

**Space Audit Report
Laucala Campus
Semester 1 2014
Property & Facilities Section**



Table of Contents

1.	PURPOSE.....	3
2.	KEY DEFINITIONS	3
3.	KEY FORMULAE.....	3
4.	APPROACH FOR THIS REPORT	4
5.	THE PROCESS: SPACE UTILIZATION ASSESSMENT	5
6.	THE AUDIT METHOD.....	5
7.	KEY FINDINGS.....	5 - 7
8.	RECOMMENDATIONS.....	8
9.	APPENDICES	8 - 25

1. Purpose

This report provides an analysis of the teaching space usage at USP's Laucala Campus for Semester 1 2014. The space utilization analysis includes the lecture theatres, tutorial rooms and laboratories which are timetabled for teaching and the non-time tabled.

2. Key Definitions

Room Frequency

- 1) Planned Room Frequency – Is the number of hours the room is in use divided by the number of hours the room is available for use. This data is obtained from the central timetable.
- 2) Audited Room Frequency – Is the number of hours the room is in use during the audit period divided by the number of hours the room is available for use during the audit period.
(Data for this report was for the week 10th – 22nd March, 2014. Audits included Saturdays)

Room Occupancy

- 1) Planned Room Occupancy – represents the average number of students (enrolled students) in the room when the room is in use, compared to the total room capacity. This data is obtained from student enrollment data and room capacity data from the central time table.
- 2) Audited Room Occupancy– represents the average number of students counted (during the audit period) in the room when the room is in use compared to the total room capacity. (Audit period was from 10th – 22nd March, 2014)

Room Utilization

- Utilization combines Room Occupancy and Room Frequency data to give an indication of how the room is being used. It is an abstract measure that is a useful indicator for rooms that require further investigation of usage patterns, and comparative assessments.

3. Key Formulae

1) Room Frequency (RF)

$$\text{RF} = \frac{\text{Hours Used}}{\text{Hours Available}}$$

2) Room Occupancy (Occ)

$$\text{Occ} = \frac{\text{Total Students}}{\text{Capacity} \times \text{Hours Used}}$$

3) Utilization (U %)

$$U\% = RF \times \text{Occ}$$

4. Approach for this Report

This Space Utilization assessment is a two-stepped process, the first involving the collection of the following information from their sources.

- a. Semester 1 2014 timetable¹ collected from the timetabler.
- b. Class enrollment data collected from Student Administrative Services

1. Using the time table and class enrollment data, the Planned Room Frequency, Planned Room Occupancy and Planned Room Utilization Rates are calculated for each lecture theatre, tutorial room and laboratory. These calculated figures are then compared with the Space Management Policy benchmarks. They represent the Planned Utilization Rates of USP facilities.

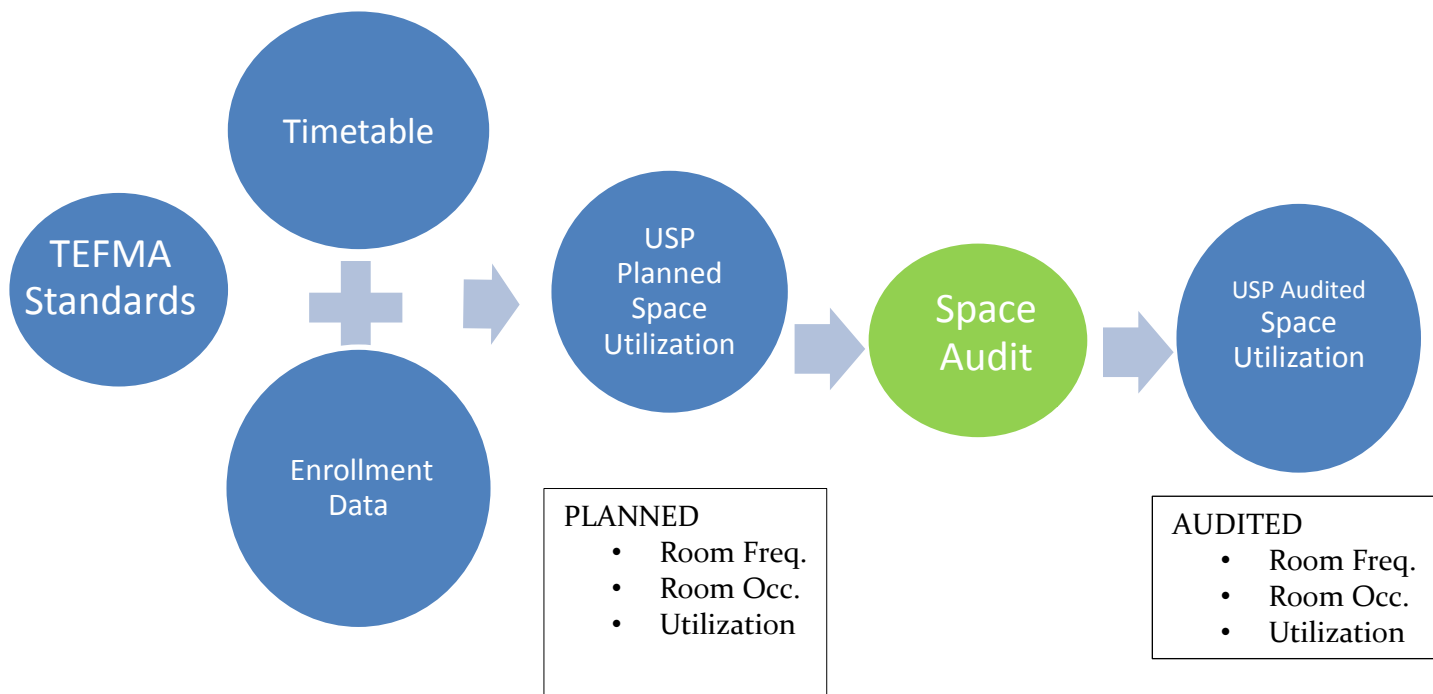
2. Following step one, a space audit is then conducted of all USP teaching facilities. The Section of P & F performs an audit once per semester over an audit period of 2 weeks. The faculties perform their own independent audit of the teaching spaces using excel spreadsheets developed for the auditing process. The data collected during the audits is then used to calculate the Audited Room Frequency and Audited Room Occupancy Rates for the University. They represent the Audited Utilization Rates of USP facilities.

