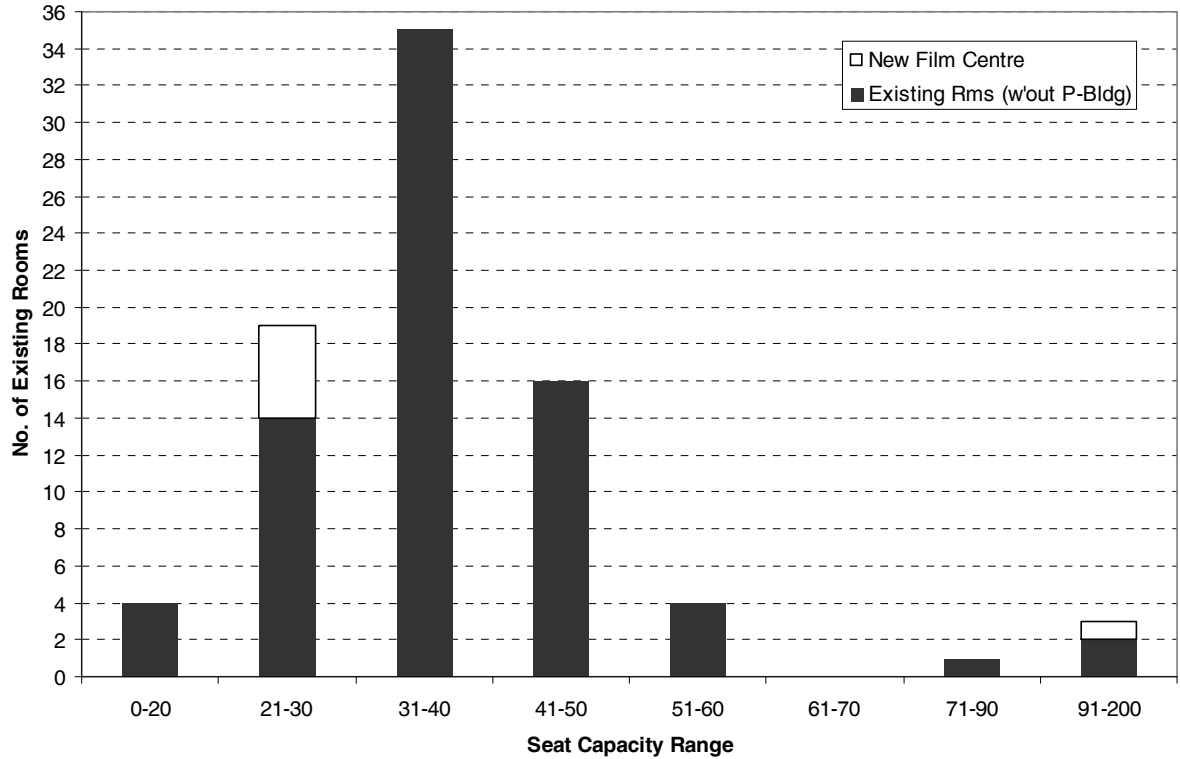
Graph 11: Classroom Requirements EXCLUDING School of MPA/Film Centre Workload and Space Inventory

Table 1: Teaching Labs & Studios Requirements (excluding SCHLMPA/ Film Centre Workload and Space Inventory)

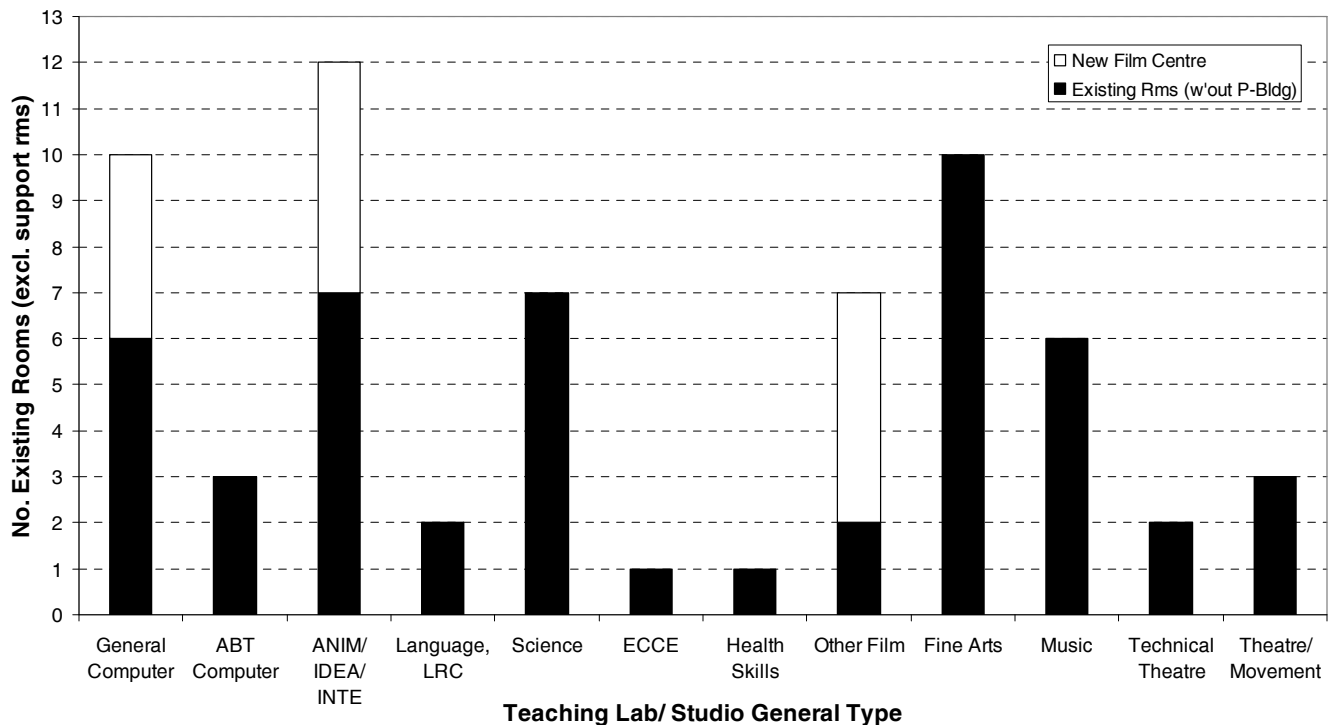
Note: the new Film Centre Main Stage is divisible into 3 separate studios and so there can be 1 to 3 concurrent sections occurring). Collectively, these rooms support a diverse range of regular, continuing education and ad hoc programs and services

As summarized in the following graphs, there are currently 76 general classrooms plus 50 specialized teaching labs & studios (excluding 9 classrooms and 1 studio located in the P-Building which will be demolished). The new Film Centre will add 6 general classrooms and 14 dedicated classrooms and specialized teaching labs & studios.

Graph 1: Existing and New Film Centre Classrooms, Summarized by Seat Capacity (excl. P-Bldg)



Graph 2: Existing and New Film Centre Teaching Labs & Studios, Summarized by Seat Capacity (excl. P-Bldg)



Data Sources

The teaching space utilization and section hour analysis is based on several information sources provided by CU between May and July 2010, including: floorplans, space inventories, room use and course workload information, as well as walkthroughs of all buildings. In particular, room use and course workload information was provided by CU Enrolment Services, Scheduling Office. In addition, RPG met with the CU Scheduling Office to review methods, data and results to ensure general compliance with accepted norms and that the analysis and results would be as useful as practical.

Seat counts of existing inventory for the utilization analysis were derived from three sources, as follows:

- Most cases, RPG lab/studio seat capacity counts used based on May 2010 walkthrough as this approach provided the most current information and best reflected the actual number of seats in the rooms.
- Some cases, CU Scheduling Office seat capacity counts were utilized as they were the same as the RPG walkthrough
- Some cases, FIS theoretical seat capacity counts were utilized where the capacity could not be determined by a literal counting of seats but is rather a function of the room size and function (e.g. Movement Studio).

It should be noted that the room utilization analysis and course workload information for the section hour analysis were based on "snapshots" of information for the peak week of each term over the 2009/10 period. Peak weeks were assumed to be the weeks having the most total instructional time. Peak weeks were as follows:

- Spring Term: Jan 31-Feb 6, 2010
- Summer Term: May 31 - June 6, 2009
- Fall Term: Sept 13 - 20, 2009.

Assumptions

Key assumptions for the utilization and section hour analyses are summarized below:

- CU 3 hour timetable grid standard, daytime blocks

	Mon	Tues	Wed	Thurs	Fri
8:30	A	B	A	E	B
9:00					
9:30					
10:00	C	D	C	F	D
10:30					
11:00					
11:30	E	CCFA Meeting Block	K	Meetings & 4 th Hr Activities ¹	K
12:00					
12:30					
13:00	F	G	L	G	L
13:30					
14:00					
14:30	I	H	I	H	
15:00					
15:30					
16:00	J	M	J	M	
16:30					
17:00					
17:30					

- Schedulable Week
 - Monday to Friday workload only (weekends not included)
 - Smooth Timetabling: for the section hour analysis, smooth timetabling is assumed where by all available hours in the week are viewed equally and equally utilized.
 - Scenario 1, Daytime: 39 hour week (8:30am to 5:30 pm, Monday to Thursday, 8:30 am to 2:30 pm Friday; excluding 11:30 am to 1:00 pm on Tuesday and Thursday). See CU 3 hr timetable grid standard above.
 - Scenario 2, Daytime + 15 Hr Evenings: 54 hour week (8:30am to 8:30 pm, Monday to Thursday and 8:30 am to 5:30 pm on Friday; excluding 11:30 am to 1:00 pm on Tuesday and Thursday).
- Section Hour Analysis Time Utilization: 80% for classrooms daytime, 60% for classrooms evenings, 65% for teaching labs & studios.
- Section Hour Analysis Seat Utilization: 80% for classrooms, teaching labs & studios.
- Film Centre: two section hour analysis scenarios have been employed for the Film Centre:
 - Scenario 1, Status Quo: assumes that general classrooms located within the new Film Centre will be dedicated to SCHLMPA programs, as is currently the case, primarily as

¹ In special circumstance, programs may schedule classes in this block.

SCHLMPA sections often result in noise and disruption and as a result, efforts have historically been made to "isolate" these sections from most other programs. It should be noted that this scenario results in poorer utilization of resources and less equitable access to classrooms across the campus.

- Scenario 2, Alternative: inclusion of all SCHLMPA general classrooms workload and all general classrooms located within the new Film Centre will be part of the common workload and classrooms pools. This scenario results in improved classrooms utilization and better/ more equitable access to classrooms across the campus.

SPACE UTILIZATION ANALYSIS

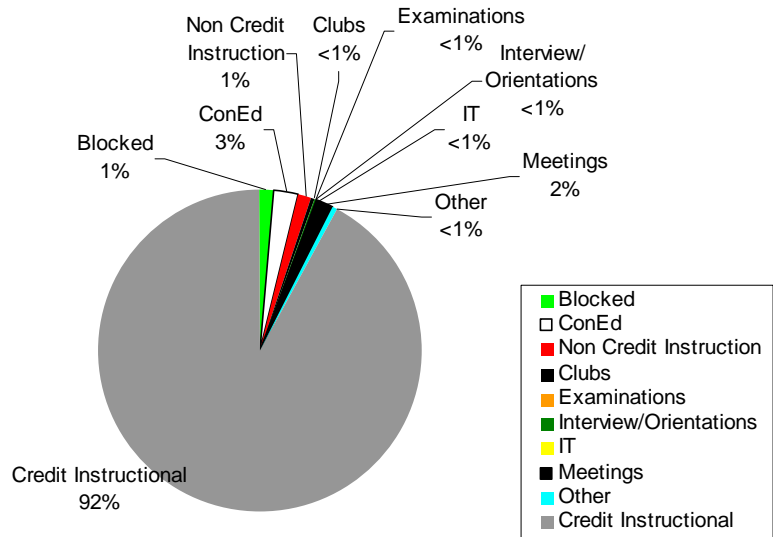
The following graphs and narrative summarize the detailed utilization information documented in Appendix C.

Graph 3: Overall Classrooms Utilization by General Activity Type

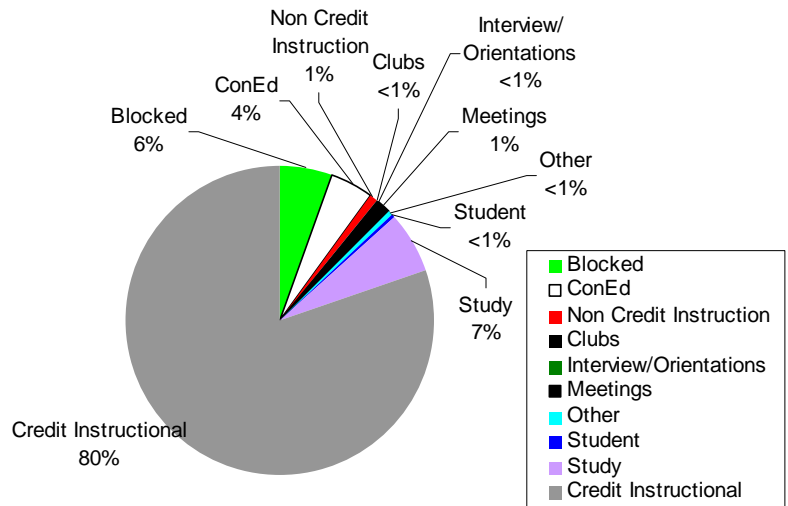
These graphs summarize instructional time by major activity group for all classrooms. In all cases, Instructional time dominates excepting in the Summer term when IT use of classrooms for equipment staging becomes a significant user.

Fall

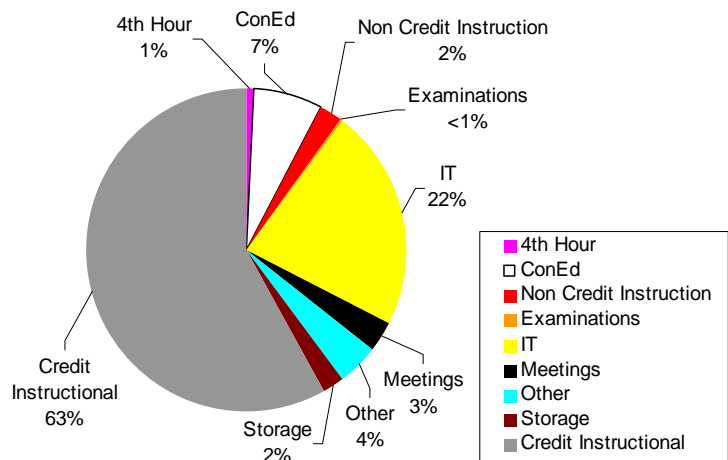
Activity groups information was provided by CU Enrolment Services



Spring Term



Summer Term

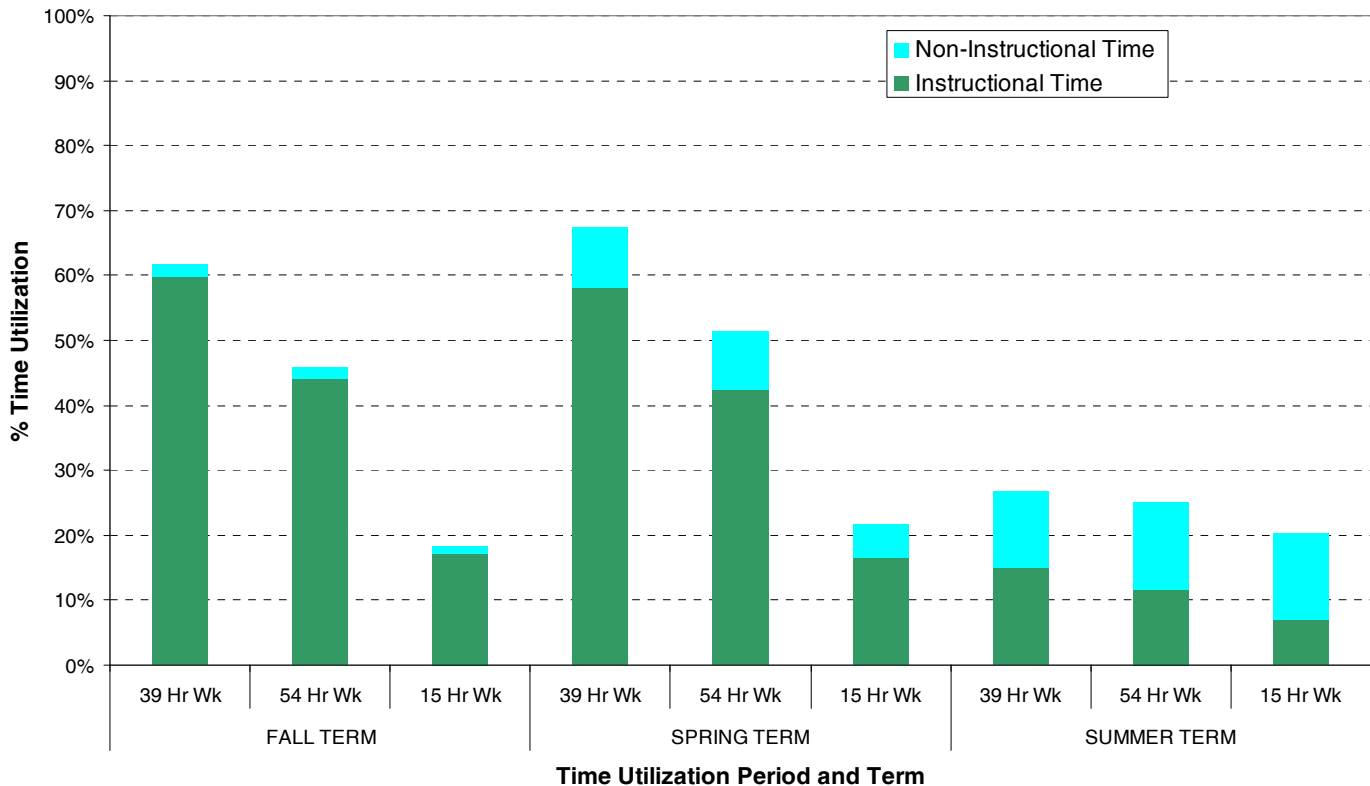


Graph 4: Classroom Time Utilization Summary

For each term, time utilization information is indicated for three periods as defined previously: 39 hour weekday daytime week, 15 hour weekday evening time week and 54 hour combined week. Scheduled instructional plus other non-instructional sections are included. Details are included in Appendix C.

The following graph summarizes average classrooms time utilization for the campus as a whole for each of the 3 terms, and the three periods as defined previously: Key observations:

- Time utilization is highest during the 39 hour daytime week in all 3 terms and lowest in the 15 hour evening period in all 3 terms, with the 54 hour week reflecting both time periods.
- Spring term has the highest time utilization for all 3 periods, with the Fall term slightly less and Summer term very much less.
- Non-instructional time utilization is very minor in the Fall, significant in the Spring and the primary item in the Summer
- A typical daytime target time utilization rate for classrooms is 80% in many institutions - CU Classrooms fall below that in all terms, indicating unutilized time capacity. Though standards are not available for evening time, a reasonable evening time target time utilization for classrooms is 50% to 65% - CU Classrooms fall below that in all terms.
- There is considerable excess capacity in the 15 hour evening period in all 3 terms.



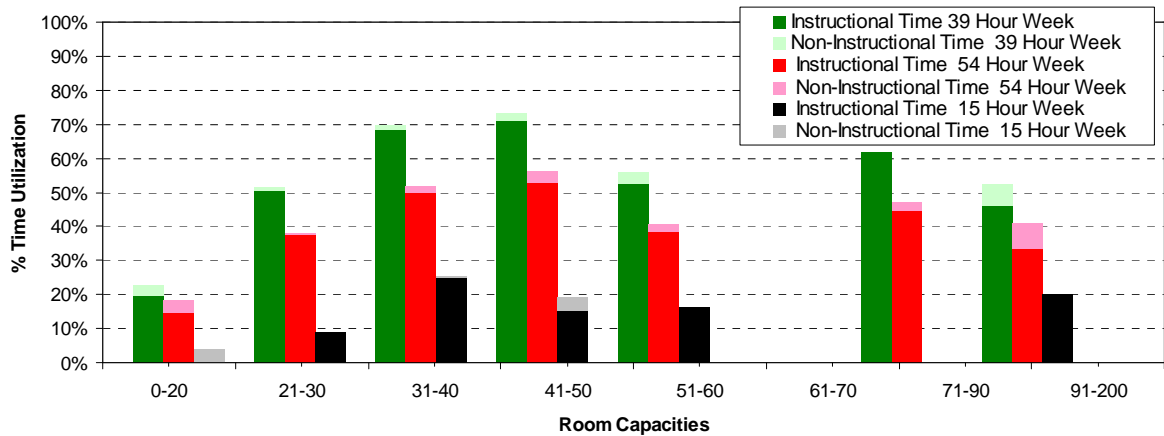
Graph 5: Classroom Time Utilization Summary by Room Capacity

For each term, time utilization information is indicated for three periods as defined previously: 39 hour weekday daytime week, 15 hour weekday evening time and 54 hour combined. Scheduled instructional plus other non-instructional sections are included. Details are included in Appendix C.

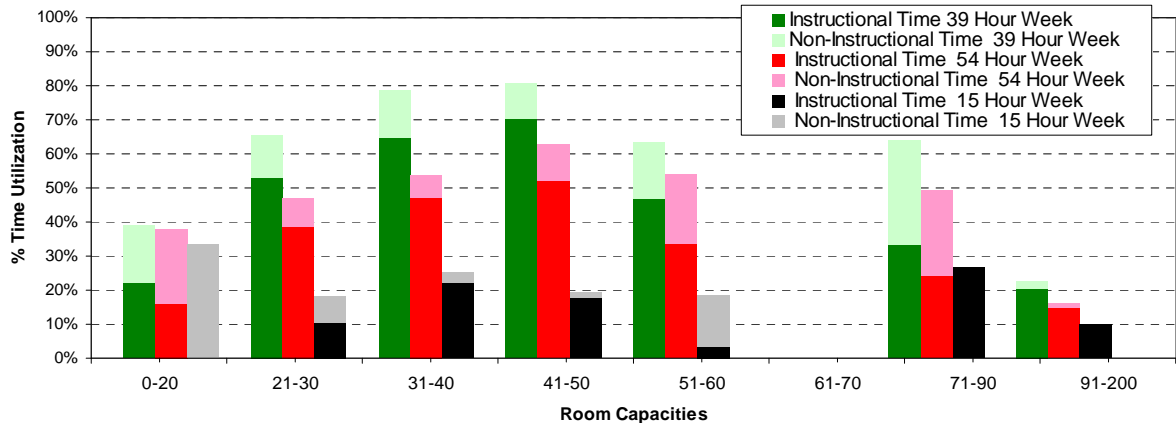
The following graphs summarize average classroom time utilization by room capacity for each of the 3 terms, for the campus as a whole, for the 3 periods defined previously. Key observations:

- All three terms experience a similar time utilization curve with highest time utilization in the mid-sized classrooms (31-60 seats) and lowest utilization at the rooms with smallest (0-20 seats) and largest (91-200 seats) room capacities.
- Spring term has the highest utilization, with the Fall term slightly less and Summer term very much less
- Non-instructional time utilization is very minor in the Fall, significant in the Spring and the primary item in the Summer.

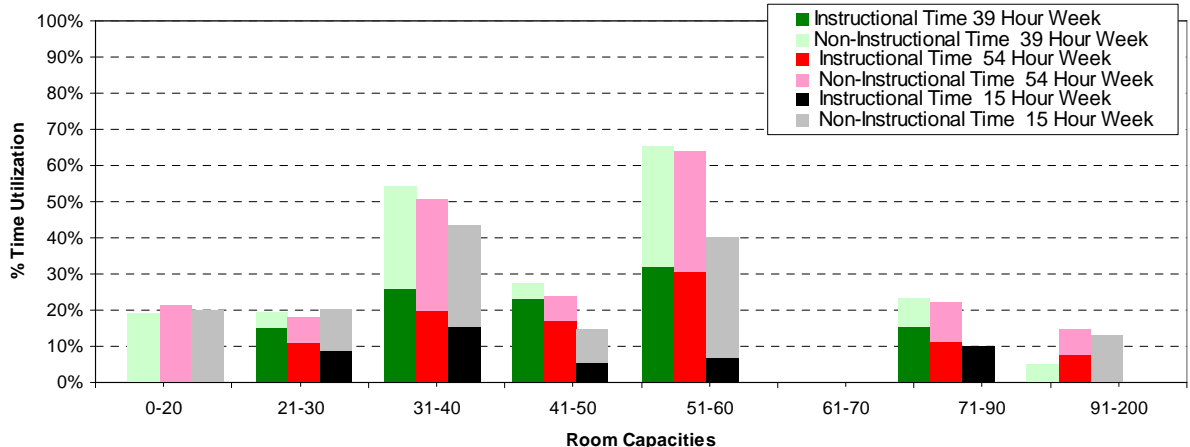
Fall Term



Spring Term



Summer Term



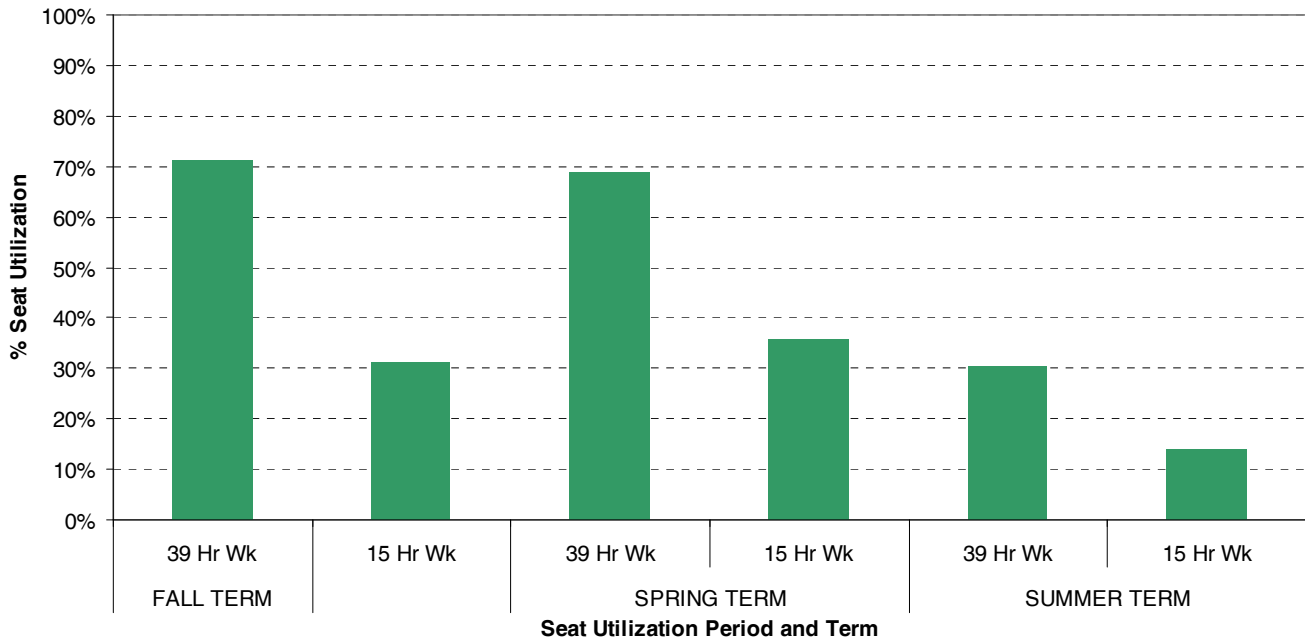
Graph 6: Classroom Seat Utilization Summary

For each term, seat utilization information is indicated for the daytime and evening periods as defined previously: 39 hour weekday daytime week, 15 hour weekday evening time week. Details are included in Appendix C.

For seat utilization, % figures refer only to the rooms actually in use for each period.

The following graph summarizes average classrooms seat utilization for the campus as a whole for each of the 3 terms, and the two periods as defined previously: Key observations

- Seat utilization is highest during the 39 hour daytime week in all 3 terms and lowest in the 15 hour evening period in all 3 terms.
- Fall term has the highest seat utilization for the 39 hour daytime week, with the Spring term slightly less and Summer term very much less.
- A typical daytime target seat utilization rate for classrooms is 80% in many institutions - CU Classrooms fall below that in all terms in both time periods, indicating unutilized seat capacity.
- There is considerable excess capacity in the 15 hour evening period in all 3 terms.



Graph 7: Classroom Seat Utilization Summary by Room Capacity

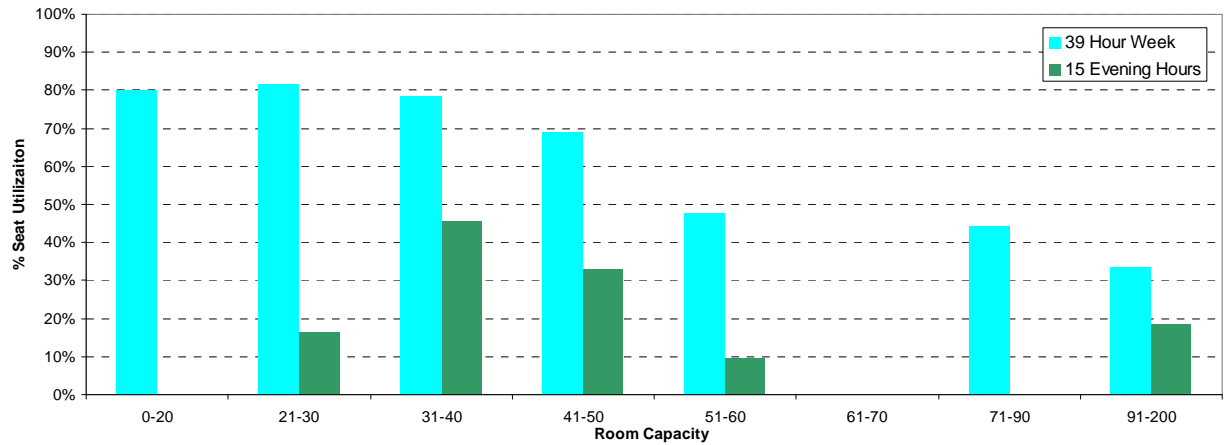
For each term, seat utilization information is indicated for the daytime and evening periods as defined previously: 39 hour weekday daytime week, 15 hour weekday evening time week. Details are included in Appendix C.

For seat utilization, % figures refer only to the rooms actually in use for each period.

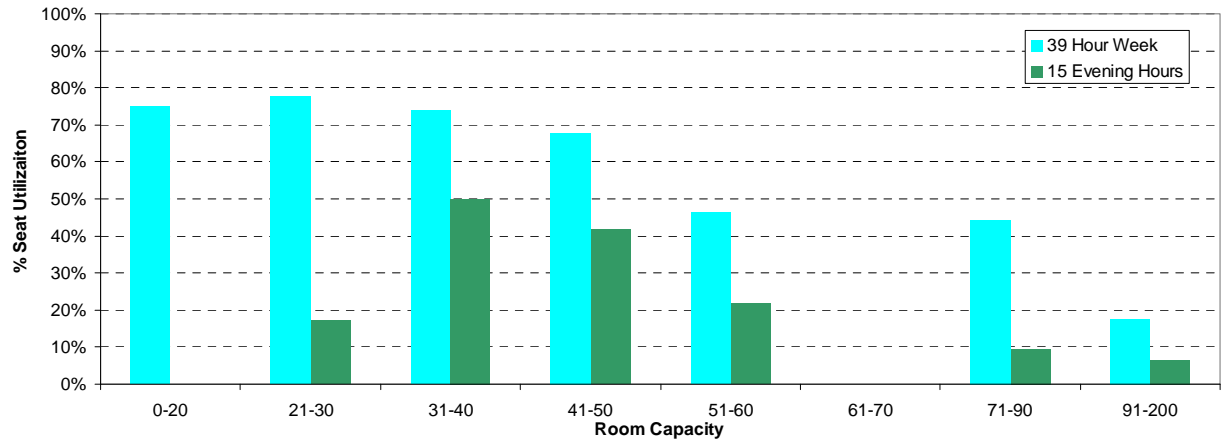
The following graphs summarize average classroom seat utilization by room capacity for each of the 3 terms, for the campus as a whole, and the two periods defined previously. Key observations:

- All three terms generally experience a similar seat utilization curve with highest utilization in the rooms with the smallest capacities and lowest utilization in rooms with the largest capacities.
- All three terms have similar seat utilization in the seat capacity ranges in which sections are scheduled. It is notable that Summer term has the highest evening time seat utilization in the larger 71-90 seat capacity range.

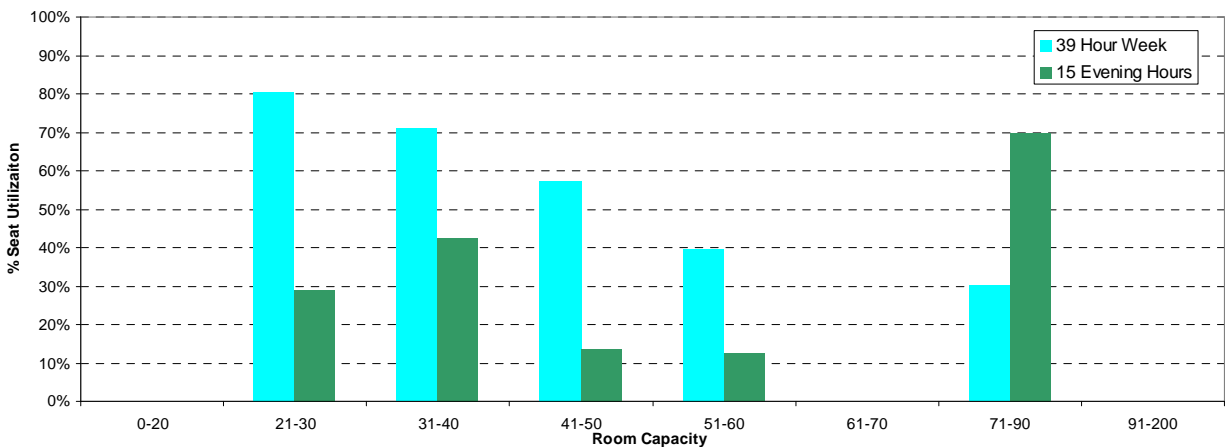
Fall Term



Spring Term



Summer Term



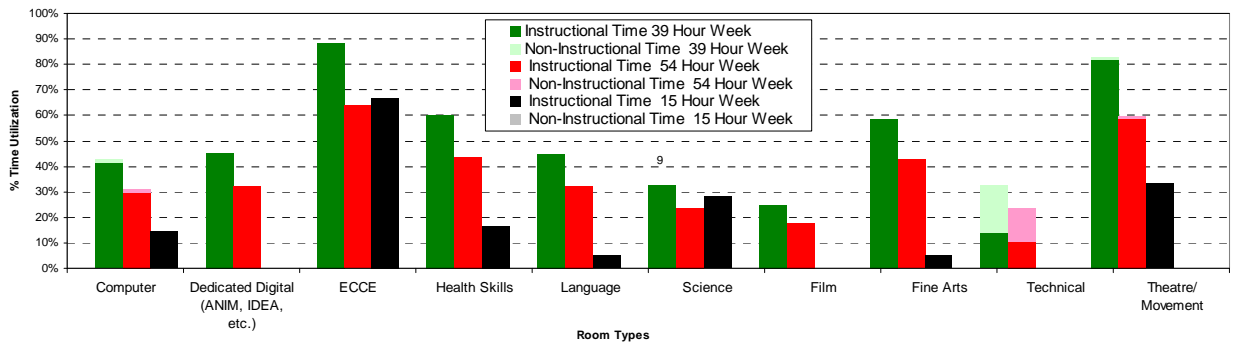
Graph 8: Teaching Labs & Studios Time Utilization Summary by General Room Type

For each term, time utilization information is indicated for three periods as defined previously: 39 hour weekday daytime week, 15 hour weekday evening time and 54 hour combined. Scheduled instructional plus other non-instructional sections are included. Details are included in Appendix C.

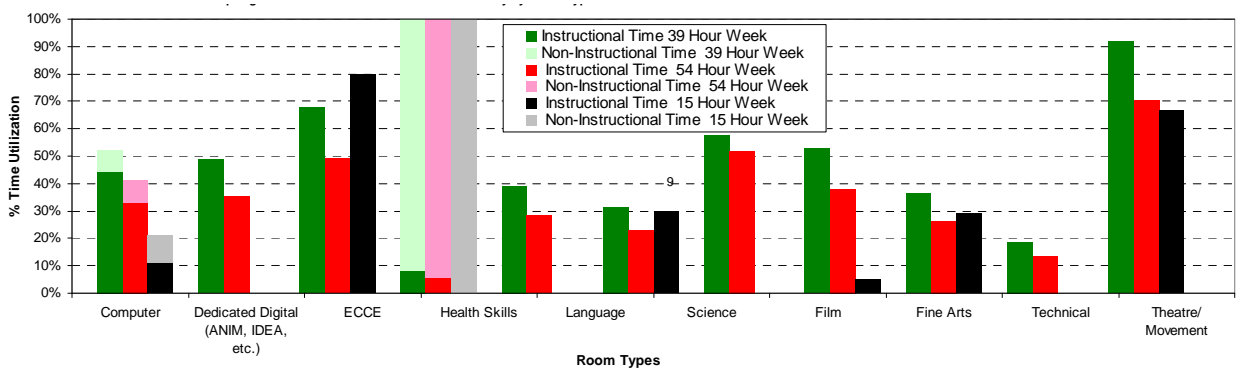
The following graphs summarize average teaching labs & studios time utilization by general room type, for each of the 3 terms, for the campus as a whole, for the 3 periods defined previously. Key observations:

- The three terms experience different time utilizations for the general room types, with Summer term having the lowest time utilization.
- Non-instructional time utilization is generally very minor, excepting for the Spring term Health Skills general room type where these rooms are primarily booked for non-instructional time (100% utilization suggest they are block booked).
- There appears to be considerable underutilized scheduled capacity in several general room types. In some cases, this low utilization is partially or wholly offset by required lab setup time by technicians/instructors, project/lab completion and practice/rehearsal time by students. However, as a 65% time utilization rate is considered capable of accommodating most or all of these activities in some cases, there appears to be underutilized capacity in some general room types. It should be noted that the Dedicated Digital type (e.g. ANIM, IDEA, etc.) are assigned to student cohorts and are fully utilized for unscheduled student work.

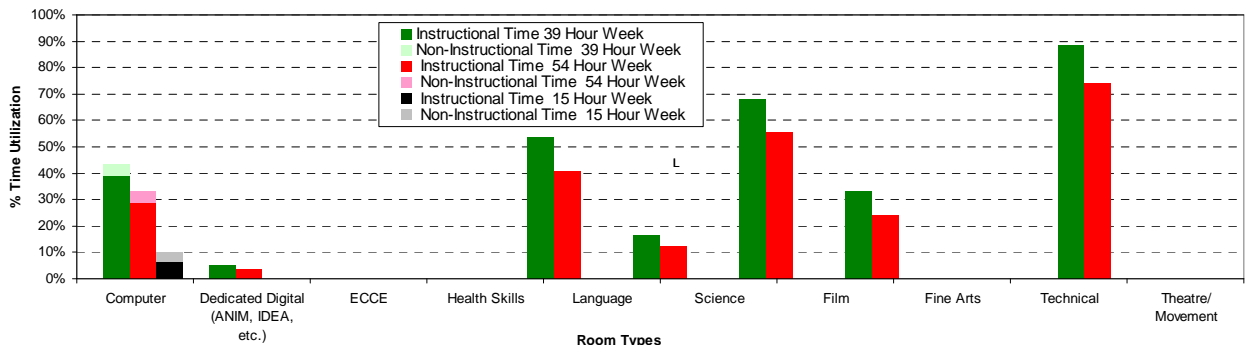
Fall Term



Spring Term



Summer Term



Graph 9: Teaching Labs & Studios Seat Utilization Summary by General Room Type

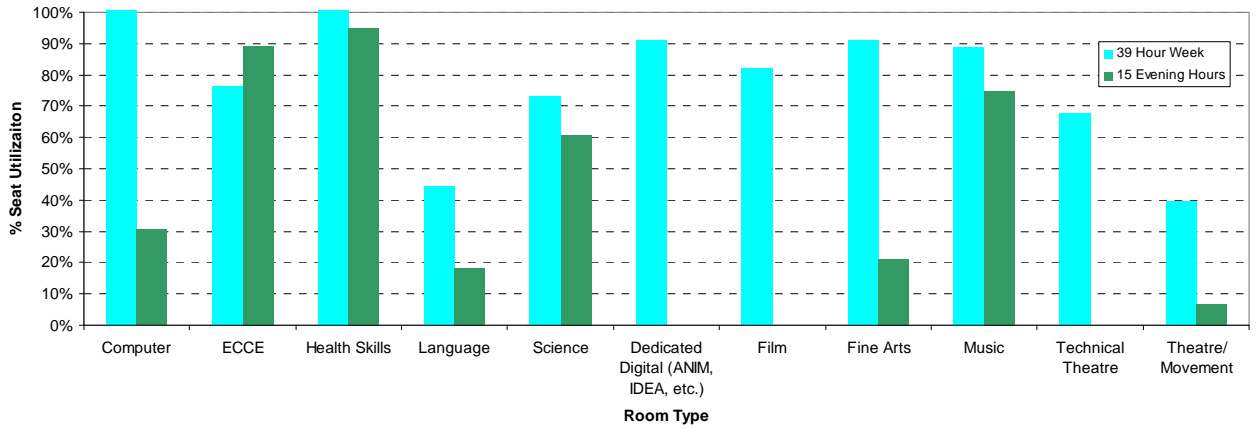
For each term, seat utilization information is indicated for the daytime and evening periods as defined previously: 39 hour weekday daytime week, 15 hour weekday evening time week. Details are included in Appendix C.

For seat utilization, % figures refer only to the rooms actually in use for each period.

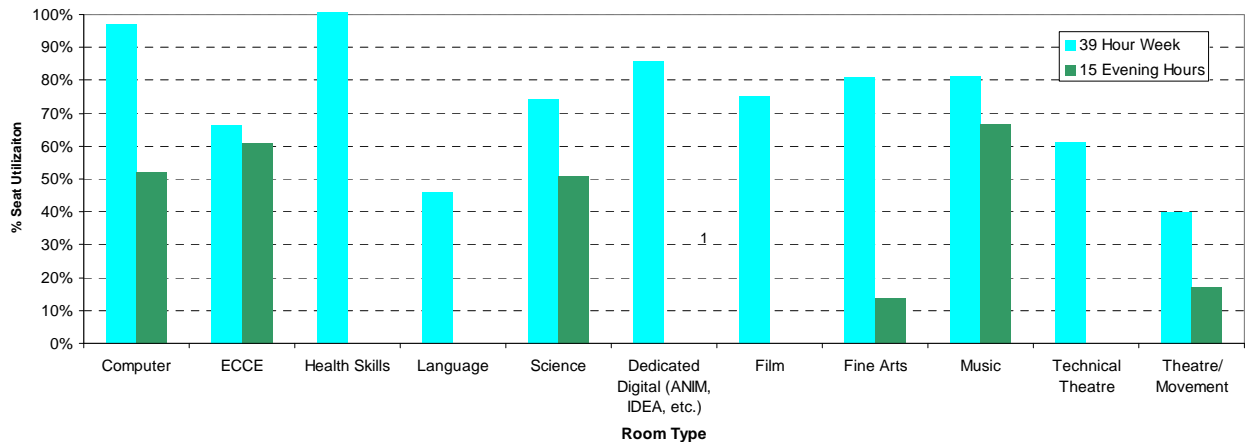
The following graphs summarize average teaching labs & studios seat utilization by general type for each of the 3 terms, for the campus as a whole, and the two periods defined previously. Key observations:

- The three terms experience different seat utilizations for the general room types, with Summer term having the lowest seat utilization.
- In some general room types, seat utilization equals or exceeds the typical target figure of 80% indicating full capacity or congestion (e.g. Computer, Health Skills, Dedicated Digital, Fine Arts, Music). In other types, seat utilization appears to be below or well below capacity (e.g. Language, Theatre/ Movement).

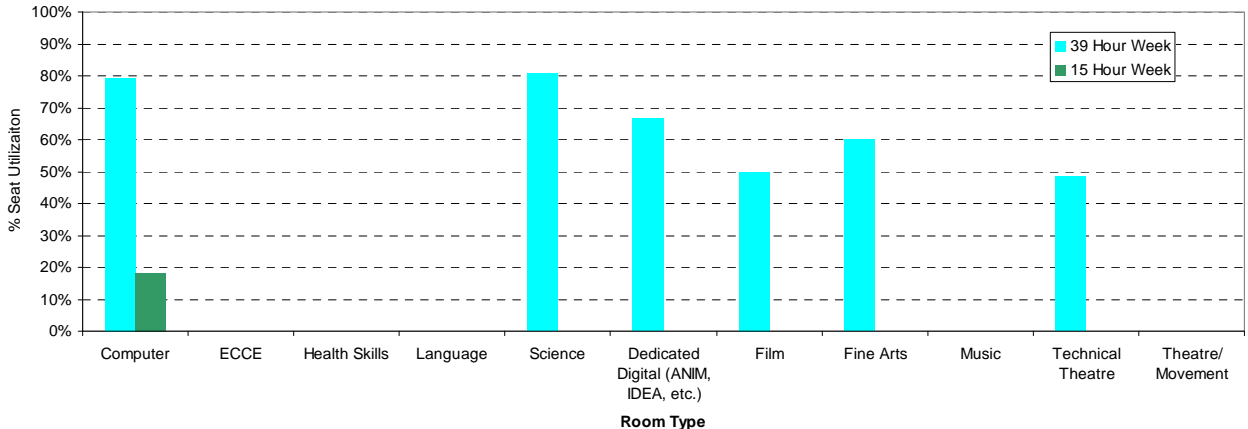
Fall Term



Spring Term



Summer Term



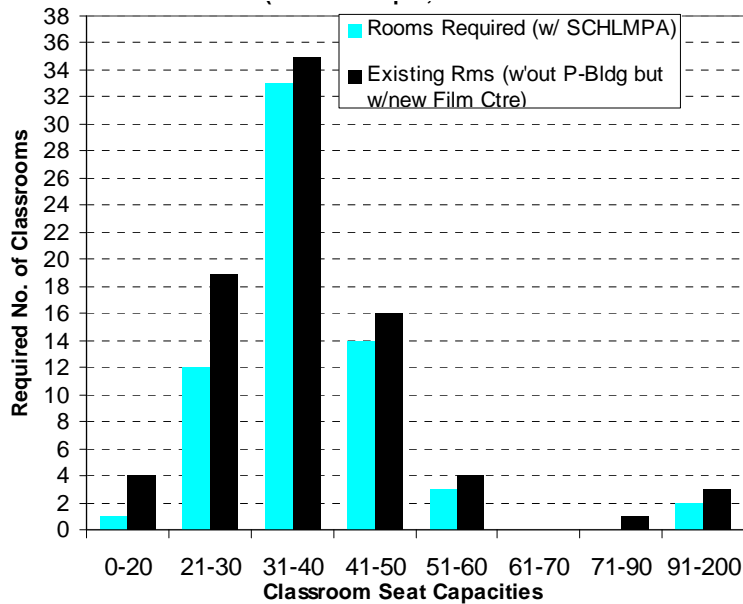
SECTION HOUR ANALYSIS

Graph 10: Classroom Requirements INCLUDING School of MPA/Film Centre Workload and Space Inventory

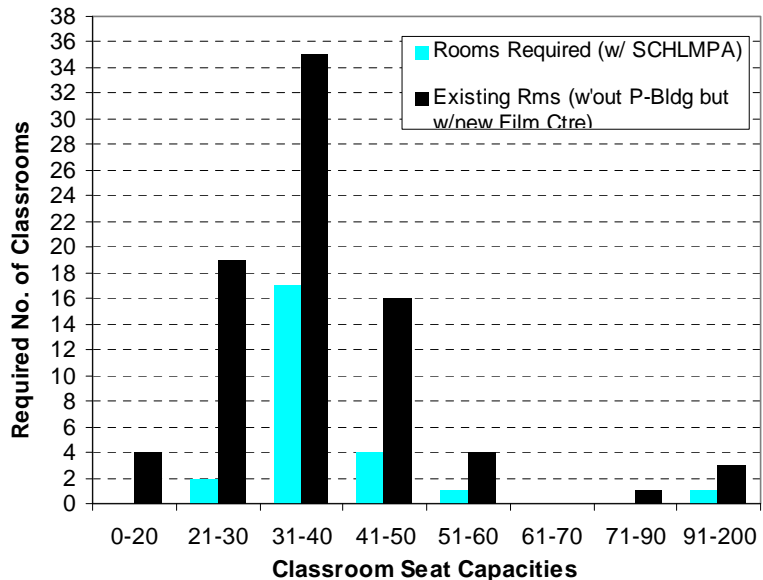
The following graphs summarize theoretical classroom requirements for the Fall term, based on a section hour analysis of peak week workload for the Fall 2009 period and utilization rates defined previously. Existing inventory is illustrated for comparison. In particular, these graphs INCLUDE School of MPA/Film Centre workload and new Film Centre space Inventory. See Appendix C for more detailed information.

The graphs illustrate that CU has a theoretical surplus of classrooms in all seat capacity ranges, with a total theoretical surplus of 17 rooms during the 39 hour week daytime period and 57 rooms during the 15 evening hour period.