This report presents the calculated Planned and Audited Utilization data alongside Space Management Policy standards. Comparison of the three should give an overview of the university planned use of its facilities in semester 1 2014 (Planned Data) against how the university is actually using its facilities during semester 1 2014 (Audited Data).

The Space management Policy allows for benchmarking to give USP some indication of where it needs to focus its planning and resources.

¹ This was provided by Kaylash Chaudhary of SCMIS who is responsible for timetabling all courses offered in the semester.

5. The Process: Space Utilization Assessment



6. The Audit Method

P & F perform the space audit as recommended in the TEFMA and the Space Management Policy guidelines. Room auditing involves the counting of the number of students using the various teaching facilities within the Laucala Campus. This is taken over all the operating hours for the campus for a two week period each semester. Auditors are instructed to begin audits 5 mins after the start of each class. This is to allow late comers coming in for class. Auditors are instructed to perform head counts, take photos and identify what class or subject.

P & F performed the space audit for semester 1 2014 in week 4 and 5 (10th - 22nd March). The audit data for this period is then analysed using the key formulae shown earlier in this report. Because this data contains head counts for each class, it is used to calculate the Audited Room Occupancy rates for this report.

7. Summary of Key Findings

7.1 Frequency of Use

Lecture Theatres Timetabled on the Central Timetable

- Planned Room Use (Timetabling) is found to be higher than actual room use (audited), which is a finding consistent with historical trends. However, the difference for semester 1 2014 is 5 % of total availability.
- The university used its lecture spaces on average 51 % of the time for which they were available for use, lower than the benchmarked 90 % as specified in the universities space policy and 75 % as used by TEFMA.
- The highest used lecture room is AusAid 092-001 (69%) and the least used lecture room is the Communications Building Media Annex Room 020-102 (added to the central timetable in 2nd Semester 2013)

Tutorial Rooms Timetabled on the Central Timetable

- Planned Room Use (Timetabling) is on average found to be higher than actual room use (audited), which is a finding consistent with historical trends. (54% compared to 45%)
- The university used its tutorial spaces on average 45 % of the time for which they were available for use, lower than the benchmarked 90 % as specified in the universities space policy and 75 % as used by TEFMA.
- The highest used tutorial room is FBE 014-009B (65%) and the least used tutorial room is the Statham Campus B202-204B (added to the central timetable this year)

Teaching and Learning Spaces Not Centrally Timetabled. (Includes ITS Labs, Tutorial and Lecture Rooms)

- Actual room use (audited) is averaged at 30%, which is lower than centrally timetabled lecture theatre spaces at 51% and tutorial spaces at 45%. Centrally Timetabled spaces are more frequently used.
- The highest used room was Statham Campus B202-111(61%) and the least used tutorial room is Marine Studies 118-GE101 (1 %)

Laboratories

- Planned lab Use (Timetabling) is on average found to be higher than actual lab use (audited), which is a finding consistent with historical trends. (29% compared with 24%)

- The university used its labs on average 24 % of the time for which they were available for use, lower than the benchmarked 50 % as specified in the universities space policy and TEFMA guidelines.
- The highest used lab is FSTE 010-032 (49%) and the least used lab is Engineering 009-Intel (0%)

7.2 Occupancy

Lecture Theatres Timetabled on the Central Timetable

- Planned Room Occupancy is found to be lower than actual room occupancy (audited), which is a finding consistent with historical trends. However, the difference for semester 1 2014 is 3 % of total capacity.
- The university on average had occupancy rates of 32 % of the of capacity of its theatres lower than the benchmarked 90 % as specified in the universities space policy and 75 % as used by TEFMA.
- The highest occupied lecture room is AusAid 092-001 (45%) and the least occupied lecture room is the Marine Studies 136-001 (18%)

Tutorial Rooms Timetabled on the Central Timetable

- Planned Room Occupancy is on average found to be similar to actual room occupancy (audited), (49% compared to 48%)
- The university on average occupied its centrally timetabled tutorial rooms at 48 % of capacity. (Benchmarked 90 % as specified in the universities space policy and 75 % as recommended by TEFMA.)
- The room with the highest occupancy is Statham Campus 202-204A (117%) and the tutorial room with the least occupancy is Food and Textiles FT-FT (28%)

Teaching and Learning Spaces Not Centrally Timetabled. (Includes ITS Labs, Tutorial and Lecture Rooms)

- Actual room occupancy (audited) is averaged at 17%, which is lower than centrally timetabled lecture theatre spaces at 32% and tutorial spaces at 48%. Centrally Timetabled spaces contain classes with larger numbers compared with non-centrally timetabled spaces.
- The highest occupancy rate was AusAid 093-105(46%) and rooms with the least occupancy rates are Marine Studies 118-GE101 (1 %) and Statham campus B206 –MBA Lab 2.