**Fall Term,
39 Hour Week,
80% Utilization
(incl. SCHLMPA & new Film Ctre)**



**Fall Term,
15 Evening Hours
60% Utilization
(incl. SCHLMPA & new Film Ctre)**

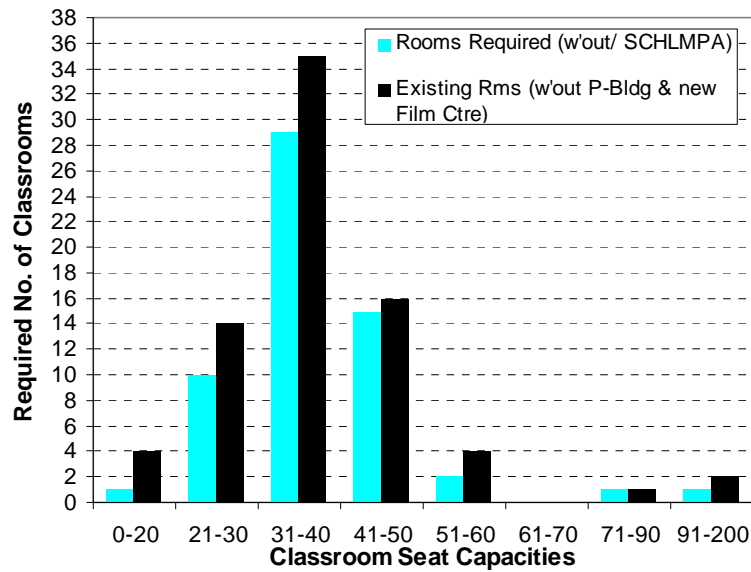


**Graph 11: Classroom
Requirements, EXCLUDING School
of MPA/Film Centre Workload and
Space Inventory**

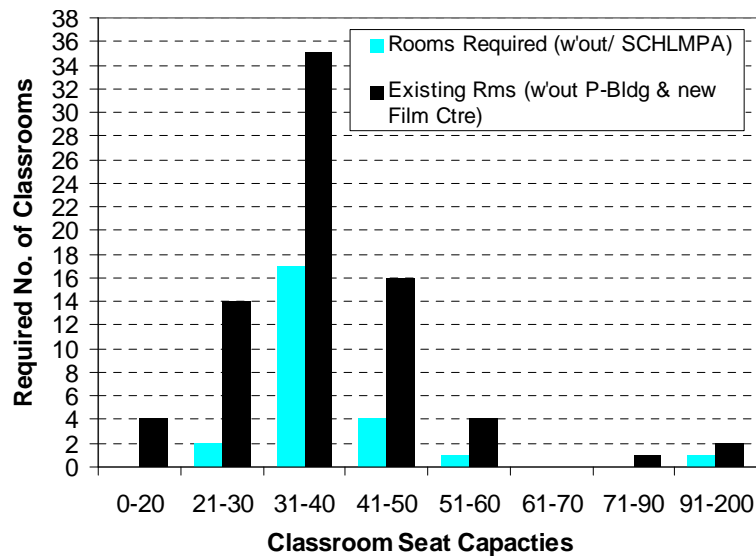
As with the previous graphs, the following graphs summarize theoretical classroom requirements for the Fall term, based on a section hour analysis of peak week workload for the Fall 2009 period as defined previously. Existing inventory is illustrated for comparison. However, in this case, these graphs EXCLUDE School of MPA/Film Centre workload and new Film Centre space Inventory. See Appendix C for more detailed information.

The graphs illustrate that CU has a theoretical surplus of classrooms in all seat capacity ranges, with a total theoretical surplus of 17 rooms during the 39 hour week daytime period and 51 rooms during the 15 evening hour period.

**Fall Term,
39 Hour Week,
80% Utilization
(excl. SCHLMPA & new Film Ctre)**



**Fall Term,
15 Evening Hours
60% Utilization
(excl. SCHLMPA & new Film Ctre)**



**Table 1: Teaching Labs & Studios
Requirements (EXCLUDING
SCHLMPA/ Film Centre Workload
and Space Inventory)**

The table on the following page, repeated in Appendix C with additional comments, summarizes theoretical specialized teaching lab & studio requirements for the Fall term, based on a section hour analysis of peak week workload for the Fall 2009 period as defined previously. A section hour analysis of SCHLMPA/Film Centre requirements was not undertaken. In general, the analysis indicates that there are currently 50 specialized rooms (excluding P-Bldg) and that 49 rooms are required. Variations between existing and theoretical required include:

- 1 x 1st/2nd year Biology lab does not appear to be required (e.g. FR309)
- 1 x ABT Computer Lab does not appear to be required (e.g. FR210)
- 1 additional Theatre Studio or Rehearsal space is required (e.g. BR002)
- Though ECCE requires 2 rooms and only 1 room appears in the inventory, in fact the ECCE space includes 2 rooms and it is assumed that some scheduled activities take place in the Child Care Centre and so only 1 room is required.
- Very low utilization in computer labs CE223 and LB302 due in part to requirements for special software in CE223. Consider moving software to LB302 and repurposing CE223.
- Though Language Lab appears to require 2 rooms and only 1 room appears in the inventory, it is assumed that overflow can take place within the Language Resource Centre and so only 1 room is required.
- The very low apparent utilization of the Music Choir/Ensemble Rooms is in part an artefact as sections are split up into smaller groups and distributed through the rooms, resulting in additional utilization workload.

Room	Rm Type	Existing Seat Capacity	Max Required Seat Capacity	Total Fall Term Hrs/Wk	Theoretical No. Rms Required (39 hr wk, 65% utilization)	Actual (Rounded) No. Rms Required	No. Existing Rms	Existing Rm Required Y/N	Existing Seat Capacity minus Max Required Seat Capacity
LB 316	ANIM, 1st Yr Drafting	24	25	17.0	0.67	1	1	Y	-1
LB 317	ANIM, 2nd Yr Dig. Com.	24	22	4.0	0.16	1	1	Y	2
LB 319	ANIM, Dig. Com.	24	22	8.5	0.34	1	1	Y	2
LB 306	ANIM, Dig. Com. Computer	24	23	20.5	0.81	1	1	Y	1
FR 303	Biology, 1st Yr	24	23	15.0	0.59	1	1	Y	1
FR 301	Biology, 1st/ 2nd Yr	24	25	20.5	0.81	1	1	Y	-1
FR 309	Biology, 1st/ 2nd Yr	24	25	-	-	-	1	N	-1
FR 306	Chemistry, 1st Yr	20	21	31.2	1.00	1	1	Y	-1
FR 308	Chemistry, 1st Yr	20	21	1.3	0.28	1	1	Y	-1
FR 310	Chemistry, 2nd Yr	20	12	6.0	0.24	1	1	Y	8
CE 223	Computer, General	26	38	4.0	0.16	1	1	Y	-12
LB 302	Computer, General	35	38	16.5	0.65	1	1	Y	-3
FR 210	Computer, ABT	36	30	-	-	-	1	N	6
FR 212	Computer, ABT	36	36	31.2	0.45	1	1	Y	0
FR 215	Computer, ABT	36	36	30.8	1.00	1	1	Y	0
FR 213	Computer, Business	34	40	25.0	0.99	1	1	Y	-6
LB 190A	Computer, Film	17	31	15.0	0.59	1	1	Y	-14
MA 101	Costume Making	24	12	19.0	0.75	1	1	Y	12
AR 301	Drawing/ Painting	29	30	21.0	0.83	1	1	Y	-1
SA 103	Drawing/ Painting, 2nd yr	25	24	9.3	0.60	1	1	Y	1
SA 104	Drawing/ Painting, 2nd yr	30	28	31.2	1.00	1	1	Y	2
CE 141	ECCE	32	31	34.5	1.36	1	1	Y	1
P 110	Film	30	22	8.5	0.34	Film Ctre	Film Ctre	na	8
TV 101	Film, TV Studio	22	22	11.5	0.45	1	1	Y	0
FR 204	Health Skills/ Nursing	20	23	23.5	0.93	1	1	Y	-3
AR 310	IDEA 1st Yr Studio	28	30	28.0	1.10	1	1	Y	-2
AR 213	IDEA 2nd Yr Studio	32	29	20.0	0.79	1	1	Y	3
AR 305	IDEA 3rd Yr Studio	33	29	23.5	0.93	1	1	Y	4
AR 209	INTE Studio	26	26	22.0	0.87	1	1	Y	0
AR 120	Lang. Res. Ctre.	50	14	2.0	0.08	1	1	Y	36
BR 335	Language	27	23	33.0	1.30	1	1	Y	4
MA 103	Media Arts, Computer	12	25	5.5	0.22	1	1	Y	-13
FR 119	Music Therapy	20	19	23.0	0.91	1	1	Y	1
FR 106	Music, Choir/ Ensemble/ Band	14	10	-	0.37	1	1	Y	4
FR 109	Music, Choir/ Ensemble/ Band	16	10	-	0.37	1	1	Y	6
FR 113	Music, Choir/ Ensemble/ Band	52	57	28.5	0.37	1	1	Y	-5
FR 110	Music, Computer Keyboard	12	26	13.0	0.51	1	1	Y	-14
FR 103	Music, Keyboard	20	21	24.0	0.95	1	1	Y	-1
FR 302	Physics, 1st/ 2nd Yr	20	19	15.5	0.61	1	1	Y	1
SA 102	Printmaking	25	26	22.0	0.85	1	1	Y	-1
SA 101	Sculpture, Woodshop	13	28	22.0	0.87	1	1	Y	-15
MA 123	Sculpture, Ceramics	24	24	20.5	0.81	1	1	Y	0
SA 100	Sculpture, Clay/ Plaster	13	28	22.0	0.87	1	1	Y	-15
LB 217	Studio, Film Set Constr.	36	26	9.0	0.36	1	1	Y	10
AR 201	Textiles	23	20	9.3	0.60	1	1	Y	3
AR 206	Textiles	23	24	31.2	1.00	1	1	Y	-1
BR 107	Theatre Back Stage Tech./ Prod.	10	11	10.0	0.39	1	1	Y	-1
BR 002	Theatre Rehearsal	60	20	33.5	1.32	2	1	Y+1	40
AR 001	Theatre Studio	36-96	20	35.5	1.40	1	1	Y	16-76
HR 118	Theatre, Movement	30	21	26.5	1.05	1	1	Y	9
HR 112	Theatre, Tech. Th., Music Therapy, PMTI	29	9	1.0	0.04	1	1	Y	20
Totals				885.6	33.92	49	50	(excl new Film Centre)	

**CONCLUSIONS AND
CONSIDERATIONS**

Both the space utilization analysis and the section hour analysis indicate that CU has a theoretical surplus capacity in its pool of general classrooms and in some specialized teaching labs & studio room types. These analyses suggest that significant opportunities exist for program and enrolment expansion and/or repurposing of some of these rooms to other functions where there are shortfalls. In summary, theoretical surpluses and shortfalls within the CU teaching space inventory include:

- Theoretical Surpluses
 - up to 17 classrooms (see Graph 10, 11),
 - one ABT Computer Lab (see Table 1),
 - one 1st/2nd Yr Biology Lab (see Table 1),
 - potential consolidation of Computer Labs CE223, LB302.
- Theoretical Shortfalls
 - one Theatre Studio or Rehearsal space

Classrooms Committee

Before undertaking any significant changes, several considerations and processes should first be considered to ensure that any changes are thoughtful and in the best interests of Capilano University, its students and employees. These may include establishing a Classrooms Committee, possibly comprised of members of the Scheduling Office, Executive Group and Faculty/Instructors. Properly instructed and working under a clear mandate and protocol, some of the optional mandates for this Committee include:

1. to clearly define criteria to establish which specific classrooms can be re-purposed in the short term and mid-long term, implications for the CU Scheduling Office and what additional supports to scheduling processes and campus communications need to be put in place.
2. clarifying exceptional criteria for when teaching programs should be provided with priority access and/or dedicated access to classrooms with special equipment, and what is meant by "special equipment". For example, priority access might mean that programs would have preferred access to certain rooms for scheduled times with the balance of time made available to the general pool; dedicated access would mean that certain classrooms, labs and studios are essentially block booked by programs and not available to the pool. Though the latter is more convenient for scheduling and for more casual and *ad hoc* use by programs, it can result in low utilization and should only be considered if required.
3. allocation and re-purposing of space using a well defined, transparent and respected process.

Short Term

Several short term considerations are summarized below.

1. Administrative Support: to relieve very significant congestion and spatial organization issues in the Birch Building, it is suggested that CU remove one classroom (e.g. BR424) and

This conclusion is also included in Section 2.

one to two of the nine ABE/Career Access classrooms (e.g. BR321-324, 342, 343, 377, 381, 382) from the teaching space inventory (see Section 4: Conclusions and Considerations - Component Re-location Options Summary).

2. ABT Computer Lab: the analysis indicates that one of the three ABT Computer labs in the Fir Building (e.g. FR210) is not required. In addition, walkthrough observations indicated that the six adjacent office/storage spaces FR 215D through FR213A are either not used or are underutilized. Consider reassigning these areas to one or more of the following:
 - informal student learning,
 - office suite for faculty/ instructors and/or small Music practice studios,
 - additional Theatre rehearsal or studio space,
 - general classrooms displaced by other initiatives.
3. 1st/2nd Yr Biology Lab: though the analysis indicates that one 1st/2nd Yr Biology Lab (FR301 or 309) may not be required, the specialized layouts of these spaces do not readily lend themselves to other activities and repurposing would likely involve costly renovations. This is further complicated as these rooms are part of an integrated suite of rooms. However, CU should consider balancing any operational cost savings that may result from closing one of these labs (e.g. heat, light, maintenance) against the costs of consolidating sections into the other lab.

This conclusion is also included in Section 2.

Mid-Term

In the mid term, several additional initiatives should be considered, as summarized below.

4. Cedar Building CE344: consider reassigning this classroom to:
 - faculty/instructor offices and/or,
 - informal learning facility and/or
 - faculty/ instructor support centre for the building or campus as a whole (e.g. comprised of seminar/ meeting rooms, resources and perhaps a complement of staff).
5. Learning Commons, International Student Centre, Aboriginal Gathering Place: identify one to three other classrooms in the Library Building and/or Birch Building that could be removed from the general classrooms pool in order to develop other key initiatives at CU. These areas may be developed initially as transitional projects, pending a possible future expansion of the Library Building, with the classrooms eventually returning to the CU pool to accommodate future growth.
6. International Student Centre: in addition to the above option, consider reassigning classrooms BR166 and or 168 to International Student Centre.
7. Film Centre: there will be five general classrooms in the new Film Centre once it is completed, in addition to several more program specific classrooms (e.g. Aboriginal Film, Animation) and a range of specialized teaching labs & studios. It is suggested that utilization of these general classrooms should

*For additional information, see Section 4:
Conclusions and Considerations -
Component Re-location Options Summary -
Other Possible Relocation Concepts Outside
the Scope of this Document.*

*For additional information, see Section 4:
Conclusions and Considerations -
Component Re-location Options Summary -
Other Possible Relocation Concepts Outside
the Scope of this Document.*

be reviewed to consider opportunities to bring them within the general classrooms pool and control of the Scheduling Office. If implemented, scheduled SCHLMPA/Film Centre course sections would still have priority access to time slots, but one or more of these rooms would be available to other programs outside of those times.

This Film Centre scenario would result in improved classrooms utilization, better/ more equitable access to classrooms across the campus and additional opportunities to repurpose surplus classrooms elsewhere. However, to be implemented and successful, this scenario would require several initiatives, including:

- updated reviews about noise and disruption issues in the new Film Centre, to see if these issues remain relevant in that environment;
- protocols for shared access and promotion of harmony among classrooms neighbours;
- consideration for grouping rooms and/or acoustic mitigation to minimize noise issues, or grouping classroom sections and/or classrooms to facilitate priority access for SCHLMPA and access by other programs at other times.

8. Faculty/ Instructor Offices: reassign several classrooms in buildings with concentration of faculty/ instructor offices, to accommodate additional faculty/ instructor offices and/or related amenity or teaching development resource areas. As these areas may best lend themselves to a mix of open area and enclosed office arrangements and so a change from the current model, this initiative would require a process of faculty/ instructor and staff engagement and a thorough review of furniture and equipment options.
9. Theatre Program: develop an additional Theatre studio or rehearsal space, possibly by a temporary reassignment of a classroom (e.g. BR125).

This conclusion is also included in Section 2.

Long-Term

In the long term, several additional initiatives should be considered, as summarized below.

10. Theatre Program: several Birch Building space reassignments should be considered to better accommodate the Theatre program. In addition to significant cost considerations, each of these options has significant implications for the Bookstore and would be subject to a careful review of its mandate, business plan and requirements. Options identified over the course of this study include:

Option 1 (Library building expansion includes relocated Bookstore)

- reassign the front of the existing Bookstore BR123 or existing classroom BR125, to a theatre studio or rehearsal space,
- reassign the back of BR123 and all of BR119 (Bookstore stores and offices) to Theatre scene shop,
- reassign BR109 to green room.

Option 2 (Library Expansion does not include Bookstore but Bookstore can be significantly reduced in size)

- reassign existing classroom BR125 to a theatre studio or rehearsal space,
- reassign the back of BR123 and all of BR119 (Bookstore stores and offices) to Theatre scene shop,
- reassign BR109 to green room.

INTRODUCTION

As part of this study, Capilano University requested that Master Program information be developed for the selected administrative components listed below:

- A. Development & Alumni Relations
- B. Continuing Education
- C. Continuing Professional Studies
- D. Human Resources
- E. Information Technology Services
- F. Marketing & Communications

For each of these six components, Master Program information was developed including: brief functional descriptions, workload and staff summaries where appropriate, adjacency/location and design criteria, existing gross space and approximate space requirements. This information was based on a meeting with representatives of each of the components, as well as floorplan and space inventory information provided by Capilano University. Approximate existing gross areas are included for comparison, generated from area take-offs from floorplans.

It should be noted that Master Program information is preliminary, relatively "high level" and is intended to support master plan decision-making only. Should the Capilano University choose to implement changes, more detailed Functional Program information will be required with additional staff involvement in order to both verify and further develop this Master Program information to a level of detail sufficient for design and compliant with any broader, strategic goals.

For reference, example office space standards are described in detail in Appendix D. Office space standards utilized in this Master Program are based on a blend of these standards as well as typical existing areas at Capilano University. In summary:

- Type A, Small open office workstation: 3.2 nsm
- Type B, Standard open office workstation: 6.0 nsm to 7.0 nsm
- Type C, Standard office with one desk: 7.2 nsm (e.g. LIB127A)
- Type D, Larger office with one desk and space for small meetings: 12.0 nsm to 16.0 nsm
- Type E, Standard office with 2 desks: 13.0 nsm

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**A. DEVELOPMENT & ALUMNI
RELATIONS**

FUNCTIONAL DESCRIPTION

This component accommodates the Development & Alumni Relations offices (D&AR), consisting of the Alumni Relations and Development groups. Example activities of this component include:

- Providing planning and coordination and other services to keep Capilano University Alumni connected with the University and with fellow graduates and friends.
- Coordination of internal and external communications related to Alumni and Capilano University donors.
- Hosting of visiting Donors and friends of Capilano University, and processing of donations.
- Planning and hosting of special events for both Capilano University Alumni and Donors.
- Collaboration with other departments (e.g. Financial Services).

Hours of operation: 8:30 am – 4:30 pm, Monday through Friday. In addition, after hours access is required, 7 days per week.

WORKLOAD, MEETINGS

Approximate meetings workload for this component is as follows:

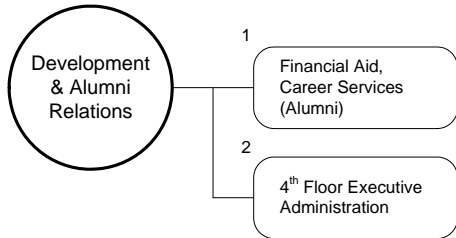
- Alumni & Donor Meetings: 2-6 people, 12-30 hrs/wk (1-2 hrs x 12-15 meetings per wk).
- Alumni Association Board Meetings: 9 people, ~6 x per yr.
- Committee Meetings (3 different committees): 6 people, 2 x per month per committee.

**STAFFING & OCCUPANCY
ESTIMATES**

Estimated staffing for this component is summarized below, with staffing summarized in terms of full-time equivalents (FTE) and headcount.

Occupant	Current (2009/10)	Projected (2014/15)	
	FTE	FTE	Headcount
Director, Development & Alumni Relations	1.00	1.00	1
Sr. Development Officer	0.60	0.60	1
Alumni Relations Officer	1.00	2.00	2
Annual Giving Officer	0.60	0.60	1
Development Assistant	0.66	2.00	2
Clerk	0.20	0.20	1
Total	4.06	6.40	8

DESIGN CRITERIA



Location Criteria and External Relationships

- 1 Provide convenient access by general circulation to Financial Aid and Alumni Career Services for the movement of staff.
- 2 Provide convenient access by general circulation to the 4th Floor Executive Administration suite for the movement of staff.

The current 4th floor location has been satisfactory due to its proximity to the Executive Administration area. In the future, D&AR would prefer improved access by donors and visitors and a more visible, central and active location providing more proximity and greater interaction with students (e.g. mentorship programs etc.). Accessibility to nearby parking for donors is ideal.

Flexibility and Image

All office and office support spaces should be flexible to support a range of activities and future changes. A professional and high profile image is necessary for this component. Provide standard office component requirements for security including individual door locks and the ability to lock the whole component after regular business hours.

Acoustic Privacy

To maintain confidentiality, sufficient acoustic privacy is required for enclosed offices and all meeting rooms so that conversations cannot be understood in adjacent spaces. Activities of some staff can be disruptive to others and so design should consider acoustic treatment of surfaces and acoustic panel separations in open areas.

Preliminary Space Requirements

Ref	Space	Component Area			Remarks
		units	nsm/unit	nsm	
	<u>Main Office</u>				
01	Office, Director	1		12.0	Incl. wkstn, file cabinet, meeting space for up to 3 people.
02	Office, Private	2	7.2	14.4	Incl. wkstn, file cabinet.
03	Office, Shared	2	13.0	24.0	Incl. 2 wkstns, 2 file cabinets.
	Subtotal, Main Office			50.4	
	<u>Support Space</u>				
04	Meeting Room, Small	1		12.0	Accommodates up to 6 people.
05	Meeting Room, Large			0	Access required to shared larger meeting room with video-conference capacity, up to 14 seats.
06	Business Work Room	1		8.0	Medium photocopier, fax, small layout table, supplies cupboard, shredder, recycling, printer.
07	Storage Room	1		20.0	Incl. 6 lateral file cabinets, 33 linear feet of storage in a mix of closed cabinets and open shelving for promo materials, brochures, equipment, events items, etc.
	Subtotal, Support Space			40.0	
	Total			90.4	Estimated Gross Area @1.35 ratio = 122 CGSM <i>Existing CGSM = 58 CGSM</i>

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B. CONTINUING EDUCATION

FUNCTIONAL DESCRIPTION

This component accommodates Continuing Education (CEd) office and administrative support activities. CEd provides the community and Capilano University with quality programs and services through delivering a diverse range of non-traditional programming to children, young and mature adults, and elders. CEd programs can be generally grouped as follows:

- Government funded training programs e.g. BOSS Self Employment Program, Fire Safety Training, etc.).
- Community-based programs (e.g. Elder College, Community Music School).
- Career and community vocational programs of general interest.

Example activities taking place within this component include:

- Marketing activities (e.g. graphic design of publications, web services, advertising).
- Receiving visitors, students, clients, etc.
- Coordination of programs and large projects.
- Consultation with various departments on CEd courses.
- Hiring of faculty and staff.
- Booking of classrooms.

Hours of operation: 8:30 am – 4:30 pm, Monday through Friday for the general office. The Instructor's Room requires after-hour access for faculty, 7 days per week. CEd courses are offered during the day, evenings and weekends within Capilano University classrooms.

WORKLOAD, MEETINGS

NA

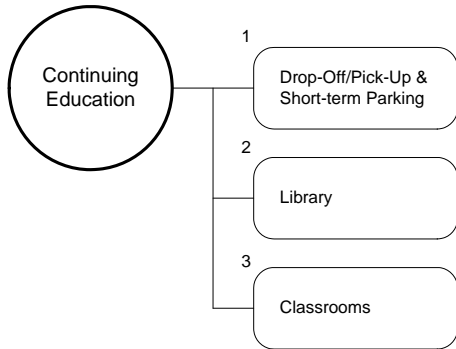
STAFFING & OCCUPANCY ESTIMATES

Estimated staffing for this component is summarized below, with staffing summarized in terms of full-time equivalents (FTE) and headcount.

Occupant	Current (2009/10)	Future (2014/15)	
	FTE	FTE	Headcount
Director, Continuing Education	1.00	1.00	1
Office Manager	1.00	1.00	1
Program Consultant/Coordinator	1.00	1.00	1
Marketing & Communication Specialist	1.00	1.00	1
Project Manager	2.00	4.00	4
Program Consultant	0.50	0.50	1
Program Consultant/PMI	1.00	1.00	1
Lead Instructor	0.25	0.25	1
EU Tour & Intern Program/Political Studies	0.75	0.75	1
Labour Education Liaison Person (LELP)	0.50	0.50	1
Assistant to the Director	1.00	1.00	1
CE Assistant I	1.00	1.00	1

Occupant	Current (2009/10)	Future (2014/15)	
	FTE	FTE	Headcount
CE Assistant II	2.50	2.50	3
Receptionist	1.00	1.00	1
Administrative Specialist	1.00	1.00	1
Total	15.50	17.50	20

DESIGN CRITERIA



Location Criteria and External Relationships

- 1 Provide convenient access by external circulation to a Drop-off/ Pick-Up and Short-term Parking area for instructors and students.
- 3 Provide convenient access by general circulation to the Library for the movement of students.
- 4 Provide convenient access by general circulation to Classrooms for safe, after hours movement of instructors and students.