Laboratories

- Planned lab occupancy is on average found to be higher than actual lab occupancy, (59% compared with 50%)
- The university has labs with occupancy rates on average at 59 % of their capacity, which is lower than the benchmarked 75% as recommended in the universities space policy and TEFMA guidelines.
- The lab with the highest occupancy rate is ICT B (131%) and the lab with the least occupancy rate is Engineering 009-Intel (0%)

7.3 Overcrowding

- The space audit semester 1 2014 also reveal individual classes being over crowded at particular times. A total of 433 classes were observed to be over crowded during the audit period, 10% (4186 classes during the audit period).
- The room showing the highest rate of overcrowding was AusAid 093-002 with a total of 32 classes observed to be over crowded in the audit period.

8. Recommendations

8.1 The University continues to monitor all its teaching and learning spaces to ensure efficient use of these spaces.

8.2 The University makes a conscious effort through the timetable to bring into balance the utilization of its various learning and teaching spaces. The results show several spaces attracting significantly higher utilization rates than others which, among other things, impact wear and tear rates on facilities.

8.3 The university currently incurs significant expense in the hire of halls, gyms and external venues for the purposes of exam operations. In addition to these hire charges; the university does significant spending on logistics (transport, labor for cartage of furniture, set up, take down and storage) and significant wear and tear on furniture due to the frequent movements. It is recommended that a re-examination of spaces currently being used for learning and teaching be made, with select spaces offered for the purposes of exam operations to reduce these expenses to the university.

PROPERTY & FACILITIES

APRIL 2014

9. Appendices

9.1 USP SPACE MANAGEMENT POLICY AND TEFMA Standards

Target Space Utilization Rates:						
USP SPACE MANAGEMENT POLICY				TEFMA STANDARDS		
Space Type	Target Room Frequency	Target Seat Occupancy	Target Utilization	Target Room Frequency	Target Room Occupancy	Target Utilization
Lecture Theatres	90%	90%	81%	75%	75%	56%
Teaching Rooms	90%	90%	81%	75%	75%	56%
Computer Laboratories	90%	90%	81%	75%	75%	56%
Specialist Laboratories	50%	75%	37.5%	50%	75%	38%
Workshops	50%	75%	37.5%	50%	75%	38%
Studios	75%	75%	56%	75%	75%	56%
Practice Rooms	80%	75%	60%	80%	75%	60%
Meeting Rooms	45%	75%	34%	45%	75%	34%

The Space Utilization Rates shown in the table above are indicative only and are based on a typical overall week of 79.0 hours. Typical daytime sessions are 8.00 am to 5.00 pm and typical evening sessions from 5.00 pm to 10.00pm. It should be noted here that USP utilization rates are based on a 79 hour week with a normal day starting at 8.00 am and ending at 10.00 pm. The timetable includes Saturday hours as directed by the SMT.

9.2 The Analysis

Room Frequency (RF)

9.2.1 Lecture Theatres

USP's planned use of lecture theatres (Planned Room Frequency), its actual use of lecture theatres (Audited Room Frequency) and the benchmark for comparison (TEFMA standards) are listed in the table below.

The Audited Room Frequency data is taken from Faculty Audit data from the period 10th to 22nd March 2014.

Building	Room No.	Semester 1 2014 Audited Room Frequency	Semester 1. 2014 Planned Room Frequency	Semester 1. 2013 Planned Room Frequency	Space Management Policy	Type of Space
AusAid	092-001	69%	71%	92%	90%	Lecture Theatre
AusAid	092-003	66%	70%	80%	90%	Lecture Theatre
Humanities (FALE)	019-101	49%	61%	83%	90%	Lecture Theatre
Main SPAS (FSTE)	010-111	53%	66%	80%	90%	Lecture Theatre
Marine Studies	136-001	39%	38%	90%	90%	Lecture Theatre
SSED (FBE)	014-024	52%	61%	80%	90%	Lecture Theatre
SSED (FBE)	014-025	45%	53%	72%	90%	Lecture Theatre
SSED (FBE)	014-028	58%	57%	87%	90%	Lecture Theatre
U8	018-001	53%	56%	78%	90%	Lecture Theatre
Communication	020-102	28%	32%		90%	Lecture Theatre
TOTAL		51%	56%	82%	90%	

The analysis showed a decrease in Planned Lecture Room use for Semester 1, 2014. It can be compared with historical EFTS data on 1st terms 2014 against 1st term of 2013. (Semester 1 2014 EFTS 3584, Semester 1 2013 EFTS 4525 for fee and non-fee paying students data from DIBS 9/4/14).