CEd currently has a central, visible location near the centre of campus, with good proximity to short term parking. These are all essential criteria for the ongoing success of the unit. However, subject to issues of budget and finance, CEd may be relocated off campus to a high profile public location such as lower Lonsdale. Currently, CEd manage two classrooms but has an expressed requirement for 4 additional classrooms. Should this situation change and CEd expand, the University should consider one or more of the following rooms: LB190A/B, 192, 193, 194, 195, 196.

The Instructor’s Room requires secure, direct exterior access by faculty during evenings and weekends. The rest of the component will typically be secured after hours. It is assumed that the CEd Instructor Room is a shared resource and the same as the Continuing Professional Studies Instructor Room described in the CPS component.

Flexibility and Image

All office and office support spaces should be flexible to support a range of activities and future changes. A professional and high profile image is necessary for this component. Provide standard office component requirements for security including individual door locks and the ability to lock the whole component after regular business hours.

Acoustic Privacy

To maintain confidentiality, sufficient acoustic privacy is required for enclosed offices and all meeting rooms so that conversations cannot be understood in adjacent spaces. Activities of some staff can be disruptive to others and so design should consider acoustic treatment of surfaces and acoustic panel separations in open areas.

Preliminary Space Requirements

Ref	Space	Component Area			Remarks
		units	nsm/unit	nsm	
	<u>Reception</u>				
01	Workstation, Main Reception	1		7.0	Over-sized reception workstation w/service counter
02	Waiting Area, 5 Seats	1		7.5	4-5 seats and small table
03	Reference Library	1		1.5	Incl. CEd pamphlets, brochures, etc.
04	Workstation, Secondary Library Reception Access	1		7.0	Over-sized reception workstation w/service counter; included to support existing secondary access via Library.
	Subtotal, Reception			23.0	
	<u>Main Office</u>				
05	Office, Director	1		12.0	Incl. wkstn, file cabinet, meeting space for up to 3 people.
06	Office, Private	5	7.2	36.0	Incl. wkstn, file cabinet; 4 project mgrs, office mgr, Mktg & Comm. Specialist.
07	Office, Shared	3	13.0	39.0	Incl. 2 wkstns, 2 file cabinets; for Program Consultants plus 1 hotelling wkstns.
08	Open Office, Workstation	6	6.0	36.0	Incl. wkstn, file cabinet.
09	Office Equipment Area	1		8.0	Medium photocopier, supply shelving, recycling, layout area, 3 lateral file units, 2 shelving units.
	Subtotal, Main Office			131.0	
	<u>Support</u>				
10	Multipurpose Meeting/ Instructor's Room	1		18.0	Daytime use as 8 seat meeting/staff break room and after hours use as Instructor Room; medium photocopier, storage cabinets, round table, 2 hotel workstations. Assumes shared with Continuing Professional Studies.
11	Storage Room	1		18.0	Open shelving for storage of program supplies, special events supplies, pamphlets, brochures etc.
12	Files/Storage Units, Active	1		7.5	10 vertical filing cabinets
13	Mail	1		2.8	6 linear feet

Ref	Space	Component Area			Remarks
		units	nsm/unit	nsm	
14	Kitchenette	1		4.0	Full size fridge, dishwasher, microwave, counter & cabinets, water cooler.
	Subtotal, Support			50.3	
	<u>Classrooms</u>				
15	Classroom, CEd			0.0	<i>Outside of scope of this document: 2 classrooms currently designated to CE, 4 additional are required for day programs; additional considerations for professional décor, quality of furnishings and ergonomics is required.</i>
	Total			204.3	Estimated Gross Area @ 1.35 ratio = 276 CGSM <i>Existing CGSM = 216 CGSM</i>

C. CONTINUING PROFESSIONAL STUDIES

FUNCTIONAL DESCRIPTION

This component accommodates Continuing Professional Studies (CPS) office requirements. CPS is a new program administered by Capilano University's Continuing Education Department. CPS programs are expected to include professional programs such as Local Government Administration, Professional Designation (e.g. Payroll, Accounting etc.) and Executive Leadership Training.

Example activities taking place within this component include:

- Classes, workshops, seminars
- Group work, collaborative learning
- Instruction, facilitation, student advising

Hours of operation: 8:30 am – 4:30 pm, Monday through Friday, as well as extended evening and weekend hours.

WORKLOAD, MEETINGS

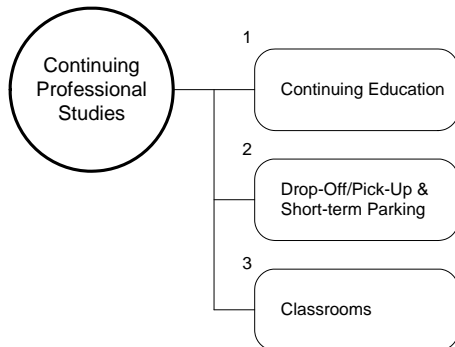
NA

STAFFING & OCCUPANCY ESTIMATES

Estimated staffing for this component is summarized below, with staffing summarized in terms of full-time equivalents (FTE) and headcount. At the time of writing, there were no current staff, and though it is expected that there will be instructors based in this component, their future numbers were not known at the time of writing.

Occupant	Current (2009/10) FTE	Future (2014/15)	
		FTE	Headcount
Coordinator/Instructor	na	1.00	1
CE Assistant	na	1.00	1
Training Consultant	na	1.00	1
Instructors	na	tbd	tbd
Total	na	3.00	3

DESIGN CRITERIA



Location Criteria and External Relationships

- 1 Provide convenient access by general circulation to Continuing Education to support integrated support services, a shared Instructor's Room and for the movement of instructors and students.
- 2 Provide easy access to a Drop-off /Pick-Up and Short-term parking zone for students.
- 3 Provide convenient access by general circulation to classrooms for the movement of students.

CPS requires a central, visible location near the centre of campus, preferably within the ground floor of the Library Building, adjacent to or integrated with Continuing Education, and with good proximity to short term parking. These are all essential criteria for the ongoing success of the unit.

The Instructor's Room requires secure, direct exterior access by instructors for evening and weekend hours. The rest of the component will be secured after hours. It is assumed that the CPE Instructor Room is a shared resource and the same as the Continuing Education Instructor Room described in the CEEd component.

Flexibility and Image

All office and office support spaces should be flexible to support a range of activities and future changes. A professional and high profile image is necessary for this component. Provide standard office component requirements for security including individual door locks and the ability to lock the whole component after regular business hours.

All student spaces should be designed for adult learners, use of comfortable soft seating where possible, and ergonomic furniture is recommended.

Acoustic Privacy

To maintain confidentiality, sufficient acoustic privacy is required for enclosed offices and all meeting rooms so that conversations cannot be understood in adjacent spaces. Workload of some staff in component can be disruptive to others and so design should consider providing surfaces in open area with acoustic treatment, and open area workstations with acoustic panel separations.

Preliminary Space Requirements

Ref	Space	Component Area			Remarks
		units	nsm/unit	nsm	
	<u>Administrative Area</u>				
01	Workstation, Reception (CE Assistant)	1		7.0	Over-sized reception workstation w/service counter
02	Waiting Area, 3 Seats	1		4.5	Accommodates 3 seats and small table
03	Office, Private	2	7.2	14.4	Incl. wkstn, file cabinet
04	Meeting Room, 4-6 Seats	1		12.0	Accommodates up to 6 people, professional decor.
05	Kitchenette	1		4.0	Fridge, dishwasher, microwave, counter & cabinets, water cooler.
06	Business Work Room	1		8.0	Medium photocopier, supply shelving, recycling, layout area, 3 lateral file units, 2 shelving units.
07	Multipurpose Meeting/ Instructor's Room	1		0	Assumes shared with Continuing Education (see Continuing Education component for space)
	Subtotal, Administrative Area			49.9	
	<u>Classroom</u>				
08	Classroom, CPS			0.0	<i>Outside of scope of this document: up to 1 classroom is expected to be required; additional considerations for professional décor, quality of furnishings and ergonomics is required.</i>
	Total			49.9	Estimated Gross Area @ 1.35 ratio = 67 CGSM <i>Existing CGSM = na</i>

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D. HUMAN RESOURCES

This component accommodates the non-executive functions of Human Resources (HR). Example activities taking place within this component include:

- Providing a resource and support for all staff and faculty at Capilano University.
- Providing support and advice to departments related to recruitment and employment, training and development for faculty.
- Testing of skills for new staff.
- New employee orientation.
- Coordination of Union matters.

Hours of operation: 8:30 am – 4:30 pm, Monday through Friday, plus after hours access, 7 days per week.

WORKLOAD, MEETINGS

Approximate meetings workload for this component is as follows:

- Small Meetings: 2-3 people, ~1-2 hours/ 3 x per day
- Advisory Group Meetings: 6-8 people, ~3 hours/ 1 x per wk
- Departmental Meetings: 8 people, ~1 x per month
- Testing Room (during peak times): 1-2 people, significant part of the day.

**STAFFING & OCCUPANCY
ESTIMATES**

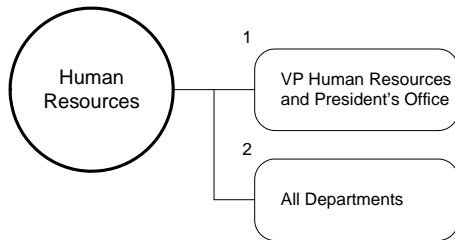
Estimated staffing for this component is summarized below, with staffing summarized in terms of full-time equivalents (FTE) and headcount.

Occupant	Current (2009/10)	Future (2014/15)	
	FTE	FTE	Headcount
<u>Executive</u>			
Vice-President, Human Resources	1.00	1.00	1
Executive Assistant, VP	1.00	1.00	1
Subtotal ¹	2.00	2.00	2
<u>Human Resources</u>			
Manager, Human Resources	2.00	2.00	2
Human Resources Advisor I	6.00	6.00	6
Human Resources Advisor II	1.00	1.00	1
Human Resources Advisor D/W	1.00	1.00	1
Human Resources Assistant	1.00	1.00	1
Conflict Resolution Advisor ²	0.25	0.25	1
Human Resources Receptionist	0.80	0.80	1
Occupation Health & Safety Advisor	1.00	1.00	1
HRIS Advisor ³	(1.00)	1.00	1
Subtotal	13.05	14.05	15
Total	15.05	16.05	17

¹ VP & Exec. Asst. staff and related space requirements are not included herein. Staff are indicated with brackets for reference and are not included in subtotals.

² Conflict Resolution Advisor requires a separate location from this component.

³ Currently, the HRIS Advisor is a "contract" position and therefore bracketed and not included in current subtotal. However, this position is expected to move to regular full-time in the future.

DESIGN CRITERIA**Location Criteria and External Relationships**

- 1 Provide convenient access by general circulation to the VP Human Resources and President's Office for the movement of information and staff.
- 2 Provide convenient access by general circulation to all departments of Capilano University for the movement of information and staff.

This unit is currently split into two locations located on the 4th floor of Birch. It should be consolidated, with close proximity to the Executive areas as well as generally provided with a location central to all departments, for faculty and staff visitors.

Flexibility and Image

All office and office support spaces should be flexible to support a range of activities and future changes. Provide standard office component requirements for security including individual door locks and the ability to lock the whole component after regular business hours.

Acoustic Privacy

To maintain confidentiality, sufficient acoustic privacy is required for enclosed offices and all meeting rooms so that conversations cannot be understood in adjacent spaces. This is particularly relevant to HR activities involving clients. Activities of some staff can be disruptive to others and so design should consider acoustic treatment of surfaces and acoustic panel separations in open areas.

Preliminary Space Requirements

Ref	Space	Component Area			Remarks
		units	nsm/unit	nsm	
	<u>Main Offices</u>				
01	Workstation, Reception	1		7.0	Incl. wkstn for HR Receptionist, c/w handicap accessible transition counter.
02	Waiting Area	1		4.5	Incl. 3 chairs and small table, space for wheelchair waiting.
03	Reference Library Area	1		4.0	Incl. open shelving unit for small reference library adjacent to waiting area.
04	Office, VP Human Resources and Executive Assistant	1		16.0	Equivalent to existing rm BR441
05	Open Office Workstation, Executive Assistant to VP Human Resources	1		6.0	Incl. wkstn, file cabinet
06	Office, Director	1		12.0	Incl. wkstn, file cabinet, meeting space for up to 3 people.
07	Office, Private	3	12.0	36.0	Incl. wkstn, file cabinet, meeting space for up to 3 people; 2 managers and HR Advisor II
08	Office, Shared	4	13.0	52.0	Incl. 2 wkstns, 2 file cabinets; for all HR Advisor I, HR Advisor D/W, Occupational H&S Advisor.
09	Open Office, Workstation	1		6.0	Incl. wkstn, file cabinet; for Exec. Asst., HR Asst., HRIS Advisor.
10	Office, Private Conflict Resolution Advisor's			0	Not included herein as this office requires a separate location from this component. However, space should be ~10.0 to 12.0 nsm.
	Subtotal, Main Offices			143.5	
	<u>Support</u>				
11	Meeting Room, Small	1		12.0	Accommodates up to 6 people.
12	File Room, Active Files	1		14.3	Incl. compact shelving unit
13	Other Files (Active)	1		6.5	Incl. 1 lateral file cabinet, 4 vertical files
14	Other Files (Archival)	0		0	Archival files to be stored off-site.

Ref	Space	Component Area			Remarks
		units	nsm/unit	nsm	
15	Office Equipment Area	1		8.0	Medium photocopier, fax, small layout table, supplies cupboard, shredder, recycling, printer.
16	Storage, Office Supplies	1		2.0	
17	Testing Room	1		12.5	
	Subtotal, Support			55.3	
	Total, Human Resources (excl. VP Human Resources, Executive)			198.8	Estimated Gross Area @ 1.35 ratio = 268 CGSM <i>Existing CGSM = 225</i>

E. INFORMATION TECHNOLOGY SERVICES

FUNCTIONAL DESCRIPTION

This component is intended to only describe the requirements of centralized IT requirements. Though outside the scope of this component, other distributed IT facilities include distributed server rooms and wiring closets in other buildings, help desk in the Library Building, etc.).

This component accommodates centralized Information Technology Services (IT). In general terms, IT provides assistance with accounts & access, computer labs, e-mail and calendaring, web development, learning applications, security and software and hardware support for Capilano University clients (students, faculty, staff). IT is organized into two, highly collaborative groups: Applications & Web Development, and Operations, Infrastructure & Support Services. Example activities that occur within this component include:

- IT Operations, Infrastructure & Support Services
 - Infrastructure
 - Technical support for networks, server rooms and wiring closets hardware and software, core systems
 - Support Services
 - Service desk, remote service providing support and trouble shooting for Capilano University clients
 - Project focus, support services for the Capilano University desktop user
- IT Applications & Web Development
 - Project Management
 - Business analysis
 - Programming
 - Data base and server management
 - Web design and development

Hours of operation: 8:30 am – 4:00 pm, Monday through Friday plus after hours access is required, 7 days per week, particularly in the event of priority or emergency activities related to server equipment.

WORKLOAD, MEETINGS

NA

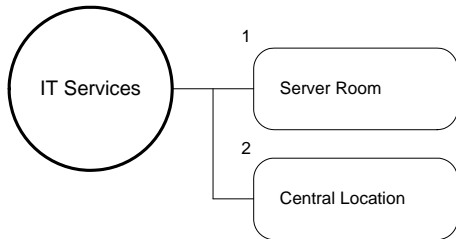
STAFFING & OCCUPANCY ESTIMATES

Estimated staffing for this component is summarized below, with staffing summarized in terms of full-time equivalents (FTE) and headcount.

Occupant	Current	Future	
	(2009/10) FTE	FTE	(2014/15) Headcount
<u>IT Operations, Infrastructure & Support</u>			
<i>IT Operations - Support Services</i>			
Director, IT Operations	1.0	1.0	1
Computer Support Analyst 1	5.0	5.0	5
Computer Support Analyst 2	3.0	3.0	3
Computer Support Supervisor	1.0	1.0	1
IT Services Assistant	1.0	1.0	1
<i>Growth</i>	-	2.0	2
Subtotal, Support Services	11.0	13.0	13

Occupant	Current	Future	
	(2009/10) FTE	FTE	(2014/15) Headcount
<i>IT Operations - Infrastructure</i>			
Manager, IT Infrastructure	1.0	1.0	1
Network Analyst 1	3.0	3.0	3
Network Analyst 2	1.0	1.0	1
Network Analyst 3	3.0	3.0	3
Security Analyst	1.0	1.0	1
Systems Manager	0.6	0.6	1
<i>Growth</i>	-	3.0	3
Subtotal, IT Operations & Infrastructure	9.6	12.6	13
Subtotal, IT Oper., Infrastructure & Support	20.6	25.6	26
<u>IT Applications & Web Development</u>			
Director, IT Applications	1.0	1.0	1
Programmer Analyst	3.0	3.0	3
Systems Analyst	4.0	4.0	4
Database Administrator	2.0	2.0	2
Systems Analysis Manager	1.0	1.0	1
Manager, Web Development	1.0	1.0	1
Web Developers	2.0	2.0	2
<i>Growth</i>	-	2.0	2
Subtotal, IT Applications & Web Develop.	14.0	16.0	16
Total	34.6	41.6	42

DESIGN CRITERIA



Location Criteria and External Relationships

- 1 Provide direct access by internal circulation to the main server room by the Infrastructure group (other IT groups do not require this adjacency) for the movement of staff and equipment.
- 2 Provide a central location to all campus buildings for the movement of staff and equipment.

Currently, this component is distributed into 5 locations in the Birch Building (Birch 204 plus 4 locations on the fourth floor). Every effort should be made to consolidate these locations to the extent practical, to support collaboration, communications and operational efficiencies. As the main server room is considered a "fixed" element, a 4th floor location adjacent/ proximate to this facility is considered ideal. Within this context, IT should be organized into integrated three zones, as follows:

- Operations - Support Services: includes related office, technical support and public service desk areas
- Operations - Infrastructure: includes related office, technical support and main server room areas
- Applications & Web Development: includes related office, technical support areas

Other locational considerations:

- Consider relocating BR434 Repair/Storage functions to BR424 (currently a classroom) to support consolidation and spatial reorganization of the component.

- BR424 periodic staging activities could be relocated to BR342 or 343 (classrooms).
- Infrastructure office/technical support functions could be more removed from the main server room if necessary, provided these two areas remain proximate.

Office Areas

IT staff typically work in teams of varying sizes in a highly collaborative milieu. Considerations to support this work model include access to meeting rooms equipped with appropriate AV equipment and informal areas equipped with whiteboards within office areas. An ideal general plan would involve an integrated office with open area workstations organized in informal, flexible groups in the middle, surrounded by a mix of private offices and meeting rooms.

All office and office support spaces should be flexible to support a range of activities and future changes. Careful considerations to power, data and network requirements are required in office areas due to the unique requirements of technical workstations.

Provide standard office component requirements for security including individual door locks and the ability to lock the whole component after regular business hours. In addition, office area entry point(s) must be equipped with a CCTV camera. In general terms, the Operations - Infrastructure area requires the most stringent security measures due to its proximity to the main server room.

The Operations - Support Services area involves considerable interaction with clients and, in part, requires "storefront" attributes that support a welcoming and interactive service area.

Acoustics

As there is considerable collaboration and cross talk among some teams and groups, careful consideration for acoustic treatment of office areas is required.

Server Room

Careful consideration for security measures are required for the main server room (BR437) including a secure, controlled, single point of entry access through the Infrastructure office area, locking door and CCTV camera at the entry point. Strict entry and exit security measures and protocols are required in order to ensure that expensive equipment and data is adequately protected.

Careful consideration of environmental and infrastructure capacities including power, emergency back-up power, HVAC, air-conditioning, fire safety and related appropriate redundancies due to the unique environmental and service requirements of equipment located in the main server room. The server room must be as flexible as practical.

Preliminary Space Requirements

Ref	Space	Component Area			Remarks
		units	nsm/unit	nsm	
	<u>Public Service/ Entry Area</u>				
01	Help Desk/ Reception, IT Services Assistant	1		8.0	Oversized reception type wkstn w/ service counter
02	Waiting, 2 to 4 Seats	1		4.5	
03	End-User Workstation	2	2.5	5.0	Incl. small wkstn
	Support, Shared				
04	Meeting Room, 4 Seats	1		10.0	Accommodates up to 4 people, meetings with client end-users and internal staff meetings
05	Meeting Room, 12 Seats	1		24.0	Accommodates up to 12 people, meetings with client end-users and internal staff meetings, videoconference capability
06	Office Equipment Area	1		8.0	Medium photocopier, fax, small layout table, supplies cupboard, shredder, recycling, printer
	Subtotal, Public Service/ Entry Area			59.5	Estimated Gross Area <u>Ave. @1.23 ratio = 73 CGSM</u>
	<u>Applications & Web Development</u>				
07	Office, Director	1		12.0	Incl. wkstn, file cabinet, meeting space for up to 3 people.
08	Office, Private	2	7.2	14.4	Incl. for 2 Managers; wkstn w/ 2 PCs, file cabinets.
09	Open Area Workstation, Technical Staff	13	7.0	91.0	Incl. oversized wkstns to support additional workspace/ equipment.
10	Support			0	Shared, see Public Service/ Entry Area above
	Subtotal, Staff – Applications & Web Development			117.4	Estimated Gross Area <u>@ 1.35 ratio = 158 CGSM</u>
	Operations - Support Services, Infrastructure				
	<u>Operations - Support Services</u>				
11	Office, Director	1		12.0	Incl. wkstn, file cabinet, meeting space for up to 3 people.

Ref	Space	Component Area			Remarks
		units	nsm/unit	nsm	
12	Office, Private	2	7.2	14.4	Incl. for Supervisor, Security Analyst; wkstn w/ 2 PCs, file cabinets.
13	Open Area Workstation, Technical Staff	10	7.0	70.0	Incl. oversized wkstns to support additional workspace/ equipment.
14	Work Space and Equipment Storage Room (BR434)	1		48.6	Same area as existing BR434.
15	Staging Areas, Equipment			0	Periodic staging areas are located in Birch and other buildings (space not included herein as this space is derived fro unused classrooms during the summer months).
16	Support			0	Shared, see Public Service/ Entry Area above
Subtotal, Operations - Support Services				145.0	Estimated Gross Area Ave. @1.25 ratio = 181 CGSM
<u>Operations - Infrastructure and Main Server Room</u>					
17	Office, Manager	2	7.2	14.4	Incl. for 2 Managers; wkstn w/ 2 PCs each, file cabinets.
18	Workstation, Technical Staff	11	7.0	77.0	Incl. oversized wkstns to support additional equipment, organized in pairs with small layout table between.
19	Main Server Room (BR437)	1		35.2	Area same as existing for BR437
20	Work Space and Equipment Storage Room			0	See Operations - Support Services
21	Support			0	Shared, see Public Service/ Entry Area above
Subtotal, Operations - Infrastructure and Main Server Room				126.6	Estimated Gross Area Ave. @1.26 ratio = 160 CGSM
Subtotal, Operations - Infrastructure & Support				271.6	Estimated Gross Area Ave. @1.26 ratio = 341 CGSM
Total, IT Services				448.5	Estimated Gross Area Ave. @1.28 ratio = 572 CGSM <i>Existing CGSM = 378 CGSM</i>

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F. MARKETING & COMMUNICATIONS

This component accommodates Marketing & Communications (M&C) office requirements. M&C at Capilano University offers a comprehensive range of services including: Advertising, Graphic Design, Web Development, Student Recruitment - Domestic, and Special Events. Example activities of this component include:

- Marketing,
- Design & production of advertising, brochures, calendars etc.,
- Photography,
- Web Development.

Hours of operation: 8:30 am – 4:30 pm, Monday through Friday, plus after hours access is required, 7 days per week.

WORKLOAD, MEETINGS

Approximate meetings workload for this component is as follows:

- Small Meetings: 2-3 people, ~1-2 hours/ 1-2 x per day.
- Team Meetings: 4-6 people, ~1-2 hours/ 1-3 x per day.
- Departmental Meetings: 12 people, ~1 x per week.

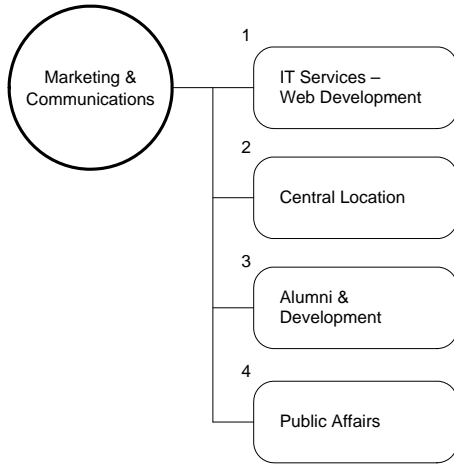
STAFFING & OCCUPANCY ESTIMATES

Estimated staffing for this component is summarized below, with staffing summarized in terms of full-time equivalents (FTE) and headcount.

Occupant	Current (2009/10) FTE	Future (2014/15) FTE	Headcount
<u>Executive</u>			
Vice-President, Education	(1.00)	(1.00)	(1)
Executive Assistant to VP	(1.00)	(1.00)	(1)
Subtotal ⁴	(2.00)	(2.00)	(2)
<u>Marketing & Communications</u>			
Community Relations Assistant	1.00	1.00	1
Manager	1.00	1.00	1
Marketing/Communication Advisor	1.00	1.00	1
Online Marketing/Communication Advisor	0.60	0.60	1
Web/Multimedia Developer	1.00	1.00	1
Marketing/Communication Assistant	1.00	1.00	1
Designer 2	2.00	2.00	2
DDA	0.60	0.60	1
DDA 2	0.80	0.80	1
Student Recruiter	1.51	1.51	2
Social Media Advisor/Developer	-	1.00	1
Mobile Marketing Advisor/Developer	-	1.00	1
Subtotal	10.51	12.51	14
Total	10.51	12.51	14

⁴ VP & Exec. Asst. staff and related space requirements are not included herein. Staff are indicated with brackets for reference and are not included in subtotals.

DESIGN CRITERIA



Location Criteria and External Relationships

- 1 Provide convenient access by general circulation to IT Services - Web Development for the movement of staff.
- 2 Provide convenient access by general circulation to a central location to busy student areas (i.e. student cafeteria) for the movement of equipment and staff.
- 3 Provide convenient access by general circulation to Alumni & Development for the movement of staff.
- 4 Provide convenient access by general circulation to Public Affairs for the movement of staff.

M&C requires a central, visible location near the centre of campus, with good proximity to short term parking. These are all essential criteria for the ongoing success of the unit. M&C often support events in LIB321/322, making the Library Building an excellent location.

Flexibility and Image

All office and office support spaces should be flexible to support a range of activities and future changes. Provide standard office component requirements for security including individual door locks and the ability to lock the whole component after regular business hours.

Oversize equipment (tents etc.) are moved frequently in and out of this component; ground floor access is required.

Light

This component requires access to natural light in as many office spaces for optimizing viewing of colours in print.

Acoustic Privacy

To maintain confidentiality, sufficient acoustic privacy is required for enclosed offices and all meeting rooms so that conversations cannot be understood in adjacent spaces. This is particularly relevant to Marketing & Communications activities involving clients. Activities of some staff can be disruptive to others and so design should consider acoustic treatment of surfaces and acoustic panel separations in open areas.

Preliminary Space Requirements

Ref	Space	Component Area			Remarks
		units	nsm/unit	nsm	
	MINIMAL OPTION 1: ASSUMING UNIT REMAINS IN PLACE				
01	Existing Space	1		181.0	
	Subtotal			181.0	Estimated Gross Area @ 1.35 ratio = 244 CGSM <i>Existing CGSM = 244 CGSM</i>
	Additional Space				
02	Office, Staff	2	7.2	14.4	Incl. wkstn, file cabinet.
03	Meeting Room, Small	1		8.0	Accommodates 4 to 6 people.
04	File Room, Lateral Files	1		14.0	Incl. space for 10 Lateral file units & 1 Digital File Storage unit
	Subtotal			36.4	Estimated Gross Area @ 1.35 ratio = 49 CGSM
	Total, Minimal Option 1			217.4	Estimated Gross Area @ 1.35 ratio = 293 CGSM <i>Existing CGSM = 244 CGSM</i>
	OPTION 2: ASSUMING UNIT IS RELOCATED				
	<u>Office Area</u>				
05	Workstation, Reception	1		7.0	Incl. wkstn for M&C Receptionist, c/w handicap accessible transition counter.
06	Waiting Area	1		6.0	Incl. 4 chairs and small table.
07	Office, Manager/Sr.Admin.	1		12.0	Incl. private offices for Manager; c/w wkstn, file cabinet, meeting space for up to 3 people.
08	Office, Staff	5	7.2	36.0	Incl. wkstn, file cabinet
09	Open Office, Workstation	7	6.0	42.0	Incl. wkstn, file cabinet
10	Office, Editing Suite	1		9.0	For Web/Multimedia Developer
	Subtotal, Office Area			112.0	

Ref	Space	Component Area			Remarks
		units	nsm/unit	nsm	
	<u>Support</u>				
11	File Room, Lateral Files	1		16.5	Incl. space for 10 Lateral file units & 1 Digital File Storage unit
12	Business Work Room	1		8.0	Medium photocopier, fax, 2 layout tables, supplies cupboard, shredder, recycling, printer, staff mailboxes.
13	Staff Kitchenette	1		4.0	Staff kitchenette; c/w fridge, sink, cabinets, microwave
14	Storage, Office Supplies	1		2.0	Stationary, office supplies
15	Equipment Storage Room	1		8.0	Storage of outdoor tents, special events items, promotional items, c/w cabinets & open shelving
16	Temporary Print Storage	1		4.0	Storage of flow-in/flow-out print, publications, brochures etc.
17	Long-term Print Storage	1		4.0	Storage of oversize signage, print, publications, brochures etc.
18	Trolley Storage	1		3.0	Storage of 3-4 trolleys/carts
19	Meeting Room, Small	1		10.0	Accommodates 4 to 6 people.
20	Multipurpose M&C Work Room	1		28.0	Accommodates up to 14 people, ceiling-mounted projector, white boards, blank wall for projection, c/w cabinets for storage, flexible tables for multiple configurations.
	Subtotal, Support			87.5	
	Total, Option 2			199.5	Estimated Gross Area @1.35 ratio = 269 CGSM <i>Existing CGSM = 244 CGSM</i>

CONCLUSIONS AND CONSIDERATIONS

Staffing Summary

The following table summarizes existing and estimated projected staffing for each component described in this section, in terms of full-time equivalents (FTE).⁵

Component	~Full Time Equivalents (FTE)		+/- Change
	Existing (Yr 2009/10)	Projected (Yr 2014/15)	
A. Development & Alumni Relations	4.06	6.40	2.34
B. Continuing Education	15.50	17.50	2.00
C. Continuing Professional Studies	-	3.00	na
D. Human Resources	15.05	16.05	1.00
E. Information Technology Services	34.60	42.60	8.00
F. Marketing & Communications	10.51	11.51	1.00
Total ~FTE	79.72	97.06	17.34

Space Summary

The following table summarizes existing and preliminary projected space requirements for each of the six components described in this section, in terms of NSM and CGSM.⁶

With the accommodation of projected staff, relief from existing congestion and other factors, the table indicates an overall approximate shortfall of 40.4% or 453 CGSM for these components, with the most significant shortfalls in components A. Development & Alumni Relations (108.9% or 64 CGSM) and E. Information Technology Services (51.3% or 194 CGSM).

Component	Existing ~CGSM	Projected Required (Yr 2014/15)		CGSM % Change
		NSM	~CGSM	
A. Development & Alumni Relations	58	90.4	122	108.9%
B. Continuing Education	216	204.3	276	27.8%
C. Continuing Professional Studies	-	49.9	67	na
D. Human Resources	225	198.8	268	19.1%
E. Information Technology Services	378	448.5	572	51.3%
F. Marketing & Communications	244	199.5	269	10.2%
Total Square Metres	1,121	1,191.4	1,574	40.4%

⁵ As noted in Section 2: Office Space Utilization and repeated herein for reference, staff information provided by CU included position type and related Faculty, Department or other affiliation as well as a measure of employment for each position, in terms of RFT, RPT or NREG (RFT: regular full time employee; RPT: regular part-time employee; NREG: non-regular employee). For the purposes of this analysis, these latter figures were translated to approximate full time equivalents (FTE), as follows:

- *Instructors/Faculty:* an RFT or RPT workload of 8.0 sections was viewed as ~full-time or ~1.0 FTE; 4.0 sections was viewed as ~0.5 FTE; etc.
- *Other Staff:* full-time other staff were viewed as ~1.0 FTE; half-time staff as ~0.5 FTE; etc.

It should be noted that positions and ~FTEs vary from term to term and year to year and the information utilized herein is "snapshot". ~FTE information was based on the academic year 2009-2010, using the Spring semester as a snapshot of time in which to capture information.

⁶ NSM (net square metres) - the horizontal area of space assignable to a specific function. The net areas of rooms are measured to the inside face of wall surfaces.

CGSM (component gross square metres) - that portion of a building assigned to a specific component/department, including net areas, internal circulation, partitions, building structure and small plumbing shafts. Component gross area is measured to the inside face of exterior walls and to the centre line of partitions adjoining other components/departments or general circulation space.

Component Re-location Options Summary

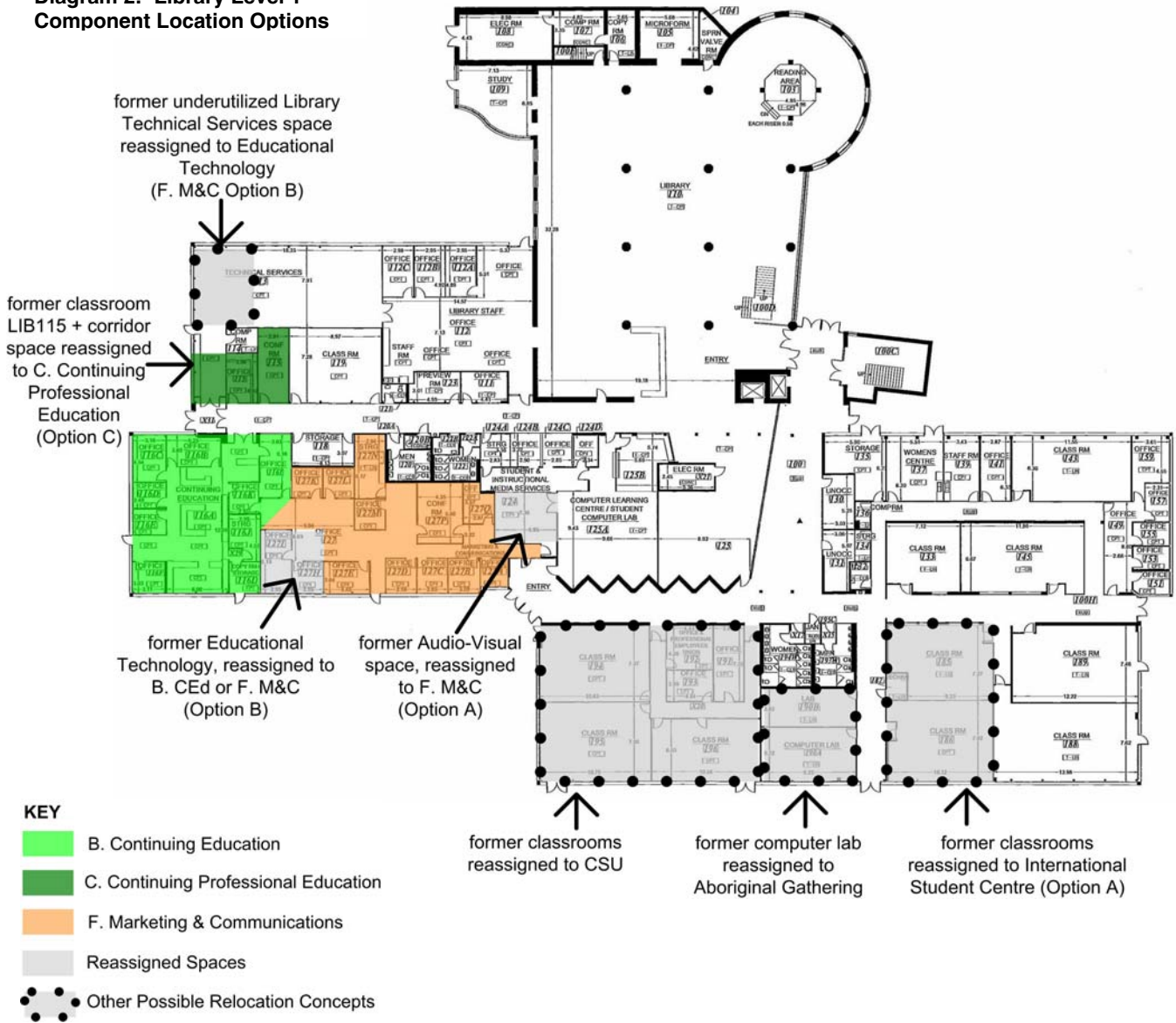
In order to best accommodate the consolidation and expansion location criteria defined in the component descriptions in this section, a series of component relocations and consequential moves will be required, with key optional concepts for consideration summarized in the following diagrams and narrative.

**Diagram 1: Birch Level 4
Component Location Options**



- KEY**
- A. Development & Alumni Relations
 - D. Human Resources
 - E. IT Services
 - Reassigned Spaces

Diagram 2: Library Level 1 Component Location Options



A. Development & Alumni Relations

This component requires ~109% expansion and preferably, a new, more visible and central location providing more proximity and greater interaction with students as well as improved access by donors and visitors and to nearby parking. Optional location strategies include:

- Option A: relocate an expanded D&AR (122 CGSM) to current IT Applications (BR401 to 407, 135 CGSM). Consequential moves for Option A include: moving IT Applications area (see IT Services below); reassigning vacated existing D&AR space to HR (see HR below).
- Option B: relocate D&AR to the Library Building as a result of a Library/Learning Commons expansion project. In this option, Payroll services could be relocated to the vacated to

IT Applications space rather than D&AR and vacated Payroll space reassigned to IT Services.

- Option C: alternatively, relocate D&AR to classroom BR125 (86 CGSM). This space has a high profile location but only provides ~40% of needed expansion space. Consequential moves include revised timetabling of classroom BR125 workload. As with Option B, in this option, Payroll services could be relocated to the vacated to IT Applications space rather than D&AR and vacated Payroll space reassigned to IT Services.

B. Continuing Education

This component requires ~28% expansion and preferably maintenance of the current location or relocation off-campus to a high profile public location such as a lower Lonsdale area. Optional location strategies include:

- Option A: relocate CEd off-campus, such as to undefined leased space in the lower Lonsdale area. This option would require a series of steps outside the scope of this document, including identifying a suitable location, and confirmation that lease costs are acceptable.
- Option B: expand CEd in place into existing Educational Technology and/or Marketing & Communications space. Consequential moves include moving some ET and/or M&C functions into alternative locations such as adjacent AV space (see M&C below).

C. Continuing Professional Studies

This new component requires ~67 CGSM and preferably, a location on the ground floor of the Library Building that is accessible after hours by instructors. Optional location strategies include:

- Option A: same as for Continuing Education
- Option B: same as for Continuing Education, with additional area reassigned for CPS.
- Option C: reassign classroom LIB115 and adjacent corridor to LIB113 to CPS. Consequential moves include revised timetabling of classroom LIB115 workload.

D. Human Resources

This component requires ~19% expansion and preferably, a more consolidated layout. Optional location strategies include:

- Relocate HR functions currently in BR416-422 (81 CGSM) to space vacated by D&AR (58 CGSM) plus space vacated by IT Infrastructure (BR435/438, 48 CGSM). This latter reallocation would require addition of an emergency exit door to secure/isolate the server room and adjacent workspace (BR436, 437) from the expanded HR space while providing an emergency exit.
- Consequential moves include: relocating D&AR (see D&AR above); relocating the office/workspace for IT Infrastructure (see IT Services below); reassigning vacated existing HR space to IT Applications (see IT Services below).

**E. Information Technology
Services**

This component requires ~51% expansion and preferably, a consolidated location that supports much greater interaction between IT Services groups while maintaining reasonable proximity to the main server room. Optional location strategies include:

- Reassign existing classroom BR424 (89 CGSM) to IT Services (see Classroom Utilization section of this document).
- As an initial stage, relocate IT Infrastructure offices/workspace (excluding BR436/437) and IT Applications to vacated HR space (BR416-422, 81 CGSM) and classroom BR424 (89 CGSM). These changes fully consolidate all work space and result in a net increase of ~40 CGSM for IT Services. This net expansion does not accommodate the total required space. To accommodate all required space, it is suggested that Option B or C for D&AR be considered, with the vacated Payroll space reassigned to IT Services.
- Consequential moves include: reassigning vacated IT Applications space to D&AR (see D&AR above); reassigning vacated IT Infrastructure offices/workspace to HR (see HR above) with the addition of an emergency exit door to secure/ isolate the server room and adjacent workspace; revised timetabling of classroom BR424 workload; use of alternative Birch classroom for summer time IT Services equipment staging (currently BR424).

F. Marketing & Communications

This component requires ~10% expansion and preferably, a location that is proximate to D&AR, Public Affairs, IT Services and Birch Building in general. However, optional location strategies that were identified included:

- Option A: expand M&C in place by reassigning part of adjacent Audio-Visual Services space to M&C. This option is contingent on an expanded Library Building that may be part of a future project, or alternatively, a potential reorganization of existing Library space.
- Option B: relocate existing Educational Technology offices LIB127H/I (28 CGSM) to another, undefined location on campus. Consequential moves include relocating Educational Technology to underutilized space in LIB113. It should be noted that a component program for Library services is outside the scope of this document and this option is based on a visual walkthrough of LIB113 only.
- Option C: expand M&C in place by reassigning part of adjacent Continuing Education space to M&S (see CEEd above).

**Other Possible Relocation
Concepts Outside the Scope of
this Document**

During the process of discussing the above options with component representatives and others, several other relocation concepts were put forward for other functions that are outside the scope of this document. These concepts should be considered as part of a separate study that includes a focus on the Library Building. As next steps, each of these functions would require the development of Master Program information, as part of a larger study including other Library Building components. For reference, these concepts included:

Capilano Student Union

Consider developing selected CSU functions in the Library Building. As an example, consider LIB191 to 196. If practical, consequential moves would include revised timetabling of classrooms LIB194, 195, 196 workload, facilitated by the completion of the Film Centre and improved utilization of other existing classrooms, as well as identifying alternative locations for the functions currently accommodated in LIB191 (Queer Resource Centre), 192 (meeting room) and 193 (office).

Aboriginal Gathering Space

Consider developing an Aboriginal Gathering space in the Library Building. As an example, consider LIB190A/B. If practical, consequential moves would include identifying alternative locations for the computer laboratory functions currently accommodated in LIB190A/B, facilitated by the completion of the Film Centre and improved utilization of other existing classrooms.

International Student Centre

Option A: consider developing an International Student Centre (ISC) space in the Library Building. Though not programmed within the scope of this project, it is understood that the ISC would require approximately 130 CGSM to accommodate up to 10 staff (8 small enclosed offices, 2 reception open area workstations), small entry foyer/waiting area and a small meeting room (8 seats). As an example, consider utilizing part of classrooms LIB185 and 186 which collectively total ~145 CGSM. If practical, consequential moves would include revised timetabling of displaced classrooms workload, facilitated by the completion of the Film Centre and improved utilization of other existing classrooms.

Option B: consider developing an International Student Centre space in the Birch Building. This location provides desirable proximity to the Registrar's Office and the main cafeteria, a significant student gathering space near the current main entry to the campus. As an example consider utilizing part of BR166, 167, 168 which collectively total ~170 CGSM. If practical, consequential moves would include revised timetabling of classrooms BR166 and 168 workload, and identifying an alternative location for ABT Medical Assistant Program storage currently in BR176.

APPENDIX A: DEFINITIONS OF TERMS

**CAPILANO UNIVERSITY FACULTY,
VICE-PRESIDENT, PROGRAM AND
DEPARTMENT ABBREVIATIONS**

FACULTIES

Fac of A&S	Faculty of Arts & Sciences
Fac of BUS	Faculty of Business
Fac of F&AA	Faculty of Fine & Applied Arts
Fac of H&E	Faculty of Health & Education
Fac of P&AS	Faculty of Pure & Applied Sciences
Fac of S&IS	Faculty of Student & Institutional Support
Fac of SS&D	Faculty of Student Services & Development
Fac of T&OR	Faculty of Tourism & Outdoor Recreation

VP/OTHER

VP A&AP	VP Education, Academic and Arts Programs
VP EM&IP	VP Education, Management & International Programs
VP F&Admin	VP Finance & Administration
VP HR	VP Human Resources
VP S&IS	VP Student & Institutional Support
D&AR	Development & Alumni Relations

PROGRAM, DEPARTMENT

A&EM	Arts & Entertainment Management
ABE	Adult Basic Education
ABT	Applied Business Technology
AWE	Access Work Experience
CCC	Child Care Centre
CD&O	Community Development & Outreach
CEd	Continuing Education
CFA	Capilano University Faculty Association
COM	Communications
COU	Counselling
CS&S	Costuming for Stage and Screen
CS&CP	Contract Services & Capital Planning
DE	Discover Employability
DIS	Disability Services
DS	Disability Services
DST	Developmental Studies
ECC&E	Early Childhood Care & Education
ESL	English as a Second Language
ETRC	Education Technology Resource Centre
FA	Financial Aid & Awards

PROGRAM, DEPARTMENT (cont.)

FIL	Foundation for Independent Living
FNS	First Nations Student Services
FNT	First Nations Transition
HKin	Human Kinetics
HLTH	Health
HUM	Humanities
IDEA	Illustration/Design: Elements & Applications
ID	Interactive Design
IIDF	Indigenous Independent Digital Filmmaking (Dipl & Cert)
ISC	International Student Centre
LIB	Library Services
LST	Legal Studies
MED	Media Arts
MPA	Motion Picture Arts
MUS	Music Therapy
PAT	Performing Arts Theatre
P&AS	Pure & Applied Sciences
PLA	Prior Learning Assessment
PMTI	Private Music Theatre Instruction
PUB	Public Administration
REH	Rehabilitation Assistant
SARAW	Speech Assisted Reading, Writing Program
SCB	School of Business
SES	Student Employment Services
SOC	Social Sciences
SPE	Special Education Assistant
SST	Student Services
STD	Student Discipline
STL	Student Liaison
TOR	Tourism & Outdoor Recreation
UIC	University Information Centre
VPA	Visual & Performing Arts

EMPLOYMENT STATUS

NREG	non-regular employee
RFT	regular full time employee
RPT	regular part-time employee

OTHER DEFINITIONS

AV (AUDIO-VISUAL SYSTEMS) - Systems which communicate information to audiences by means of audio-supported image displays.

BGSM – Building Gross Square Metres.

BUILDING GROSS SQUARE METRES - The sum of all building floor areas measured to the outside face of exterior walls for all stories or areas having floor surfaces. Gross area includes component gross areas, washrooms, telephones, general display, general circulation, mechanical and electrical space and exterior walls.

BUILDING SYSTEMS - All of the utilities and physical support systems and controls for the environmental support of all the elements of the facility, and the operational support of the

delivery system, including: mechanical, electrical, structural, plumbing, circulation, cladding and interior finishing systems.

CGSM – Component Gross Square Metres

CLADDING, EXTERIOR - Those components of a building which are exposed to the outdoor environment and are intended to provide protection against wind, water or vapour.

COMPONENT - A cohesive grouping of activities or spaces related by service or physical arrangement. A planning component may or may not be a department, since the term "department" refers to an administrative rather than a functional organization.

COMPONENT GROSS SQUARE METRES - That portion of a building assigned to a specific component/department, including net areas, internal circulation, partitions, building structure and small plumbing shafts. Component gross area is measured to the inside face of exterior walls and to the centre line of partitions adjoining other components/departments or general circulation space.

COMPONENT NET SQUARE METRES - That portion of a building assigned to a specific component/department but including only the net assignable areas. The internal circulation, partitions, building structure and small plumbing shafts are not included in this measurement.

CONVENIENT ACCESS - Physical access between components through the use of extended horizontal and/or vertical general circulation.

DEDICATED CIRCULATION - General or internal circulation for specified people or material which may or may not require a control point.

DESK - Desk nsm in this document is assumed to be either the net measured area of an open office area desk, the net measured area of a desk in a multi desk enclosed office, or the net room area of a single desk office.

DIRECT ACCESS - Physical access between components through the use of minimal amount of horizontal and/or vertical general or internal circulation.

EXIT - That part of a means of egress that leads from the floor area it services, including any doorway leading directly from a floor area, to a public thoroughfare or to an approved open space.

EXTERNAL RELATIONSHIPS - The functional relationships and key adjacencies or proximities of one component to another.

FTE - FULL TIME EQUIVALENT - For staff, a term generally used to express the conversion of a number of annual paid hours into the number of individuals who, if they were working a complete shift on a regular schedule basis, would be required to accommodate that number of hours. At Capilano University, FTE has been approximated based on RFT, RPT, NREG information for the 2009/2010 academic year. An RFT, RPT or

NREG workload of ~8 courses over the year was considered ~full-time or ~1.0 FTE.