The Audit data shows higher use of the lecture rooms was initially planned as compared to the actual audit period.

It should also be noted that Aus Aid 092-001 has the highest Planned Frequency and the highest used similar to 1st and 2nd Semester of 2013.

9.2.2 Tutorials

Room Frequency for Tutorial Rooms						
Building	Room No.	Semester 1 2014 Audited Room Frequency	Semester 1 2014 Planned Room Frequency	Semester 1 2013 Planned Room Frequency	Space Management Policy	Type of Space
AusAid	093-001	57%	73%	93%	90%	Teaching Rooms
AusAid	093-002	61%	78%	77%	90%	Teaching Rooms
AusAid	093-003	56%	68%	85%	90%	Teaching Rooms
AusAid	093-004	59%	73%	92%	90%	Teaching Rooms
AusAid	093-007	62%	70%	87%	90%	Teaching Rooms
AusAid	093-201	52%	68%	82%	90%	Teaching Rooms
AusAid	093-202	56%	75%	93%	90%	Teaching Rooms
AusAid	093-203	49%	61%	90%	90%	Teaching Rooms
AusAid	093-204	51%	54%	95%	90%	Teaching Rooms
AusAid	093-205	44%	66%	92%	90%	Teaching Rooms
AusAid	093-206	49%	65%	95%	90%	Teaching Rooms
AusAid	093-207	58%	68%	93%	90%	Teaching Rooms
AusAid	093-208	60%	70%	83%	90%	Teaching Rooms
CELT	091-113	9%	6%		90%	Teaching Rooms
Food and	FT-FT	24%	22%		90%	Teaching

Textiles Building						Rooms
Humanities (FALE)	019-104A	39%	61%	80%	90%	Teaching Rooms
Humanities (FALE)	019-104B	40%	41%	77%	90%	Teaching Rooms
Humanities (FALE)	019-105	50%	67%	85%	90%	Teaching Rooms
Main Marine Studies	134-107A	46%	53%	88%	90%	Teaching Rooms
Main Marine Studies	134-107B	47%	48%	82%	90%	Teaching Rooms
Main Marine Studies	134-GEO01	42%	47%	75%	90%	Teaching Rooms
Old CFS Block	003-001	44%	62%		90%	Teaching Rooms
Old CFS Block	003-002	37%	61%		90%	Teaching Rooms
Old CFS Block	003-032	51%	63%		90%	Teaching Rooms
Old CFS Block	003-041	47%	59%		90%	Teaching Rooms
Old CFS Block	003-042	44%	63%		90%	Teaching Rooms
SSED (FBE)	014-009A	62%	66%	98%	90%	Teaching Rooms
SSED (FBE)	014-009B	65%	71%	93%	90%	Teaching Rooms
SSED (FBE)	014-014A	49%	67%	77%	90%	Teaching Rooms
SSED (FBE)	014-014B	51%	65%	78%	90%	Teaching Rooms
SSED (FBE)	014-023	62%	71%	93%	90%	Teaching Rooms
SSED (FBE)	014-027	49%	63%	93%	90%	Teaching Rooms
SSED (FBE)	014-103	30%	29%	37%	90%	Teaching Rooms
SSED (FBE)	014-111	48%	56%	88%	90%	Teaching Rooms
SSED (FBE)	014-112	57%	56%	77%	90%	Teaching Rooms
SSED (FBE)	014-113	59%	66%	90%	90%	Teaching Rooms
SSED (FBE)	014-114	58%	67%	88%	90%	Teaching

						Rooms
SSED (FBE)	014-115	56%	67%	88%	90%	Teaching Rooms
SSED (FBE)	014-116	61%	72%	85%	90%	Teaching Rooms
SSED (FBE)	014-117	51%	61%	87%	90%	Teaching Rooms
SSED (FBE)	014-FBEA01	29%	15%	13%	90%	Teaching Rooms
SSED (FBE)	014-FBEA023	36%	37%	27%	90%	Teaching Rooms
SSED (FBE)	014-GLAS	16%	11%		90%	Teaching Rooms
Stham Campus	202-113	5%	4%		90%	Teaching Rooms
Stham Campus	202-204A	26%	11%		90%	Teaching Rooms
Stham Campus	202-204B	4%	8%		90%	Teaching Rooms
ICT	048-317	23%	19%	58%	90%	Teaching Rooms
TOTAL		45%	54%	68%	90%	

9.2.3

Room Frequency for Not Centrally Timetabled Rooms				
Building	Room No.	Semester 1 2014 Audited Room Frequency	Space Management Policy	Type of Space
Old CFS	003-029	9%	90%	Teaching Room
Humanities (FALE)	019-300	16%	90%	Teaching Room
Humanities (FALE)	019-301	23%	90%	Teaching Room
Humanities (FALE)	019-401	16%	90%	Teaching Room
SSED (FBE)	014-Tourism Room	31%	90%	Teaching Room
SSED (FBE)	014-Post Grad Lecture Rm	15%	90%	Teaching Room