FUNCTIONAL COMPONENT - See "COMPONENT"

GENERAL CIRCULATION - The total system of connecting links that enable movement of people and materials throughout the facility, between rather than through departments; i.e., main corridors, elevators, stairs, etc.

GROSSING FACTORS - Multiplication factors applied (1) to net areas for each room or element within a component, and (2) to gross component areas. These factors allow for space requirements not included in net element or room measurements; see "Component Gross Square Metres" and "Building Gross Square Metres".

HEADCOUNT - The number of people actually working in an area at peak utilization. This includes part-time and full-time employees.

HORIZONTAL SERVICE SPACE - A space such as an attic, duct, ceiling, roof, crawl space or basement oriented essentially in a horizontal plane through which building services such as pipes, ducts and wiring may pass.

HV - Heating and Ventilating

INDIRECT LIGHTING - Diffuse lighting in a work area which provides ambient lighting in a room and is frequently controlled from a central room location.

INTERNAL RELATIONSHIPS - The functional relationship and key adjacencies/proximities between areas within one functional component.

MAXIMUM OCCUPANCY - The maximum number of people expected to be within an area at peak utilization. This figure includes visitors, employees and students.

NET SQUARE METRES (NSM) - The horizontal area of space assignable to a specific function. The net areas of rooms are measured to the inside face of wall surfaces.

NREG - non-regular employee

LEED® - The Leadership in Energy and Environmental Design Green Building Rating System, developed by the U.S. Green Building Council (USGBC), provides a suite of standards for environmentally sustainable construction.

PLUMBING SYSTEM - A drainage system with a venting and a water system or parts, thereof. It includes: drinking water, waste and vent, fluid fuels, medical gases, housekeeping vacuum, compressed air.

RESTRICTED CIRCULATION - Internal circulation which can be entered only by a passing a control point.

RFT - regular full time employee

RPT - regular part-time employee

SERVICE SPACE - A space provided in a building to facilitate or conceal the installation of building services such as chute, ducts, pipes, shafts or wires.

TASK LIGHTING - Concentrated lighting in a particular work area which is normally at a higher level of illumination than the surrounding (ambient) light level and is frequently controllable at the specific work (task) location.

VERTICAL CIRCULATION - The upward or downward movement of people and materials via elevators, stairs, etc., to connect with other floors within the building.

**APPENDIX B: OFFICE SPACE
UTILIZATION**

This section includes office space utilization information for the North Vancouver campus of Capilano University, developed during the summer of 2010. Tables in this section include:

TABLES

Table B1: Total Faculty & Staff ~FTE Equivalent by Position Type by Faculty/VP and Department

Table B2: Total Number of Desks by Position Type, by Faculty/VP and Department

Table B3: Total NSM by Position Type, by Faculty/VP and Department

Table B4: Average NSM by ~FTE Equivalent by Position Type, by Faculty/VP and Department

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**APPENDIX C: CLASSROOMS,
TEACHING LABS & STUDIOS
UTILIZATION AND SECTION HOUR
ANALYSIS****INTRODUCTION**

This section includes detailed teaching space utilization and section hour analysis information for general classrooms and specialized teaching labs & studios for the North Vancouver campus of Capilano University, developed during the summer of 2010.

As described in Section 3 and repeated herein for reference, space utilization and section hour analysis are defined as follows for the purposes of this document:

- **Utilization Analysis:** analyzes existing room use in terms of time (average hours per week used) and/or seats (average number of occupied seats within the room). This analysis can be used to identify room capacities and types that are experiencing scheduling pressure or are underutilized.
- **Section Hour Analysis:** analyzes current course workloads (section hours, hours per week, room types required) to assess the theoretical number of required rooms by seat capacities and room types. This analysis can be compared with existing space inventory to identify shortfalls or surpluses and opportunities for improving the "fit" between resources and requirements.

For reference, data sources, assumptions and methodologies are described in Section 3.

TABLES**Existing Inventory**

Table C1: Existing and New Film Centre Classrooms Space Inventory

Table C2: Existing and New Film Centre Teaching Labs & Studios Space Inventory

Utilization Analysis

Table C3: Classroom Time Utilization Summary, (Hrs per Peak Week)

Table C4: Classroom Seat Utilization Summary (% Peak Week)

Table C5: Teaching Labs & Studios Time Utilization Summary, (Hrs per Peak Week)

Table C6: Teaching Labs & Studios Seat Utilization Summary (% Peak Week)

Section Hour Analysis

Table C7: Classrooms Section Hour Analysis

Table C8: Teaching Labs & Studios Section Hour Analysis

TABLE C1: Existing and New Film Centre Classrooms Space Inventory

Room	Room Type	Actual			FIS		Notes
		No. of Seats (CU provided)	NSM	NSM per No. Seats	FIS Seat Capacity (theoretical)	FIS NSM per Seat	
AR 116	Classroom	24	52.9	2.20	21	2.52	
AR 117	Classroom	40	82.4	2.06	42	1.96	
AR 124	Classroom	22	62.4	2.84	32	1.95	
AR 125	Classroom	42	75.2	1.79	39	1.93	
AR 304	Classroom	36	92.2	2.56	47	1.96	
AR 312	Classroom	36	87.3	2.43	26	3.36	
AR 314	Classroom	40	81.2	2.03	24	3.38	
AR 315	Classroom	57	86.0	1.51	44	1.95	
BR 101	Classroom	200	277.5	1.39	154	1.80	
BR 125	Classroom	40	86.2	2.16	44	1.96	
BR 161	Classroom	42	73.0	1.74	37	1.97	
BR 162	Classroom	40	88.3	2.21	45	1.96	
BR 166	Classroom	40	79.7	1.99	41	1.94	
BR 168	Classroom	44	74.3	1.69	38	1.96	
BR 203	Classroom	40	79.7	1.99	41	1.94	
BR 205	Classroom	56	92.7	1.66	48	1.93	
BR 247	Classroom	50	89.4	1.79	46	1.94	
BR 263	Classroom	42	76.7	1.83	39	1.97	
BR 265	Classroom	48	79.5	1.66	41	1.94	
BR 310	Classroom	25	43.4	1.74	13	3.34	
BR 321	Classroom	42	73.0	1.74	37	1.97	
BR 322	Classroom	42	72.8	1.73	37	1.97	
BR 323	Classroom	40	73.1	1.83	37	1.98	
BR 324	Classroom	22	73.2	3.33	38	1.95	
BR 338	Classroom	35	66.3	1.89	34	1.95	
BR 342	Classroom	20	56.4	2.82	23	2.45	
BR 343	Classroom	36	67.5	1.88	35	1.93	
BR 377	Classroom	26	64.4	2.48	33	1.95	
BR 381	Classroom	32	70.9	2.22	36	1.97	
BR 382	Classroom	26	50.6	1.95	20	2.53	
BR 424	Classroom	53	87.5	1.65	45	1.94	
CE 120	Classroom	38	70.0	1.84	36	1.94	
CE 122	Classroom	40	75.7	1.89	39	1.94	
CE 124	Classroom	24	55.2	2.30	28	1.97	
CE 134	Classroom	35	75.2	2.15	39	1.93	
CE 135	Classroom	38	76.5	2.01	39	1.96	
CE 136	Classroom	40	75.4	1.89	39	1.93	
CE 140	Classroom	44	76.8	1.75	39	1.97	
CE 148	Classroom	92	156.4	1.70	87	1.80	
CE 221	Classroom	38	81.7	2.15	42	1.95	
CE 222	Classroom	40	69.8	1.75	36	1.94	
CE 224	Classroom	37	75.2	2.03	39	1.93	
CE 225	Classroom	36	75.1	2.09	39	1.93	
CE 231	Classroom	40	77.9	1.95	40	1.95	
CE 233	Classroom	44	74.2	1.69	38	1.95	
CE 237	Classroom	37	74.2	2.01	38	1.95	
CE 238	Classroom	40	76.8	1.92	39	1.97	
CE 344	Classroom	26	56.9	2.19	23	2.47	
FR 111	Classroom	30	62.6	2.09	32	1.96	
FR 112	Classroom	30	62.7	2.09	32	1.96	
FR 205	Classroom	22	73.9	3.36	38	1.94	
FR 206	Classroom	43	85.4	1.99	44	1.94	
FR 207	Classroom	20	40.9	2.05	16	2.56	
FR 209	Classroom	30	63.0	2.10	32	1.97	
FR 211	Classroom	28	55.8	1.99	22	2.54	

TABLE C1 (continued)

Room	Room Type	Actual			FIS		Notes
		No. of Seats (CU provided)	NSM	NSM per No. Seats	FIS Seat Capacity (theoretical)	FIS NSM per Seat	
FR 112	Classroom	30	62.7	2.09	32	1.96	
FR 205	Classroom	22	73.9	3.36	38	1.94	
FR 206	Classroom	43	85.4	1.99	44	1.94	
FR 207	Classroom	20	40.9	2.05	16	2.56	
FR 209	Classroom	30	63.0	2.10	32	1.97	
FR 211	Classroom	28	55.8	1.99	22	2.54	
FR 503	Classroom	38	104.9	2.76	70	1.50	
FR 509	Classroom	20	33.3	1.67	13	2.50	
HR 102	Classroom	16	33.0	2.06	13	2.54	
HR 114	Classroom	42	67.0	1.60	34	1.97	
HR 115	Classroom	40	84.1	2.10	43	1.96	
HR 116	Classroom	40	76.4	1.91	39	1.96	
HR 117	Classroom	42	70.6	1.68	36	1.96	
LB 133	Classroom	22	45.4	2.06	18	2.52	
LB 143	Classroom	38	71.4	1.88	37	1.93	
LB 145	Classroom	42	78.5	1.87	40	1.96	
LB 185	Classroom	38	66.9	1.76	34	1.97	
LB 186	Classroom	40	77.9	1.95	40	1.95	
LB 188	Classroom	73	109.1	1.49	66	1.65	
LB 189	Classroom	48	89.2	1.86	46	1.94	
LB 194	Classroom	38	78.1	2.06	40	1.95	
LB 195	Classroom	42	82.3	1.96	42	1.96	
LB 214	Classroom	38	75.7	1.99	39	1.94	
LB 215	Classroom	36	76.2	2.12	39	1.95	
LB 321	Classroom	40	97.7	2.44	50	1.95	
LB 322	Classroom	60	151.8	2.53	101	1.50	
MA 102	Classroom	36	70.0	1.94	36	1.94	
Totals/ Averages		3,059	5,922.5	1.94	3,009	1.97	
New Film Centre							
FC 108	Classroom	180	215.0	1.19	119	1.80	FIS figures estimated
FC 309	Classroom	25	78.0	3.12	40	1.94	FIS figures estimated
FC 313	Classroom	25	80.0	3.20	41	1.94	FIS figures estimated
FC 321	Classroom	25	70.0	2.80	36	1.94	FIS figures estimated
FC 339	Classroom	25	93.0	3.72	48	1.94	FIS figures estimated
FC 343	Classroom	25	80.0	3.20	41	1.94	FIS figures estimated
Totals/ Averages		305	616.0	2.02	326	1.89	
P-Bldg							
P 104	Classroom	30	92.0	3.07	47	1.96	
P 201	Classroom	22	64.5	2.93	34	1.90	
P 202	Classroom	26	64.5	2.48	40	1.61	
P 204	Classroom	26	64.5	2.48	35	1.84	
P 208	Classroom	26	69.0	2.65	35	1.97	
P 101	Classroom	32	68.1	2.13	35	1.95	
P 102	Classroom	32	68.1	2.13	35	1.95	
P 103	Classroom	35	68.5	1.96	35	1.96	
P 105	Classroom	36	68.9	1.91	35	1.97	
P 205	Classroom	32	87.7	2.74	45	1.95	
Totals/ Averages		297	715.8	2.41	376	1.90	

TABLE C2: Existing and New Film Centre Teaching Labs & Studios Space Inventory

Room	Room Type		Actual			FIS		Notes
	General	Detailed	No. of Seats	NSM	NSM per No. Seats	FIS Seat Capacity (theoretical)	FIS NSM per Seat	
AR 001	Studio, Theatre/Movement	Theatre Studio	36-96	173.5	4.82 to 1.81	96	1.81	Exist Seat Cap has a range of 36-96 to reflect different activities (96 = FIS 26 chairs at tables + 24 PC stations)
AR 120	Lab, Language	Lang. Res. Ctre	50	147.6	2.95	43	3.43	
AR 201	Studio, Fine Arts	Textiles	23	145.7	6.33	29	5.02	
AR 206	Studio, Fine Arts	Textiles	23	113.3	4.93	23	4.93	
AR 209	Studio, Dedicated Digital	INTE Studio	26	148.3	5.70	44	3.37	
AR 213	Studio, Dedicated Digital	IDEA 2nd Yr Studio	32	151.1	4.72	44	3.43	
AR 301	Studio, Fine Arts	Drawing/ Painting	29	144.8	4.99	29	4.99	Assume FIS seat capacity
AR 305	Studio, Dedicated Digital	IDEA 3rd Yr Studio	33	149.3	4.52	30	4.98	
AR 310	Studio, Dedicated Digital	IDEA 1st Yr Studio	28	150.0	5.36	100	1.50	
BR 002	Studio, Theatre/Movement	Theatre Rehearsal	60	116.9	1.95	60	1.95	Assume FIS seat capacity
BR 107	Studio, Technical Theatre	Theatre Back Stage Tech./ Prod.	10	90.5	9.05	18	5.00	Cap U seat cap congested space will not support many students
BR 335	Lab, Language	Language	27	73.6	2.73	22	3.35	Seat cap based on number of PC stations (there are also 16 chairs at tables).
CE 141	Lab, ECCE	ECCE	32	75.5	2.36	11	6.86	Cap U seat cap as ECCE lab CE141 has 2 rms (~131 nsm total)
CE 228	Lab, Computer	Computer, General	26	75.2	2.89	22	3.42	
FR 103	Studio, Music	Music, Keyboard	20	52.8	2.64	21	2.50	
FR 106	Studio, Music	Music, Choir/ Ensemble/ Band	14	36.0	2.57	14	2.50	Assume FIS seat capacity
FR 109	Studio, Music	Music, Choir/ Ensemble/ Band	16	41.2	2.58	16	2.50	Assume FIS seat capacity
FR 110	Studio, Music	Music, Computer Keyboard	12	61.7	5.14	32	1.93	Very large compositional computer keyboard stations.
FR 113	Studio, Music	Music, Choir/ Ensemble/ Band	53	102.5	1.93	53	1.95	Assume FIS seat capacity
FR 119	Studio, Music	Music Therapy	20	63.9	3.20	33	1.95	Significant music instrument and equip sto
FR 204	Lab, Health Skills	Health Skills/ Nursing	20	138.6	6.93	20	6.93	
FR 210	Lab, Computer	Computer, ABT	36	113.5	3.15	33	3.44	
FR 212	Lab, Computer	Computer, ABT	36	123.2	3.42	36	3.42	
FR 213	Lab, Computer	Computer, Business	34	119.4	3.51	35	3.41	
FR 215	Lab, Computer	Computer, ABT	36	127.4	3.54	37	3.44	
FR 301	Lab, Science	Biology, 1st/ 2nd Yr	24	155.1	6.46	31	5.00	Cap U seat capacity
FR 302	Lab, Science	Physics, 1st/ 2nd Yr	20	119.8	5.99	40	3.00	Cap U seat capacity
FR 303	Lab, Science	Biology, 1st Yr	24	154.9	6.45	31	5.00	Cap U seat capacity
FR 306	Lab, Science	Chemistry, 1st Yr	20	98.2	4.91	20	4.91	
FR 308	Lab, Science	Chemistry, 1st Yr	20	99.3	4.97	20	4.97	
FR 309	Lab, Science	Biology, 1st/ 2nd Yr	24	137.0	5.71	27	5.07	Cap U seat capacity
FR 310	Lab, Science	Chemistry, 2nd Yr	20	98.6	4.93	20	4.93	
HR 112	Studio, Technical Theatre	Thre, Tech. Th., Music Ther, PMTI	29	87.6	3.02	29	3.02	Assume FIS seat capacity
HR 118	Studio, Theatre/Movement	Theatre, Movement	30	150.6	5.02	30	5.00	Assume FIS seat capacity
LB 190A	Lab, Computer	Computer, Film	17	48.2	2.84	14	3.44	
LB 217	Studio, Film	Studio, Film Set Constr.	36	164.9	4.58	85	1.94	Cap U seat capacity as large structure(s) occupy much of the space
LB 302	Lab, Computer	Computer, General	35	102.0	2.91	30	3.40	
LB 306	Lab, Computer	ANIM, Dig. Com. Computer	24	81.7	3.40	24	3.40	
LB 316	Studio, Dedicated Digital	ANIM, 1st Yr Drafting	24	122.6	5.11	36	3.41	
LB 317	Studio, Dedicated Digital	ANIM, 2nd Yr Dig. Com.	24	94.6	3.94	28	3.38	
LB 319	Studio, Dedicated Digital	ANIM, Dig. Com.	24	76.8	3.20	23	3.34	
MA 101	Studio, Fine Arts	Costume Making	24	79.1	3.30	41	1.95	
MA 103	Lab, Computer	Media Arts, Computer	12	44.7	3.73	8	5.59	
MA 123	Studio, Fine Arts	Sculpture, Ceramics	24	170.3	7.10	23	7.40	Cap U seat capacity
P 110	Studio, Film	Film	30	67.9	2.26	35	1.94	Cap U seat capacity
SA 100	Studio, Fine Arts	Sculpture, Clay/ Plaster	13	97.4	7.49	13	7.49	Assume FIS seat capacity
SA 101	Studio, Fine Arts	Sculpture, Woodshop	13	191.7	14.75	13	14.75	Assume FIS seat capacity
SA 102	Studio, Fine Arts	Printmaking	25	189.2	7.57	38	4.98	Cap U seat capacity
SA 103	Studio, Fine Arts	Drawing/ Painting, 2nd yr	25	124.8	4.99	25	4.99	
SA 104	Studio, Fine Arts	Drawing/ Painting, 2nd yr	30	156.3	5.21	31	5.04	
TV 101	Studio, Film	Film, TV Studio	22	124.5	5.66	25	5.00	
Totals/Averages			1,345 to 1,405	5,773.3	4.36 to 4.42	1,641	4.12	
New Film Centre								
FC 117	Multipurpose	-	35	81.0	2.31	na	na	
FC 306	Lab, Computer	COMMERCIAL ANIMATION	25	96.0	3.84	na	na	
FC 310	Lab, Computer	DIGITAL ANIMATION COMPUTER	25	97.0	3.88	na	na	
FC 314	Lab, Computer	VISUAL EFFECTS	25	97.0	3.88	na	na	
FC 317	Classroom	ANIMATION	25	116.0	4.64	na	na	
FC 318	Classroom	INDIGENOUS FILM	25	97.0	3.88	na	na	
FC 322	Lab, Computer	MACLAB	30	97.0	3.23	na	na	
FC 326	Lab, Computer	MACLAB	30	97.0	3.23	na	na	
FC 330	Lab, Computer	MACLAB	30	97.0	3.23	na	na	
FC 334	Lab, Computer	MACLAB	25	97.0	3.88	na	na	
FC 335	Classroom	ANIMATION	25	114.0	4.56	na	na	
FC 22	Studio	MAIN STAGE AND GREEN-SCREEN	60 to	732.0	12.20 to	na	na	Dividable into 3 studios of 20-30 seats each
FC 25	Studio	COSTUMING STUDIO	20	86.0	4.30	na	na	
FC 31	Studio	COSTUMING STUDIO	20	90.0	4.50	na	na	
Totals/Averages			400 to 430	1,994.0	4.99 to 4.64	na	na	