Main Marine Studies	118-GE101	1%	90%	Teaching Room
Main Marine Studies	134-FIO LAB	42%	90%	Computer Lab
Main Marine Studies	118-GIS1	39%	90%	Computer Lab
Main Marine Studies	118-GIS2	38%	90%	Computer Lab
Stham Campus	201-Com Lab	31%	90%	Computer Lab
Stham Campus	201-Lecture rm	44%	90%	Lecture Theatre
Stham Campus	201-Moot Court	3%	90%	Teaching Room
Stham Campus	202-103	16%	90%	Teaching Room
Stham Campus	202-105	35%	90%	Teaching Room
Stham Campus	202-111	61%	90%	Teaching Room
Stham Campus	202-112	10%	90%	Teaching Room
Stham Campus	206-MBA Lab 1	36%	90%	Computer Lab
Stham Campus	206-MBA Lab 2	3%	90%	Computer Lab
Stham Campus	206-MBA Conference	27%	90%	Teaching Room
Stham Campus	206-MBA Lecture Rm1	23%	90%	Lecture Theatre
Stham Campus	206-MBA Lecture Rm2	16%	90%	Lecture Theatre
Communication	020-ITS 19	59%	90%	Computer Lab
Communication	020-ITS 20	32%	90%	Computer Lab
ICT A	047- G.Lab A1	51%	90%	Computer Lab
ICT A	047- G.Lab A2	3%	90%	Computer Lab
AusAid	093-008	49%	90%	Computer Lab
AusAid	093-101	54%	90%	Computer Lab
AusAid	093-102	58%	90%	Computer Lab
AusAid	093-105	59%	90%	Computer Lab
AusAid	093-106	61%	90%	Computer Lab
Engineering	009-Mechanic	6%	50%	Specialized Lab

	Lab			
Engineering	009-Electronics	6%	50%	Specialized Lab
TOTAL		30%		

9.2.4 Laboratories

Room Frequency for Laboratory						
Building	Room No.	Semester 1 2014 Audited Room Frequency	Semester1 2014 Planned Room Frequency	Semester1 2013 Planned Room Frequency	Space Management Policy	Type of Space
Engineering	009-120	8%	13%	7%	50%	Specialized Lab
Engineering	009-FLUID	6%	34%	35%	50%	Specialized Lab
Engineering	009-INTEL	0%	4%	5%	50%	Specialized Lab
Engineering	009-TECH	12%	15%		50%	Specialized Lab
Chemistry	090-007	34%	44%	58%	50%	Specialized Lab
Chemistry	090-010	37%	25%	33%	50%	Specialized Lab
Main SPAS (FSTE)	010-030	35%	44%	60%	50%	Specialized Lab
Main SPAS (FSTE)	010-032	49%	61%	80%	50%	Specialized Lab
Main SPAS (FSTE)	010-053	19%	23%	30%	50%	Specialized Lab
Main SPAS (FSTE)	010-102	34%	43%	57%	50%	Specialized Lab
Main SPAS (FSTE)	010-120	32%	38%	55%	50%	Specialized Lab
Main SPAS (FSTE)	010-131	2%	5%	7%	50%	Specialized Lab
Main SPAS (FSTE)	010-142	26%	20%	27%	50%	Specialized Lab
Main SPAS (FSTE)	010-152	23%	27%	30%	50%	Specialized Lab
ICT B	048-324	28%	37%	50%	90%	Computer Lab
ICT B	048-327	41%	23%		90%	Computer Lab

Main Marine Studies	134-124	25%	39%	52%	50%	Specialized Lab
TOTAL		24%	29%			

In comparison with use and planned use of the lecture theaters, the tutorial rooms generally saw a reduction.

Also noted is that AusAid Tutorial Rooms gets the highest planned room frequency.

Teaching spaces listed in 8.1.3 are listed on the timetable but are not scheduled by the timetabling software. They are done by individual faculty administrators which manage the space.

9.3 Room Occupancy (OCC)

9.3.1

Room Occupancy for Lecture Theater						
Building	Room No.	Semester 1 2014 Audited Room Occupancy	Semester 1 2014 Planned Room Occupancy	Semester 1 2013 Planned Room Occupancy	Space Management Policy	Type of Space
AusAid	092-001	45%	36%	72%	90%	Lecture Theatre
AusAid	092-003	41%	31%	74%	90%	Lecture Theatre
Humanities (FALE)	019-101	30%	28%	49%	90%	Lecture Theatre
Main SPAS (FSTE)	010-111	30%	29%	51%	90%	Lecture Theatre
Marine Studies	136-001	18%	22%	32%	90%	Lecture Theatre
SSED (FBE)	014-024	26%	28%	64%	90%	Lecture Theatre
SSED (FBE)	014-025	30%	32%	66%	90%	Lecture Theatre
SSED (FBE)	014-028	31%	29%	74%	90%	Lecture Theatre
U8	018-001	36%	26%	75%	90%	Lecture

						Theatre
Communication	020-102	33%	26%		90%	Lecture Theatre
TOTAL		32%	29%	60%	90%	

Lecture theatres Audited Occupancy Rates were shown to be lower than the Planned Occupancy Rates.

9.3.2

Room Occupancy for Tutorial Rooms						
Building	Room No.	Semester 1 2014 Audited Room Occupancy	Semester1 2014 Planned Room Occupancy	Semester1. 2013 Planned Room Occupancy	Space Management Policy	Type of Space
AusAid	093-001	50%	48%	99%	90%	Teaching Rooms
AusAid	093-002	64%	43%	98%	90%	Teaching Rooms
AusAid	093-003	56%	45%	94%	90%	Teaching Rooms
AusAid	093-004	63%	46%	95%	90%	Teaching Rooms
AusAid	093-007	59%	49%	100%	90%	Teaching Rooms
AusAid	093-201	59%	44%	96%	90%	Teaching Rooms
AusAid	093-202	57%	43%	98%	90%	Teaching Rooms
AusAid	093-203	50%	42%	99%	90%	Teaching Rooms
AusAid	093-204	54%	38%	99%	90%	Teaching Rooms
AusAid	093-205	39%	29%	97%	90%	Teaching Rooms
AusAid	093-206	43%	37%	91%	90%	Teaching Rooms
AusAid	093-207	64%	48%	92%	90%	Teaching Rooms
AusAid	093-208	50%	47%	97%	90%	Teaching Rooms
CELT	091-113	70%	29%		90%	Teaching Rooms

2014 Teaching Space Audit Report

Food and Textiles Building	FT-FT	28%	42%		90%	Teaching Rooms
Humanities (FALE)	019-104A	32%	35%	80%	90%	Teaching Rooms
Humanities (FALE)	019-104B	43%	45%	73%	90%	Teaching Rooms
Humanities (FALE)	019-105	44%	47%	98%	90%	Teaching Rooms
Main Marine Studies	134-107A	30%	37%	80%	90%	Teaching Rooms
Main Marine Studies	134-107B	45%	50%	87%	90%	Teaching Rooms
Main Marine Studies	134-GEO01	58%	50%	94%	90%	Teaching Rooms
Old CFS Block	003-001	48%	48%		90%	Teaching Rooms
Old CFS Block	003-002	34%	49%		90%	Teaching Rooms
Old CFS Block	003-032	38%	47%		90%	Teaching Rooms
Old CFS Block	003-041	43%	49%		90%	Teaching Rooms
Old CFS Block	003-042	21%	49%		90%	Teaching Rooms
SSED (FBE)	014-009A	61%	50%	98%	90%	Teaching Rooms
SSED (FBE)	014-009B	62%	49%	94%	90%	Teaching Rooms
SSED (FBE)	014-014A	41%	47%	96%	90%	Teaching Rooms
SSED (FBE)	014-014B	51%	48%	99%	90%	Teaching Rooms
SSED (FBE)	014-023	61%	49%	100%	90%	Teaching Rooms
SSED (FBE)	014-027	31%	45%	75%	90%	Teaching Rooms
SSED (FBE)	014-103	40%	34%	68%	90%	Teaching Rooms
SSED (FBE)	014-111	34%	34%	56%	90%	Teaching Rooms
SSED (FBE)	014-112	35%	29%	65%	90%	Teaching Rooms
SSED (FBE)	014-113	55%	109%	88%	90%	Teaching Rooms

SSED (FBE)	014-114	56%	49%	97%	90%	Teaching Rooms
SSED (FBE)	014-115	54%	46%	95%	90%	Teaching Rooms
SSED (FBE)	014-116	53%	45%	98%	90%	Teaching Rooms
SSED (FBE)	014-117	49%	48%	97%	90%	Teaching Rooms
SSED (FBE)	014-FBEA01	71%	30%	44%	90%	Teaching Rooms
SSED (FBE)	014-FBEA023	29%	32%	58%	90%	Teaching Rooms
SSED (FBE)	014-GLAS	44%	30%		90%	Teaching Rooms
Stham Campus	202-113	34%	110%		90%	Teaching Rooms
Stham Campus	202-204A	117%	104%		90%	Teaching Rooms
Stham Campus	202-204B	20%	133%		90%	Teaching Rooms
ICT	048-317	35%	30%	70%	90%	Teaching Rooms
TOTAL		48%	49%	90%	90%	

9.3.3

Room Occupancy for Not Centrally Timetabled Rooms

Building	Room No.	Semester 1 2014 Audited Room Occupancy	Space Management Policy	Type of Space
Old CFS	003-029	3%	90%	Teaching Room
Humanities (FALE)	019-300	9%	90%	Teaching Room
Humanities (FALE)	019-301	10%	90%	Teaching Room
Humanities (FALE)	019-401	6%	90%	Teaching Room
SSED (FBE)	014-Tourism Room	28%	90%	Teaching Room
SSED (FBE)	014-Post Grad Lecture Rm	2%	90%	Teaching Room