**TABLE C3:
Classroom Time
Utilization Summary
(Hrs per Peak Week)**

Room	Room Type	Room Capacity	FALL TERM									SPRING TERM									SUMMER TERM									
			39 Hrs/Wk (daytime)			54 Hrs/Wk (day-even.)			15 Hrs/Wk (evening)			39 Hrs/Wk (daytime)			54 Hrs/Wk (day-even.)			15 Hrs/Wk (evening)			39 Hrs/Wk (daytime)			54 Hrs/Wk (day-even.)			15 Hrs/Wk (evening)			
			Instructi- onal Time	Non- Instructi- onal Time	Total	Instructi- onal Time	Non- Instructi- onal Time	Total	Instructi- onal Time	Non- Instructi- onal Time	Total	Instructi- onal Time	Non- Instructi- onal Time	Total	Instructi- onal Time	Non- Instructi- onal Time	Total	Instructi- onal Time	Non- Instructi- onal Time	Total	Instructi- onal Time	Non- Instructi- onal Time	Total	Instructi- onal Time	Non- Instructi- onal Time	Total	Instructi- onal Time	Non- Instructi- onal Time	Total	
AR 116	Classroom	21-30	18.0	1.0	19.0	18.0	1.0	19.0	0.0	0.0	0.0	20.5	6.5	27.0	20.5	6.5	27.0	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	3.0	7.0	0.0	3.0	3.0
AR 117	Classroom	31-40	24.0		24.0	27.5		27.5	8.0	8.0	25.0	10.0		35.0	25.5	14.5	40.0	6.0	6.0	13.0			13.0	13.0		13.0	4.0	4.0	4.0	
AR 124	Classroom	21-30	11.5		11.5	11.5		11.5	0.0	0.0	29.5			29.5	29.5		29.5	0.0	0.0											
AR 125	Classroom	41-50	31.5		31.5	31.5		31.5	3.0	3.0	32.5	3.0		35.5	33.0	3.0	36.0	3.0	3.0	11.0			11.0	11.0	8.0	19.0	3.0	6.0	9.0	
AR 304	Classroom	31-40	32.5	1.0	33.5	33.0	2.0	35.0	9.0	9.0	35.0			35.0	35.0		35.0	7.0	7.0	22.5			22.5	22.5		22.5	12.0	12.0	12.0	
AR 312	Classroom	31-40	28.0	3.0	31.0	28.0	3.0	31.0	9.0	9.0	16.0	2.5		18.5	16.0	4.0	20.0	3.0	3.0	18.0			18.0	18.0		18.0	6.0	6.0	6.0	
AR 314	Classroom	31-40	28.5		28.5	28.5		28.5	3.0	3.0	32.5			32.5	33.0		33.0	6.0	6.0	22.0			22.0	22.0		22.0	6.0	6.0	6.0	
AR 315	Classroom	51-60	25.5		25.5	25.5		25.5	3.8	3.8	22.5			22.5	22.5		22.5	0.0	0.0	12.0			12.0	12.0		12.0	0.0	0.0	0.0	
BR 101	Classroom	91-200									4.0			4.0	4.0		4.0	0.0	0.0											
BR 125	Classroom	31-40	30.0		30.0	30.0		30.0	3.0	3.0	30.0			30.0	30.0	1.0	31.0	9.0	9.0	18.5	2.0		20.5	20.0	2.0	22.0	6.0	6.0	6.0	
BR 161	Classroom	41-50	22.5		22.5	22.5		22.5	0.0	0.0	19.0	3.0		22.0	19.0	3.0	22.0	0.0	0.0	10.0			10.0	10.0		10.0	0.0	0.0	0.0	
BR 162	Classroom	31-40	26.5	1.5	28.0	26.5	2.8	29.3	9.0	9.0	27.5	3.0		30.5	27.5	3.0	30.5	6.0	6.0	14.0			14.0	14.0		14.0	0.0	0.0	0.0	
BR 166	Classroom	31-40	29.5		29.5	29.5		29.5	0.0	0.0	37.0			37.0	37.5	6.0	43.5	6.0	6.0	14.0			14.0	14.0		14.0	0.0	0.0	0.0	
BR 168	Classroom	41-50	26.0		26.0	26.0		26.0	0.0	0.0	32.5	3.0		35.5	33.0	4.5	37.5	3.0	3.0	12.5			12.5	14.0		14.0	0.0	0.0	0.0	
BR 203	Classroom	31-40	25.5	7.0	32.5	25.5	7.0	32.5	0.0	0.0	32.5			32.5	33.0	1.0	34.0	9.0	9.0	25.5	3.5		29.0	37.5	8.5	46.0	3.0	3.0	6.0	
BR 205	Classroom	51-60	30.0	1.5	31.5	30.0	1.5	31.5	0.0	0.0	25.0	3.0		28.0	25.0	3.0	28.0	0.0	0.0	25.5			25.5	37.5		37.5	3.0	3.0	3.0	
BR 247	Classroom	41-50	33.0		33.0	33.0	2.0	35.0	1.0	2.0	30.0	6.0		36.0	30.0	6.0	36.0	0.0	0.0	9.0	3.0		12.0	9.0	3.0	12.0	0.0	0.0	0.0	
BR 263	Classroom	41-50	27.0	2.5	29.5	27.0	2.5	29.5	0.0	0.0	21.0	14.5		35.5	21.0	17.5	38.5	0.0	0.0	10.0			10.0	10.0	2.5	12.5	0.0	0.0	0.0	
BR 265	Classroom	41-50	34.0		34.0	34.0		34.0	0.0	0.0	27.0	7.5		34.5	27.0	12.0	39.0	6.0	6.0	13.5			13.5	23.0		23.0	6.0	6.0	6.0	
BR 310	Classroom	21-30	25.5		25.5	28.5		28.5	0.0	0.0	26.2			26.2	26.2		26.2	0.0	0.0											
BR 321	Classroom	41-50	25.0		25.0	25.0		25.0	0.0	0.0	27.5	3.5		31.0	28.0	6.5	34.5	0.0	2.0	12.0			12.0	12.0		12.0	0.0	0.0	0.0	
BR 322	Classroom	41-50	23.0		23.0	23.0		23.0	0.0	0.0	29.0			29.0	29.5		29.5	0.0	0.0	2.0			2.0	2.0		2.0	0.0	0.0	0.0	
BR 323	Classroom	31-40	31.0		31.0	31.0		31.0	9.0	9.0	32.5			32.5	32.5		32.5	8.0	8.0	23.7			23.7	23.7		23.7	6.0	6.0	6.0	
BR 324	Classroom	21-30	14.5		14.5	16.0		16.0	0.0	0.0	11.5			11.5	12.0		12.0	0.0	0.0	6.5			6.5	7.5		7.5	0.0	0.0	0.0	
BR 328	Classroom	31-40	27.5		27.5	27.5		27.5	0.0	0.0	30.0			30.0	30.0		30.0	0.0	0.0											
BR 342	Classroom	0-20	11.0		11.0	11.0		11.0	0.0	0.0																				
BR 343	Classroom	31-40	24.3		24.3	24.3		24.3	3.0	3.0	22.0			22.0	22.0		22.0	4.0	4.0	6.8			6.8	6.8		6.8	3.0	3.0	3.0	
BR 377	Classroom	21-30	22.3		22.3	22.3		22.3	3.0	3.0	27.0			27.0	27.0		27.0	3.0	3.0	10.2			10.2	10.2		10.2	3.0	3.0	3.0	
BR 381	Classroom	31-40	29.8		29.8	29.8		29.8	0.0	0.0	32.5	1.5		34.0	32.5	1.5	34.0	1.0	1.0	14.2			14.2	14.2		14.2	0.0	0.0	0.0	
BR 382	Classroom	21-30	16.0		16.0	16.0		16.0	0.0	0.0	16.0	3.0		19.0	16.0	3.0	19.0	0.0	0.0	0.5			0.5	1.0		1.0	0.0	0.0	0.0	
BR 424	Classroom	61-60	26.5	3.5	30.0	27.0	3.5	30.5	0.0	0.0	25.0	7.5		32.5	25.5	7.5	33.0	0.0	0.0	39.0			39.0	54.0		54.0	15.0	15.0	15.0	
CE 120	Classroom	31-40	35.5		35.5	36.0		36.0	6.0	6.0	34.0			34.0	34.5		34.5	6.0	6.0	39.0			39.0	39.0		39.0	15.0	15.0	15.0	
CE 122	Classroom	31-40	32.5		32.5	33.0		33.0	10.5	10.5	23.1	4.0		27.1	23.1	4.0	27.1	0.0	0.0	4.0			4.0	4.0		4.0	0.0	0.0	0.0	
CE 124	Classroom	21-30	32.5		32.5	32.5		32.5	0.0	0.0	33.0	4.5		37.5	33.0	9.0	42.0	1.0	1.0											
CE 134	Classroom	31-40	29.0		29.0	29.0		29.0	3.0	3.0	29.5	1.5		31.0	29.5	4.5	34.0	3.0	3.0	3.0			3.0	3.0		3.0	0.0	0.0	0.0	
CE 135	Classroom	31-40	30.5	1.5	32.0	30.5	1.5	32.0	3.0	3.0	25.0	1.5		26.5	25.0	1.5	26.5	6.0	6.0											
CE 136	Classroom	31-40	30.0		30.0	30.0		30.0	0.0	0.0	23.5			23.5	24.0	4.5	28.5	0.0	3.0	3.0			39.0	39.0		54.0	54.0	15.0	15.0	
CE 140	Classroom	41-50	32.0	1.5	33.5	32.5	1.5	34.0	6.0	6.0	30.5			30.5	30.5		30.5	7.8	7.8	5.5			5.5	13.0		13.0	6.0	6.0	6.0	
CE 148	Classroom	91-200	18.0	2.5	20.5	18.0	4.0	22.0	3.0	3.0	12.0	1.5		13.5	12.0	1.5	13.5	3.0	3.0	2.0			2.0	2.0		4.0	4.0	2.0	2.0	
CE 221	Classroom	31-40	32.5		32.5	33.0		33.0	6.0	6.0	30.0	1.5		31.5	30.0	1.5	31.5	0.0	0.0	39.0			39.0	39.0		54.0	54.0	15.0	15.0	
CE 222	Classroom	31-40	30.0		30.0	30.0	2.0	32.0	5.0	2.0	7.0	27.0	6.0		33.0	27.5	9.0	36.5	3.0	1.5		4.5	4.5		4.5	0.0	0.0	0.0		
CE 224	Classroom	31-40	27.0	1.0	28.0	27.0	1.0	28.0	6.0	6.0	28.5	4.0		32.5	29.0	4.0	33.0	9.0	9.0											
CE 225	Classroom	31-40	15.5		15.5	15.5		15.5	1.0	1.0	17.0	16.5		33.5	17.0	21.0	38.0	0.0	0.0											
CE 231	Classroom	31-40	30.5		30.5	31.0		31.0	3.0	3.0	34.0			34.0	34.5		34.5	1.5	1.5	39.0			39.0	39.0		54.0	54.0	15.0	15.0	
CE 233	Classroom	41-50	29.5		29.5	29.5		29.5	0.0	0.0	31.5			31.5	31.5		31.5	3.0	3.0											
CE 237	Classroom	31-40	27.0		27.0	27.0		27.0	6.0	6.0	34.5			34.5	34.5		34.5	10.5	10.5				6.5	6.5		9.5	9.5		0.0	0.0
CE 238	Classroom	31-40	24.5		24.5	24.5		24.5	0.0	0.0	32.5	1.5		34.0	32.5	3.0	35.5	6.0	6.0	39.0			39.0	39.0		54.0	54.0	15.0	15.0	
CE 344	Classroom	21-30	5.0	5.0	10.0	5.0	5.0	10.0	0.0	0.0				35.5	35.5		42.5	42.5	0.0	0.0										
FR 111	Classroom	21-30	30.0		30.0	30.0		30.0	11.0	11.0	32.5			32.5	32.5		32.5	9.0	9.0											
FR 112	Classroom	21-30	20.5		20.5	20.5		20.5	3.0	3.0	34.0			34.0	34.0		34.0	9.0	9.0											
FR 205	Classroom	21-30	30.0		30.0	30.0		30.0	0.0	0.0	26.8			26.8	27.3		27.													



**TABLE C4:
Classroom Seat Utilization Summary (% Peak Week)**

Room	Room Capacity	Range	FALL TERM		SPRING TERM		SUMMER TERM	
			39 Hrs/Wk (daytime)	15 Hrs/Wk (evening)	39 Hrs/Wk (daytime)	15 Hrs/Wk (evening)	39 Hrs/Wk (daytime)	15 Hrs/Wk (evening)
AR116	Classroom	21-30	87.0%		75.4%		79.2%	
AR117	Classroom	31-40	69.1%	32.2%	59.6%	88.8%	66.5%	67.5%
AR124	Classroom	21-30	81.0%		74.3%			
AR125	Classroom	41-50	79.4%	76.2%	77.3%	90.5%	60.0%	73.8%
AR304	Classroom	31-40	92.9%	77.8%	78.4%	69.4%	95.0%	70.8%
AR312	Classroom	31-40	100.0%	91.7%	83.9%	100.0%	61.1%	75.0%
AR314	Classroom	31-40	89.9%	72.5%	80.5%	80.0%	57.7%	95.0%
AR315	Classroom	51-60	64.9%	7.0%	63.7%		54.4%	
BR101	Classroom				4.0%			
BR125	Classroom	31-40	83.4%	50.0%	80.5%	85.0%	63.4%	100.0%
BR161	Classroom	41-50	76.3%		86.6%		63.8%	
BR162	Classroom	31-40	89.5%	90.8%	83.0%	95.0%	53.9%	
BR166	Classroom	31-40	82.5%		79.6%		54.1%	
BR168	Classroom	41-50	73.3%		77.9%	50.0%	54.1%	
BR203	Classroom	31-40	78.7%		76.2%	86.7%	35.0%	35.0%
BR205	Classroom	51-60	56.1%		57.9%		25.0%	25.0%
BR247	Classroom	41-50	62.5%	62.0%	65.4%		70.0%	
BR263	Classroom	41-50	70.0%		43.5%		67.6%	
BR265	Classroom	41-50	61.6%		74.8%	78.1%		
BR310	Classroom	21-30	76.0%		72.0%			
BR321	Classroom	41-50	76.0%		78.7%		52.4%	
BR322	Classroom	41-50	77.1%		79.7%			
BR323	Classroom	31-40	62.9%	67.8%	61.2%	69.7%	64.1%	61.3%
BR324	Classroom	21-30	110.8%		113.6%		100.0%	
BR338	Classroom	31-40	63.8%		68.8%			
BR342	Classroom	0-20	65.0%					
BR343	Classroom	31-40	66.5%	77.8%	61.5%	57.6%	66.6%	55.6%
BR377	Classroom	21-30	92.5%	103.8%	94.3%	114.1%	92.6%	84.6%
BR381	Classroom	31-40	76.1%		73.7%	81.3%	73.9%	
BR382	Classroom	21-30	61.1%		70.0%			
BR424	Classroom	51-60	69.1%		64.0%			
CE120	Classroom	31-40	94.7%	84.2%	88.8%	89.5%		
CE122	Classroom	31-40	79.3%	83.6%	85.1%		42.5%	
CE124	Classroom	21-30	77.1%		77.9%	79.2%		
CE134	Classroom	31-40	74.9%	40.0%	78.7%	105.7%	88.6%	
CE135	Classroom	31-40	69.6%	86.8%	85.4%	77.6%		
CE136	Classroom	31-40	84.5%		74.2%			
CE140	Classroom	41-50	71.2%	67.0%	73.4%	53.2%		
CE148	Classroom	91-200	33.6%	18.5%	31.2%	13.0%		
CE221	Classroom	31-40	87.4%	77.6%	74.5%			
CE222	Classroom	31-40	61.2%	44.5%	76.2%	52.5%		
CE224	Classroom	31-40	87.3%	98.6%	75.9%	90.1%		
CE225	Classroom	31-40	74.6%	61.1%	82.5%			
CE231	Classroom	31-40	81.4%	85.0%	86.3%	80.0%		
CE233	Classroom	41-50	60.2%		66.0%	75.0%		
CE237	Classroom	31-40	73.3%	68.9%	79.1%	90.1%		
CE238	Classroom	31-40	78.8%		84.7%	85.0%		
CE344	Classroom	21-30	73.1%					
FR111	Classroom	21-30	65.4%	43.3%	58.1%	51.5%		
FR112	Classroom	21-30	67.7%	55.0%	54.4%	35.6%		
FR205	Classroom	21-30	90.9%		82.0%			
FR206	Classroom	41-50	66.4%	84.9%	56.6%	77.9%	41.4%	
FR207	Classroom	0-20	115.0%		115.0%			
FR209	Classroom	21-30	66.3%		65.8%		70.0%	
FR211	Classroom	21-30	61.0%	64.0%	60.7%	32.1%	60.7%	60.7%
FR503	Classroom	31-40	89.1%		97.6%			
FR509	Classroom	0-20	60.0%		60.0%			
HR102	Classroom				50.0%			
HR114	Classroom	41-50	66.8%	40.5%	66.0%		41.3%	
HR115	Classroom	31-40	82.8%	77.5%	79.1%	73.8%		
HR116	Classroom	31-40	55.0%		50.0%		77.5%	
HR117	Classroom	41-50	50.7%		52.6%	45.2%	45.2%	45.2%
LB133	Classroom	21-30	69.7%	45.5%	60.8%			
LB143	Classroom	31-40	81.2%	93.0%	70.3%	103.5%	68.7%	
LB145	Classroom	41-50	72.5%	38.1%	68.9%	57.1%	85.7%	
LB185	Classroom	31-40	66.3%		78.9%	55.3%	107.9%	
LB186	Classroom	31-40	70.7%	70.4%	84.4%	25.0%	67.5%	70.0%
LB188	Classroom	71-90	44.5%		44.3%	9.6%	30.1%	69.9%
LB189	Classroom	41-50	67.5%	70.8%	65.7%	75.7%	42.5%	45.8%
LB194	Classroom	31-40	80.4%	78.9%	93.7%	98.7%	83.2%	105.3%
LB195	Classroom	41-50	73.9%	90.5%	52.2%	65.9%	65.9%	
LB214	Classroom	31-40	92.7%	86.8%	89.7%	62.9%		
LB215	Classroom	31-40	82.6%		76.0%		61.1%	
LB321	Classroom					130.0%		
LB322	Classroom	51-60		31.7%		86.7%		
MA102	Classroom	31-40	82.1%		68.2%		95.4%	72.2%
P101	Classroom	31-40	92.9%		86.5%			
P102	Classroom	31-40	89.8%		70.5%			
P103	Classroom	31-40	74.3%		72.1%			
P104	Classroom	21-30	66.4%		68.2%			
P105	Classroom	31-40	47.2%		39.8%			
P201	Classroom	21-30	109.1%		90.9%			
P202	Classroom	21-30	90.3%		73.1%			
P204	Classroom	21-30	115.4%		103.8%			
P205	Classroom	31-40	63.8%		56.3%			
P208	Classroom				100.5%			
AVERAGES			71.3%	31.1%	68.8%	35.9%	30.3%	14.1%



TABLE C5:
Teaching
Labs &
Studios
Time
Utilization
Summary
(Hrs per
Peak
Week)

General Room Type	Rm	FALL									SPRING									SUMMER								
		39 Hrs/Wk (daytime)			54 Hrs/Wk (day+even.)			15 Hrs/Wk (evening)			39 Hrs/Wk (daytime)			54 Hrs/Wk (day+even.)			15 Hrs/Wk (evening)			39 Hrs/Wk (daytime)			54 Hrs/Wk (day+even.)			15 Hrs/Wk (evening)		
		Instructi- onal Time	Non- Instructi- onal Time	Total	Instructi- onal Time	Non- Instructi- onal Time	Total	Instructi- onal Time	Non- Instructi- onal Time	Total	Instructi- onal Time	Non- Instructi- onal Time	Total	Instructi- onal Time	Non- Instructi- onal Time	Total	Instructi- onal Time	Non- Instructi- onal Time	Total	Instructi- onal Time	Non- Instructi- onal Time	Total	Instructi- onal Time	Non- Instructi- onal Time	Total	Instructi- onal Time	Non- Instructi- onal Time	Total
Computer	CE223	4.0	4.5	8.5	4.0	4.5	8.5	0.0	0.0	0.0	14.0	0.0	14.0	15.5	0.0	15.5	0.0	0.0	0.0	0.0	2.5	2.5	2.5	0.0	0.0	0.0		
Computer	FR210	22.5	0.0	22.5	22.5	0.0	22.5	0.0	0.0	0.0	25.5	6.0	31.5	25.5	8.0	33.5	0.0	2.0	2.0	2.0	21.0	4.0	25.0	21.0	8.5	29.5		
Computer	FR212	23.0	0.0	23.0	23.0	0.0	23.0	0.0	0.0	0.0	22.5	6.0	28.5	24.0	8.0	32.0	3.0	2.0	5.0	19.5	2.5	22.0	21.0	2.5	23.5			
Computer	FR213	25.0	0.0	25.0	25.0	0.0	25.0	9.0	0.0	9.0	13.5	0.0	13.5	13.5	0.0	13.5	3.0	0.0	3.0	18.0	0.0	18.0	18.0	0.0	18.0			
Computer	FR215	16.5	0.0	16.5	16.5	0.0	16.5	0.0	0.0	0.0	21.0	7.5	28.5	21.0	14.0	35.0	0.0	5.0	5.0	12.0	1.5	13.5	12.0	1.5	13.5			
Computer	LB190A	15.0	0.0	15.0	15.0	0.0	15.0	0.0	0.0	0.0																		
Computer	LB302	16.5	0.5	17.0	16.5	2.0	18.5	4.5	0.0	4.5	14.5	2.0	16.5	14.5	5.0	19.5	1.5	3.0	4.5	21.0	0.0	21.0	21.0	0.0	21.0			
Computer	LB306	17.5	0.0	17.5	17.0	0.0	17.0	6.0	0.0	6.0	20.5	0.0	20.5	22.0	0.0	22.0	6.0	0.0	6.0									
Computer	MA103	5.5	0.0	5.5	5.5	0.0	5.5	0.0	0.0	0.0	6.0	0.0	6.0	6.0	0.0	6.0	0.0	0.0	0.0									
Dedicated Digital (ANIM, IDEA, etc.)	AR209	22.0	0.0	22.0	22.0	0.0	22.0	0.0	0.0	0.0	28.0	0.0	28.0	28.0	0.0	28.0	0.0	0.0	0.0									
	AR213	20.0	0.0	20.0	20.0	0.0	20.0	0.0	0.0	0.0	27.5	0.0	27.5	27.5	0.0	27.5	0.0	0.0	0.0									
	AR305	23.5	0.0	23.5	23.5	0.0	23.5	0.0	0.0	0.0	27.0	0.0	27.0	27.0	0.0	27.0	0.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0			
	AR310	28.0	0.0	28.0	28.0	0.0	28.0	0.0	0.0	0.0	15.0	0.0	15.0	15.0	0.0	15.0	0.0	0.0	0.0									
	LB217																			26.5	0.0	26.5	30.0	0.0	30.0			
	LB316	17.0	0.0	17.0	17.0	0.0	17.0	0.0	0.0	0.0	14.0	0.0	14.0	14.0	0.0	14.0	0.0	0.0	0.0									
	LB317	4.0	0.0	4.0	4.0	0.0	4.0	0.0	0.0	0.0	11.0	0.0	11.0	11.0	0.0	11.0	0.0	0.0	0.0									
	LB319	8.5	0.0	8.5	8.5	0.0	8.5	0.0	0.0	0.0	11.0	0.0	11.0	11.0	0.0	11.0	0.0	0.0	0.0									
ECCE	CE141	34.5	0.0	34.5	34.5	0.0	34.5	10.0	0.0	10.0	26.5	0.0	26.5	26.5	0.0	26.5	12.0	0.0	12.0									
Film	LB217	9.0	0.0	9.0	9.0	0.0	9.0	0.0	0.0	0.0																		
	P110	8.5	0.0	8.5	8.5	0.0	8.5	0.0	0.0	0.0	39.0	0.0	39.0	50.0	0.0	50.0	0.0	0.0	0.0									
	TV101	11.5	0.0	11.5	11.5	0.0	11.5	0.0	0.0	0.0	6.0	0.0	6.0	6.0	0.0	6.0	0.0	0.0	0.0									
Fine Arts	AR201	25.0	0.0	25.0	25.0	0.0	25.0	3.0	0.0	3.0	23.0	0.0	23.0	23.0	0.0	23.0	0.0	0.0	0.0									
	AR206	15.5	0.0	15.5	15.5	0.0	15.5	0.0	0.0	0.0	11.5	0.0	11.5	11.5	0.0	11.5	0.0	0.0	0.0									
	AR301	21.0	0.0	21.0	21.0	0.0	21.0	0.0	0.0	0.0	21.0	0.0	21.0	21.0	0.0	21.0	0.0	0.0	0.0									
	MA101	39.0	0.0	39.0	41.0	0.0	41.0	4.0	0.0	4.0																		
	MA123	20.5	0.0	20.5	20.5	0.0	20.5	0.0	0.0	0.0	17.5	0.0	17.5	17.5	0.0	17.5	0.0	0.0	0.0									
	SA100	22.0	0.0	22.0	22.0	0.0	22.0	0.0	0.0	0.0	20.0	0.0	20.0	20.0	0.0	20.0	0.0	0.0	0.0									
	SA101										27.0	0.0	27.0	27.0	0.0	27.0	0.0	0.0	0.0									
	SA102	21.5	0.0	21.5	21.5	0.0	21.5	0.0	0.0	0.0	19.5	0.0	19.5	19.5	0.0	19.5	0.0	0.0	0.0									
	SA103	21.5	0.0	21.5	21.5	0.0	21.5	0.0	0.0	0.0	12.0	0.0	12.0	12.0	0.0	12.0	3.0	0.0	3.0									
	SA104	19.0	0.0	19.0	19.0	0.0	19.0	0.0	0.0	0.0	34.0	0.0	34.0	34.0	0.0	34.0	4.0	0.0	4.0	13.0	0.0	13.0	13.0	0.0	13.0			
Health Skills	FR204	23.5	0.0	23.5	23.5	0.0	23.5	2.5	0.0	2.5	3.2	35.8	39.0	3.2	50.8	54.0	0.0	15.0	15.0									
Language	AR120	2.0	0.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0									
	BR335	33.0	0.0	33.0	33.0	0.0	33.0	1.5	0.0	1.5	28.5	0.0	28.5	28.5	0.0	28.5	0.0	0.0	0.0	21.0	0.0	21.0	22.0	0.0	22.0			
Music	FR103	24.0	0.0	24.0	24.0	0.0	24.0	0.0	0.0	0.0	27.5	0.0	27.5	28.0	0.0	28.0	0.0	0.0	0.0									
	FR106	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0									
	FR109	5.5	0.0	5.5	5.5	0.0	5.5	11.5	0.0	11.5	7.0	0.0	7.0	7.0	0.0	7.0	7.0	0.0	7.0									
	FR110	13.0	0.0	13.0	13.0	0.0	13.0	11.5	0.0	11.5	14.0	0.0	14.0	14.0	0.0	14.0	4.5	0.0	4.5									
	FR113	21.0	0.0	21.0	21.0	0.0	21.0	12.5	0.0	12.5	22.0	0.0	22.0	22.0	0.0	22.0	12.5	0.0	12.5									
	FR119	23.0	0.0	23.0	23.0	0.0	23.0	2.0	0.0	2.0	12.5	0.0	12.5	12.5	0.0	12.5	0.0	0.0	0.0									
Science	FR301	9.0	0.0	9.0	9.0	0.0	9.0	0.0	0.0	0.0	10.0	0.0	10.0	10.0	0.0	10.0	3.0	0.0	3.0									
	FR302	15.5	0.0	15.5	15.5	0.0	15.5	5.5	0.0	5.5	16.0	0.0	16.0	16.0	0.0	16.0	6.0	0.0	6.0									
	FR303	15.0	0.0	15.0	15.0	0.0	15.0	6.0	0.0	6.0	18.0	0.0	18.0	18.0	0.0	18.0	0.0	0.0	0.0	10.0	0.0	10.0	10.0	0.0	10.0			
	FR306	17.5	0.0	17.5	17.5	0.0	17.5	6.0	0.0	6.0	15.0	0.0	15.0	15.0	0.0	15.0	3.0	0.0	3.0	6.0	0.0	6.0	6.0	0.0	6.0			
	FR308	15.0	0.0	15.0	15.0	0.0	15.0	3.0	0.0	3.0	9.0	0.0	9.0	9.0	0.0	9.0	3.0	0.0	3.0	6.0	0.0	6.0	6.0	0.0	6.0			
	FR309	11.5	0.0	11.5	11.5	0.0	11.5	3.0	0.0	3.0	12.0	0.0	12.0	12.0	0.0	12.0	9.0	0.0	9.0	4.0	0.0	4.0	4.0	0.0	4.0			
	FR310	6.0	0.0	6.0	6.0	0.0	6.0	6.0	0.0	6.0	6.0	0.0	6.0	6.0	0.0	6.0	3.0	0.0	3.0									
Technical Theatre	BR107	10.0	0.0	10.0	10.0	0.0	10.0	0.0	0.0	0.0	9.5	0.0	9.5	9.5	0.0	9.5	0.0	0.0	0.0									
	HR112	1.0	14.5	15.5	1.0	14.5	15.5	0.0	0.0	0.0	5.0	0.0	5.0	5.0	0.0	5.0	0.0	0.0	0.0	34.5	0.0	34.5	40.0	0.0	40.0			
Theatre/Movement	AR001	35.5	0.0	35.5	35.5	0.0	35.5	15.0	0.0	15.0	39.0	0.0	39.0	46.0	0.0	46.0	15.0	0.0	15.0									
	BR002	33.5	0.0	33.5	33.5	0.0	33.5	0.0	0.0	0.0	38.5	0.0	38.5	38.5	0.0	38.5	15.0	0.0	15.0									
	HR118	26.5	1.0	27.5	26.5	1.0	27.5	0.0	0.0	0.0	30.0	0.0	30.0	30.0	0.0	30.0	0.0	0.0	0.0									
TOTAL/AVERAGE		880.1	20.5	900.6	881.6	22.0	903.6	124.5	0.0	124.5	854.8	57.3	912.1	877.8	85.8	963.6	115.5	27.0	142.5	214.5	10.5	225.0	226.0	15.0	241.0			



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**TABLE C6:
Teaching
Labs &
Studios Seat
Utilization
Summary (%
Peak Week)**

Room	General Room Type	Room Capacity	FALL		SPRING		SUMMER	
			39 Hrs/Wk (daytime)	15 Hrs/Wk (evening)	39 Hrs/Wk (daytime)	15 Hrs/Wk (evening)	39 Hrs/Wk (daytime)	15 Hrs/Wk (evening)
CE223	Computer	26	79%	0%	78%	0%	0%	0%
FR210		36	86%	0%	90%	0%	85%	0%
FR212		36	91%	0%	95%	103%	75%	92%
FR213		34	92%	107%	113%	129%	104%	0%
FR215		36	95%	0%	90%	0%	64%	0%
LB190A		17	166%	0%	0%	0%	0%	0%
LB302		35	79%	71%	81%	89%	69%	0%
LB306		24	96%	98%	96%	96%	0%	0%
MA103		12	161%	0%	133%	0%	0%	0%
AR209	Dedicated Digital (ANIM, IDEA, etc.)	26	85%	0%	87%	0%	0%	0%
AR213		32	73%	0%	42%	0%	0%	0%
AR305		33	88%	0%	85%	0%	67%	0%
AR310		28	107%	0%	109%	0%	0%	0%
LB217		36	0%	0%	0%	0%	50%	0%
LB316		24	100%	0%	100%	0%	0%	0%
LB317		24	92%	0%	88%	0%	0%	0%
LB319		24	92%	0%	92%	0%	0%	0%
CE141	ECCE	32	76%	89%	66%	61%	0%	0%
LB217	Film	36	72%	0%	0%	0%	0%	0%
P110		30	73%	0%	60%	0%	0%	0%
TV101		22	100%	0%	91%	0%	0%	0%
AR201	Fine Arts	23	85%	52%	66%	0%	0%	0%
AR206		23	82%	0%	64%	0%	0%	0%
AR301		29	98%	0%	94%	0%	0%	0%
MA101		24	48%	0%	50%	0%	0%	0%
MA123		24	79%	0%	75%	0%	0%	0%
SA100		13	147%	0%	133%	0%	0%	0%
SA101		13	147%	162%	133%	0%	0%	0%
SA102		25	65%	0%	55%	0%	0%	0%
SA103		25	74%	0%	62%	52%	0%	0%
SA104		30	85%	0%	77%	83%	60%	0%
FR204	Health Skills	20	101%	95%	115%	0%	0%	0%
AR120	Language	50	21%	0%	21%	0%	0%	0%
BR335		27	67%	37%	71%	0%	50%	0%
FR103	Music	20	78%	0%	74%	0%	0%	0%
FR106		14	121%	121%	121%	121%	0%	0%
FR109		16	88%	86%	63%	101%	0%	0%
FR110		12	144%	114%	123%	141%	0%	0%
FR113		53	21%	32%	27%	37%	0%	0%
FR119		20	81%	95%	79%	0%	0%	0%
FR301	Science	24	88%	0%	58%	25%	0%	0%
FR302		20	83%	75%	77%	67%	0%	0%
FR303		24	66%	92%	79%	0%	86%	0%
FR306		20	91%	83%	86%	85%	60%	0%
FR308		20	91%	85%	85%	85%	85%	0%
FR309		24	54%	33%	78%	69%	92%	0%
FR310		20	38%	58%	58%	25%	0%	0%
BR107	Technical Theatre	10	104%	0%	95%	0%	0%	0%
HR112		29	31%	0%	28%	0%	48%	0%
AR001	Theatre/Movement	36-96	20%	21%	21%	20%	0%	0%
BR002		60	32%	0%	33%	32%	0%	0%
HR118		30	66%	0%	67%	0%	0%	0%
TOTALS/AVERAGES			83%	31%	74%	27%	19%	2%

**TABLE C7:
Classrooms
Section Hour
Analysis**

INCLUDING
SCHLMPA
Workload and
New Film Centre
Rms (w/out P-
Bldg)

Capacity	Existing No. Rms	39 Hr Wk (@80% utilization)			15 Evening Hrs (@60%		
		No. Schedule d Hrs	Theoretical Required No. Rms	Theoretical Shortfall/ Surplus	No. Schedule d Hrs	Theoretical Required No. Rms	Theoretical Shortfall/ Surplus
0-20	4	31.0	1	3	-	-	4
21-30	19	375.3	12	7	25.5	2	17
31-40	35	1,038.4	33	2	146.0	17	18
41-50	16	442.1	14	2	36.5	4	12
51-60	4	82.0	3	1	9.8	1	3
61-70	-	-	-	-	-	-	-
71-90	1	24.0	-	1	-	-	1
91-200	3	18.0	2	1	3.0	1	2
Totals	82	2,010.9	65	17	220.8	25	57

EXCLUDING
SCHLMPA
Workload and
New Film Centre
Rms (w/out P-
Bldg)

Capacity	Existing No. Rms	39 Hr Wk (@80% utilization)			15 Evening Hrs (@60%		
		No. Schedule d Hrs	Theoretical Required No. Rms	Theoretical Shortfall/ Surplus	No. Schedule d Hrs	Theoretical Required No. Rms	Theoretical Shortfall/ Surplus
0-20	4	31.0	1	3	-	-	4
21-30	14	321.8	10	4	25.5	2	12
31-40	35	921.9	29	6	146.0	17	18
41-50	16	442.1	15	1	36.5	4	12
51-60	4	82.0	2	2	9.8	1	3
61-70	-	-	-	-	-	-	-
71-90	1	24.0	1	-	-	-	1
91-200	2	18.0	1	1	3.0	1	1
Totals	76	1,840.8	59	17	220.8	25	51

**TABLE C8:
 Teaching Labs
 & Studios
 Section Hour
 Analysis**

Room	Rm Type	Existing Seat Capacity	Max Required Seat Capacity	Total Fall Term Hrs/Wk	Theoretical No. Rms Required (39 hr wk, 65% time utilization)	Actual (Rounded) No. Rms Required	No. Existing Rms	Existing Rm Required Y/N	Existing Seat Capacity minus Max Required Seat Capacity	Notes: Time Utilization
LB 316	ANIM, 1st Yr Drafting	24	25	17.0	0.67	1	1	Y	-1	
LB 317	ANIM, 2nd Yr Dig. Com.	24	22	4.0	0.16	1	1	Y	2	
LB 319	ANIM, Dig. Com.	24	22	8.5	0.34	1	1	Y	2	
LB 306	ANIM, Dig. Com. Computer	24	23	20.5	0.81	1	1	Y	1	
FR 303	Biology, 1st Yr	24	23	15.0	0.59	1	1	Y	1	
FR 301	Biology, 1st/2nd Yr	24	25	20.5	0.81	1	1	Y	-1	Assumes FR301 or 309 can accommodate Biol107 (4 sect@3hrs and 1.5 hrs), 110 (1 sect @2.5hrs), 208 (2 sect @3hrs), 214 (1 sect @3hrs)
FR 309	Biology, 1st/2nd Yr	24	25	-	-	-	1	N	-1	As above. One of FR 301 or 309 not required w/ current workload as 2 sections per day of same crse is practical in 1 room (Biol107, 208)
FR 306	Chemistry, 1st Yr	20	21	31.2	1.00	1	1	Y	-1	
FR 308	Chemistry, 1st Yr	20	21	1.3	0.28	1	1	Y	-1	
FR 310	Chemistry, 2nd Yr	20	12	6.0	0.24	1	1	Y	8	
CE 223	Computer, General	26	38	4.0	0.16	1	1	Y	-12	Very low utilization due to req for special software in CE223. Consider moving software to LB302 and repurposing CE223.
LB 302	Computer, General	35	38	16.5	0.65	1	1	Y	-3	As above.
FR 210	Computer, ABT	36	30	-	-	-	1	N	6	
FR 212	Computer, ABT	36	36	31.2	0.45	1	1	Y	0	
FR 215	Computer, ABT	36	36	30.8	1.00	1	1	Y	0	
FR 213	Computer, Business	34	40	25.0	0.99	1	1	Y	-6	
LB 190A	Computer, Film	17	31	15.0	0.59	1	1	Y	-14	
MA 101	Costume Making	24	12	19.0	0.75	1	1	Y	12	
AR 301	Drawing/ Painting	29	30	21.0	0.83	1	1	Y	-1	
SA 103	Drawing/ Painting, 2nd yr	25	24	9.3	0.60	1	1	Y	1	
SA 104	Drawing/ Painting, 2nd yr	30	28	31.2	1.00	1	1	Y	2	
CE 141	ECCE	32	31	34.5	1.36	1	1	Y	1	Assumes 1 lab only required as CE141 is comprised of 2 rms (~131 nsm total) and as some hrs may occur in Child Care Centre.
P 110	Film	30	22	8.5	0.34	Film Ctre	Film Ctre	na	8	Film Ctre analysis not undertaken
TV 101	Film, TV Studio	22	22	11.5	0.45	1	1	Y	0	
FR 204	Health Skills/ Nursing	20	23	23.5	0.93	1	1	Y	-3	
AR 310	IDEA 1st Yr Studio	28	30	28.0	1.10	1	1	Y	-2	Assumes 1 rm only required as cohort program
AR 213	IDEA 2nd Yr Studio	32	29	20.0	0.79	1	1	Y	3	
AR 305	IDEA 3rd Yr Studio	33	29	23.5	0.93	1	1	Y	4	
AR 209	INTE Studio	26	26	22.0	0.87	1	1	Y	0	
AR 120	Lang. Res. Ctre.	50	14	2.0	0.08	1	1	Y	36	Consider further analysis and possible reduction in size of LRC.
BR 335	Language	27	23	33.0	1.30	1	1	Y	4	Assumes 1 lab only required as overflow can occur in Langaugae Resource Centre.
MA 103	Media Arts, Computer	12	25	5.5	0.22	1	1	Y	-13	
FR 119	Music Therapy	20	19	23.0	0.91	1	1	Y	1	
FR 106	Music, Choir/ Ensemble/ Band	14	10	-	0.37	1	1	Y	4	Very low utilization. Rm required to allow for sections to split up into small groups.
FR 109	Music, Choir/ Ensemble/ Band	16	10	-	0.37	1	1	Y	6	Very low utilization. Rm required to allow for sections to split up into small groups.
FR 113	Music, Choir/ Ensemble/ Band	52	57	28.5	0.37	1	1	Y	-5	Very low utilization. Rm required to allow for sections to split up into small groups.
FR 110	Music, Computer Keyboard	12	26	13.0	0.51	1	1	Y	-14	
FR 103	Music, Keyboard	20	21	24.0	0.95	1	1	Y	-1	
FR 302	Physics, 1st/ 2nd Yr	20	19	15.5	0.61	1	1	Y	1	
SA 102	Printmaking	25	26	22.0	0.85	1	1	Y	-1	
SA 101	Sculpture, Woodshop	13	28	22.0	0.87	1	1	Y	-15	
MA 123	Sculpture, Ceramics	24	24	20.5	0.81	1	1	Y	0	
SA 100	Sculpture, Clay/ Plaster	13	28	22.0	0.87	1	1	Y	-15	
LB 217	Studio, Film Set Constr.	36	26	9.0	0.36	1	1	Y	10	
AR 201	Textiles	23	20	9.3	0.60	1	1	Y	3	Not all students work on looms at same time
AR 206	Textiles	23	24	31.2	1.00	1	1	Y	-1	Not all students work on looms at same time
BR 107	Theatre Back Stage Tech./ Prod.	10	11	10.0	0.39	1	1	Y	-1	
BR 002	Theatre Rehearsal	60	20	33.5	1.32	2	1	Y+1	40	Consider requirement for additional Theatre Studio or Rehearsal.
AR 001	Theatre Studio	36-96	20	35.5	1.40	1	1	Y	16-76	As above. Exist Seat Cap range reflects different activities (96 = FIS capacity).
HR 118	Theatre, Movement	30	21	26.5	1.05	1	1	Y	9	
HR 112	Theatre, Tech. Th., Music Therapy, PMTI	29	9	1.0	0.04	1	1	Y	20	
Totals				885.6	33.92	49	50	(excl new Film Centre)		Film Ctre analysis not undertaken



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APPENDIX D: OFFICE SPACE PRINCIPLES AND STANDARDS REFERENCE

INTRODUCTION

Though not within the scope of this project, for reference, typical desk and office type principles and standards are included below for reference.

One definition of the purpose of office space is that it exists. Offices exist primarily to allow employees to do their work, and, thereby, support their organization's and their own professional goals. Though work performance is the key function, a workstation should also provide a supportive environment for mental and physical well-being. Employees may spend a great many of their waking hours per year in their offices, which need to be comfortable and satisfactory.

Like all offices, open-plan office workstations must provide the space, equipment, and conditions that employees need to do their work. To meet the functional requirements of each job, one needs to know who will work in the office and the variety of tasks that they will do.

ERGONOMICS PRINCIPLES

These other principles are not intended be exclusive or exhaustive but rather as a starting point for further review.

Ergonomics is an important consideration when establishing workplace standards. Ergonomics is the science of designing the job to fit the worker, rather than physically forcing the worker's body to fit the job. Adapting tasks, workstations, tools and equipment to fit the worker can help reduce physical stress on a worker's body and eliminate many potentially serious, disabling work-related musculoskeletal disorders.

In general, workstation layouts should provide chairs that:

- can be adjusted to different heights, making it possible for employees of all sizes to rest their feet comfortably on the floor
- have 5 prong base for stability
- have adjustable back rests
- have arm rests that are detachable (also option to have or not have armrests)
- support the lower back (lumbar area)
- have padded seats and roll on wheels
- support the forearms with arm rests while allowing the elbows to remain near the waist.

The computer at the workstation should:

- allow employees to keep their wrists nearly straight - without furniture edges digging into their wrists or forearms
- enable the employee to see the screen clearly without leaning forward
- have the height of the monitor at eye level

- have rounded edges on keyboard trays
- have a monitor that can be adjusted up and down or side to side
- have a keyboard tray that is wide enough to accommodate both keyboard and mouse at same level
- have sufficient leg space under keyboard tray as well as under desktop.

OTHER PRINCIPLES

These other principles are not intended be exclusive or exhaustive but rather as a starting point for further review.

In addition to ergonomics, typical hallmarks of a productive workplace are equally important:

- **Functionality:** the workplace is designed to meet the functional needs of employees by accommodating tasks to be undertaken without compromising individual access to privacy, daylight, outside views and aesthetics.
- **Equity:** workspace is allocated on an equitable basis in terms of access to desks, offices and the qualitative aspects of the workplace.
- **Flexibility:** the workplace configuration adapts to typical organizational and work process changes but also can be readily reconstructed to accommodate major functional changes.
- **Healthfulness:** the workplace is housed in a healthy environment with access to air, light, and water and is free of harmful contaminants and excessive noise.
- **Comfort:** the workplace allows employees to adjust thermal, lighting, acoustic and furniture systems to meet personal and team comfort levels.
- **Technological Connectivity:** workplaces allow easy communication among distributed co-workers while allowing simultaneous access to data.
- **Reliability:** the workplace is supported by effective heating, ventilating, and air-conditioning, lighting, power, security and telecommunications systems and ventilating equipment that require minimal maintenance downtime and are designed with back-up capabilities to insure minimal loss of service.
- **Sense of Place:** the workplace has an appropriate image and identity, enabling a sense of pride, purpose and dedication for both the individual and the workplace community.

WORKSTYLES AND WORKSPACES

*Source: "Lower Mainland Support Services
Space Consolidation Initiative Space
Guidelines, Administrative Workspace", Fraser
Health Authority, May 6, 2010*

To further the discussion regarding office space at CU, the following narrative attempts to generally define the key related terms of "workstyle" and "workspace". These definitions should be considered as starting points for CU and are expected to require careful review and substantial changes as they are considered more deeply.

Workstyles

Workstyle can be described as the method(s) an employee utilizes to perform her/his job functions. Many of today's office based workers are engaged in "knowledge work", which is characteristically more fluid than the task-driven office based work of the past, and thus there is greater variety in the workstyles seen in today's workplaces. Some examples of these workstyles include, working:

- at a desk independently,
- within a group setting,
- on a term-defined project team,
- working in multiple work settings on site or off site, etc.

This variety in workstyles is a primary driver for employing new workspace design principles and strategies as it necessitates the provision of greater variety and flexibility.

Mobility is an aspect of workstyles that has a substantial impact on workspace planning. A mobile employee is one who does not complete all their work functions at one workspace or even one worksite. Digital technology allows for mobile employees to be connected to the organization but enables them to work where and when they need to work. An example is the ability to work from home or touchdown workstations at distributed locations.

The creation of diverse spaces that can be shared across department/ functional groups better supports the concepts of:

- Learning: building knowledge with peers and mentors.
- Collaborating: creating innovations and collectively creating content in both formal and informal interactions.
- Focusing: allowing for concentration for an uninterrupted time period to contemplate, strategize and process.
- Informal Interaction/ Socializing: informal face to face environments offer opportunities that deepen relationships where interpersonal connections have a chance to be fostered, relationships developed and information transferred.

Workspace

In many sectors, the on site work environment is being transformed from a limited "desk as a workspace" concept to a more holistic "entire floor/ building as the workspace" concept. The building interior encompasses a larger scope of design options that can be better matched to the functional needs of user group(s).

In order to match the functional requirements of user groups with the design potential, an assessment may be done to discover where, when and what work is being done. Meeting room space, workstation space, confidential space and time away from the site all contribute to the allocation of a variety of types and sizes of space in the plan. The following types of workstation space allocations that can be considered, based on a typical utilization review.

- Dedicated: workstation is assigned and used by one employee.
- Shared: workstation is assigned to one or more employees.
- Free address: workstation is unassigned and is used by any employee for the duration of their on-site needs.

To maximize space utilization and best fit between functional requirements and available resources, the assignment of workstation space may be determined through a utilization review. Workstation spaces may be assigned/allocated with the intention of maximizing resource utilization; not only within a program, but also between programs.

EXAMPLE WORKSTATION STANDARDS

These example standards are not intended be exclusive or prescriptive, but rather as a starting point for further review.

"Workstation" in this document refers to a desk or office.

For reference, CU workstation sizes currently range from 1.6 nsm (LB116K Continuing Education) to 18.4 nsm (Executive Administrator to VP) and single desk enclosed offices range from 4.2 nsm (BR261 Health Services) to 29.1 nsm (BR451 President). As described in Appendix B, the most common sizes lie within the following ranges:

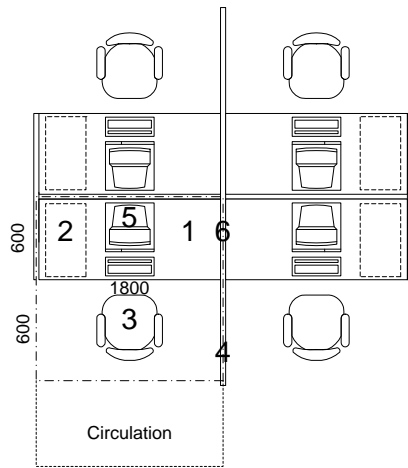
- Workstation: ~4.6 to 6.5 nsm
- Single desk office: ~6.6 to 8.5 nsm

Typical example workstation standards are summarized below. In practice, should Capilano University choose to develop and adopt workstation standards, this document should be viewed as a reference or starting point, with specific standards and protocols developed with the involvement of CU representatives in an open and transparent process. Also in practice, actual equipment and areas for workstation types will vary from that indicated below and will be a product of functional requirements, available equipment budgets, manufacturer specifications and availability of space.

Four typical example workstation standard types are included, that can be used as a basis for further review and planning:

- Type A (2.5 to 3.5 nsm) - small open area desk
- Type B (4.5 to 7.0 nsm) - standard open area desk or desk in enclosed multi-desk office
- Type C (7.0 to 12.0 nsm) - standard office
- Type D (12.0 to 16.0+ nsm) - larger office w/ meeting space

Type A (2.5 to 3.5 nsm)



Example layout



Example photo

Type

- Standard open area desk
- Typically provided to employees who perform clerical, administrative or research activities, often on a part-time or temporary basis, in an open area, also considered as 'touchdown' space

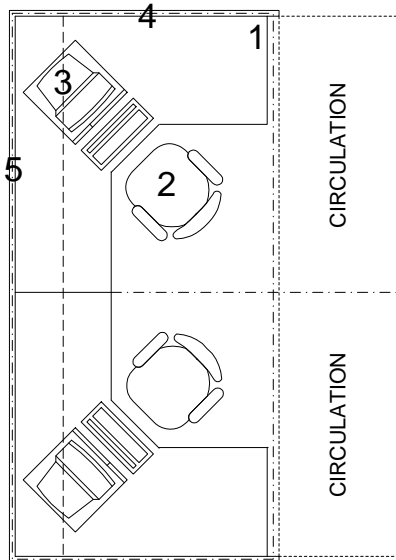
Area

- Typical desk size: 2.2 nsm (1.2m x 1.8m) to 3.2 nsm
- Typical desk size + circulation: 2.5 to 4.2 nsm

Description

- 1 Straight desk (no return)
- 2 Mobile pedestal (personal pencil and file drawer)
- 3 Ergonomic office task chair
- 4 Data, power and phone cabling within divider screens
- 5 Computer with flat screen monitor
- 6 Freestanding divider screen, surrounding desk, variable height

Type B (4.5 to 7.0 nsm)



Example layout



Example photo

Type

- Standard open area desk or desk in enclosed multi-desk office
- Typically provided to employees who perform clerical, administrative or research activities or similar in an open area or in an enclosed multi-desk office, and with a significant workload or full-time basis

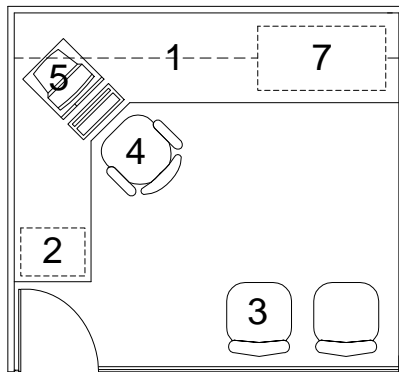
Area

- Typical desk size: 3.2 nsm (1.8m x 1.8m) to 5.8 nsm (2.4m x 2.4m)
- Typical desk size + circulation: 4.5 to 7.0 nsm

Description

- 1 L-shaped desk with return (optional: keyboard corner)
 - 2 Ergonomic office task chair
 - 3 Computer with flat screen monitor
 - 4 Freestanding screen system surrounding workdesk
 - 5 Screen fixed shelf or hamper with whiteboard and/or pin board as required
- Mobile pedestal (personal pencil and file drawer)
 - Data, power and phone cabling

Type C (7.0 to 12.0 nsm)



Example layout

Type

- Standard office
- Typically provided to employees who are faculty or in a managerial position and who require acoustic and visual privacy.

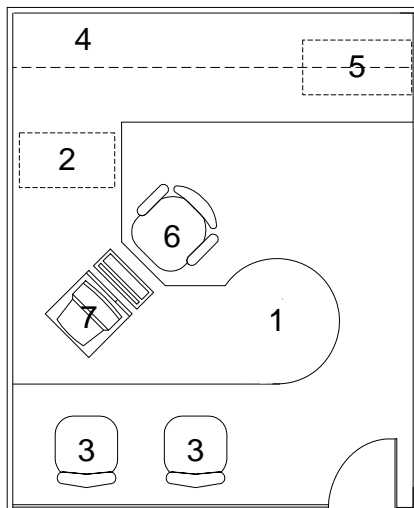
Area (desk size considered equal to office size)

- Typical desk size: 7.0 nsm (2.6m x 2.6m) to 12.0 nsm
- Typical desk size + circulation: 7.0 to 12.0 nsm

Description

- 1 L-shaped desk with return (optional keyboard corner)
 - 2 Mobile pedestal (personal pencil and file drawer)
 - 3 Visitor chairs x 2
 - 4 Ergonomic office task chair
 - 5 Computer with flat screen monitor
 - 6 Wall hung shelving or hamper above work surface
 - 7 Two drawer lateral file cabinet (below desk)
- Data, power and phone cabling

Type D (12.0 to 16.0+ nsm)



Example layout

Type

- Standard office w/ meeting space
- Typically provided to employees in managerial and executive positions who require acoustic and visual privacy, and internal meeting space for visitors/staff.

Area (desk size considered equal to office size)

- Size of office: 12.0 nsm (3.0m x 4.0m) to 16.0+ nsm
- Area of office (including circulation): 12.0 to 16.0+ nsm

Description

- 1 L-shaped desk with return
 - 2 Mobile pedestal (personal pencil and file drawer)
 - 3 Meeting/visitor chairs x 2 (more for larger offices)
 - 4 Wall hung shelving or hamper above desk
 - 5 Two drawer lateral file cabinet (below back unit)
 - 6 Ergonomic office task chair
 - 7 Computer with flat screen monitor
 - 8 Full height glazed front wall (option: adhesive film for privacy)
- Data, power and phone cabling
 - Whiteboard and/or pin board as required
 - Meeting table for larger offices