Main Marine Studies	118-GE101	1%	90%	Teaching Room
Main Marine Studies	134-FIO LAB	21%	90%	Computer Lab
Main Marine Studies	118-GIS1	22%	90%	Computer Lab
Main Marine Studies	118-GIS2	22%	90%	Computer Lab
Stham Campus	201-Com Lab	17%	90%	Computer Lab
Stham Campus	201-Lecture room	24%	90%	Lecture Theatre
Stham Campus	201-Moot Court	2%	90%	Teaching Room
Stham Campus	202-103	9%	90%	Teaching Room
Stham Campus	202-105	20%	90%	Teaching Room
Stham Campus	202-111	33%	90%	Teaching Room
Stham Campus	202-112	4%	90%	Teaching Room
Stham Campus	206-MBA Lab 1	6%	90%	Computer Lab
Stham Campus	206-MBA Lab 2	1%	90%	Computer Lab
Stham Campus	206-MBA Conference	12%	90%	Teaching Room
Stham Campus	206-MBA Lecture Rm1	11%	90%	Lecture Theatre
Stham Campus	206-MBA Lecture Rm2	6%	90%	Lecture Theatre
Communication	020-ITS 19	30%	90%	Computer Lab
Communication	020-ITS 20	17%	90%	Computer Lab
ICT A	047- G.Lab A1	40%	90%	Computer Lab
ICT A	047- G.Lab A2	2%	90%	Computer Lab
AusAid	093-008	40%	90%	Computer Lab
AusAid	093-101	39%	90%	Computer Lab
AusAid	093-102	39%	90%	Computer

				Lab
AusAid	093-105	46%	90%	Computer Lab
AusAid	093-106	42%	90%	Computer Lab
Engineering	009-Mechanic Lab	4%	75%	Specialised Lab
Engineering	009-Electronics	4%	75%	Specialised Lab
TOTAL		17%		

9.3.4

Room Occupancy for Laboratory						
Building	Room No.	Semester 1 2014 Audited Room Occupancy	Semester 1 2014 Planned Room Occupancy	Semester 2 2013 Planned Room Occupancy	Space Management Policy	Type of Space
Engineering	009-120	35%	43%	100%	75%	Specialized Lab
Engineering	009-FLUID	9%	44%	82%	75%	Specialized Lab
Engineering	009-INTEL	0%	50%	100%	75%	Specialized Lab
Engineering	009-TECH	64%	39%		75%	Specialized Lab
Chemistry	090-007	54%	50%	100%	75%	Specialized Lab
Chemistry	090-010	82%	50%	100%	75%	Specialized Lab
Main SPAS (FSTE)	010-030	58%	49%	94%	75%	Specialized Lab
Main SPAS (FSTE)	010-032	62%	21%	100%	75%	Specialized Lab
Main SPAS (FSTE)	010-053	24%	50%	100%	75%	Specialized Lab
Main SPAS (FSTE)	010-102	66%	47%	95%	75%	Specialized Lab
Main SPAS (FSTE)	010-120	65%	55%	100%	75%	Specialized Lab
Main SPAS (FSTE)	010-131	42%	50%	100%	75%	Specialized Lab
Main SPAS (FSTE)	010-142	84%	50%	100%	75%	Specialized Lab

Main SPAS (FSTE)	010-152	98%	50%	100%	75%	Specialized Lab
ICT B	048-324	43%	86%	100%	90%	Computer Lab
ICT B	048-327	131%	73%		90%	Computer Lab
Main Marine Studies	134-124	94%	49%	100%	75%	Specialized Lab
TOTAL		59%	50%	46%		

Room Occupancy represents the average number of students (enrolled students) in the room when the room is in use, compared to the total room capacity. (See formula below)

$$\text{Occ} = \frac{\text{Total Students (Sum of students for each class the room was in use)}}{\text{Maximum Capacity of the Room} \times \text{Total Number of Hours the room was in use}}$$

Tutorial Audited Occupancy Rates were shown to be lower than the Planned Occupancy Rates. Student attendance at Face to Face tutorial for the audit period is shown to be less than 50% of the expected numbers. As tutorial attendance is normally required for about 80% of classes, with attendance being recorded, it is unclear why such low attendance was noted.

Teaching spaces listed in 8.2.3 are listed on the timetable but are not scheduled by the timetabling software. They are done by individual faculty administrators which manage the space. The data is showing the occupancy of these spaces is generally lower than those timetabled through the central timetabling software.

9.4 Tutorial Rooms Overcrowding

The following tutorial rooms were observed to have individual classes that were overcrowded during the audit period. Although the individual classes were overcrowded, the overall occupancy rates for the rooms were not above the TEFMA benchmarks. It is possible that students were temporarily changing tutorial slots during the audit period, contributing to an imbalance in the distribution of students over the available timetabled rooms.

Overcrowded Classes		
Building	Room No.	No. of Overcrowded Class
Old CFS Block	003-001	14
Old CFS Block	003-002	5
Old CFS Block	003-041	1
Engineering	009-Tech	6
Main SPAS (FSTE)	010-030	5
Main SPAS (FSTE)	010-032	24
Main SPAS (FSTE)	010-053	12
Main SPAS (FSTE)	010-102	20
Main SPAS (FSTE)	010-111	1
Main SPAS (FSTE)	010-120	5
Main SPAS (FSTE)	010-131	3
Main SPAS (FSTE)	010-142	6
Main SPAS (FSTE)	010-152	22
SSED (FBE)	014-009A	6
SSED (FBE)	014-014A	2
SSED (FBE)	014-014B	7
SSED (FBE)	014-023	1
SSED (FBE)	014-024	1
SSED (FBE)	014-025	1
SSED (FBE)	014-027	2
SSED (FBE)	014-113	1
SSED (FBE)	014-114	5
SSED (FBE)	014-115	5
SSED (FBE)	014-117	5
U8 Theatre	018-001	4
Humanities (FALE)	019-101	2
Humanities (FALE)	019-104A	2
Humanities (FALE)	019-104B	2
Humanities (FALE)	019-105	5
ICT Centre Building - B	048-327	11
Chemistry Labs	090-007	2
CELT	091-113	1
AusAid	092-001	1
AusAid	092-003	4
AusAid	093-001	11
AusAid	093-002	32
AusAid	093-003	17
AusAid	093-004	20

AusAid		093-007	18
AusAid		093-201	20
AusAid		093-202	20
AusAid		093-203	12
AusAid		093-204	11
AusAid		093-205	11
AusAid		093-206	10
AusAid		093-207	18
AusAid		093-208	3
Main Studies	Marine	134-107B	2
Main Studies	Marine	134-124	29
Main Studies	Marine	134-GEO01	5

9.5 Room Utilization

Utilization combines Planned Room Occupancy and Planned Room Frequency data to give an indication of how the room is being used. Utilization, as an abstract measure, is only useful as an indicator of rooms requiring further investigation of usage patterns and comparative assessments.

9.5.1

Utilization rates are provided in this report to aid analysis trends in the future.

Building	Room No.	Semester 1 2014 Audited Room Frequency	Semester 1 2014 Audited Room Occupancy	Audited Utilization Rate (%)	Semester 1 2014 Planned Room Frequency	Semester 1 2014 Planned Room Occupancy	Planned Utilization Rate (%)	Space Management Policy	Type of Space
AusAid	092-001	69%	45%	31%	71%	36%	26%	81%	Lecture Theatre
AusAid	092-003	66%	41%	27%	70%	31%	22%	81%	Lecture Theatre
Humanities (FALE)	019-101	49%	30%	15%	61%	28%	17%	81%	Lecture Theatre

									e
Main SPAS (FSTE)	010-111	53%	30%	16%	66%	29%	19%	81%	Lecture Theatre
Marine Studies	136-001	39%	18%	7%	38%	22%	8%	81%	Lecture Theatre
SSED (FBE)	014-024	52%	26%	13%	61%	28%	17%	81%	Lecture Theatre
SSED (FBE)	014-025	45%	30%	13%	53%	32%	17%	81%	Lecture Theatre
SSED (FBE)	014-028	58%	31%	18%	57%	29%	17%	81%	Lecture Theatre
U8	018-001	53%	36%	19%	56%	26%	15%	81%	Lecture Theatre
Communication	020-102	28%	33%	9%	32%	26%	8%	81%	Lecture Theatre
TOTAL		51%	32%	16%	56%	29%	16%		

9.5.2

Utilization Rate for Tutorial Rooms

Building	Room No.	Semester 1.2014 Audited Room Frequency	Semester 1.2014 Audited Room Occupancy	Audited Utilization Rate (%)	Semester 1 2014 Planned Room Frequency	Semester 1 2014 Planned Room Occupancy	Planned Utilization Rate (%)	Space Management Policy	Type of Space
AusAid	093-001	57%	50%	29%	73%	48%	35%	81%	Teaching Rooms
AusAid	093-	61%	64%	39%	78%	43%	34%	81%	Teachin

	002								g Rooms
AusAid	093-003	56%	56%	32%	68%	45%	31%	81%	Teachin g Rooms
AusAid	093-004	59%	63%	38%	73%	46%	34%	81%	Teachin g Rooms
AusAid	093-007	62%	59%	36%	70%	49%	34%	81%	Teachin g Rooms
AusAid	093-201	52%	59%	31%	68%	44%	30%	81%	Teachin g Rooms
AusAid	093-202	56%	57%	32%	75%	43%	32%	81%	Teachin g Rooms
AusAid	093-203	49%	50%	25%	61%	42%	26%	81%	Teachin g Rooms
AusAid	093-204	51%	54%	28%	54%	38%	20%	81%	Teachin g Rooms
AusAid	093-205	44%	39%	17%	66%	29%	19%	81%	Teachin g Rooms
AusAid	093-206	49%	43%	21%	65%	37%	24%	81%	Teachin g Rooms
AusAid	093-207	58%	64%	38%	68%	48%	33%	81%	Teachin g Rooms
AusAid	093-208	60%	50%	30%	70%	47%	33%	81%	Teachin g Rooms
CELT	091-113	9%	70%	7%	6%	29%	2%	81%	Teachin g Rooms
Food and Textiles Building	FT-FT	24%	28%	7%	22%	42%	9%	81%	Teachin g Rooms
Humanities (FALE)	019-104A	39%	32%	12%	61%	35%	21%	81%	Teachin g Rooms

2014 Teaching Space Audit Report

Humanities (FALE)	019-104B	40%	43%	17%	41%	45%	18%	81%	Teaching Rooms
Humanities (FALE)	019-105	50%	44%	22%	67%	47%	32%	81%	Teaching Rooms
Main Marine Studies	134-107A	46%	30%	14%	53%	37%	20%	81%	Teaching Rooms
Main Marine Studies	134-107B	47%	45%	21%	48%	50%	24%	81%	Teaching Rooms
Main Marine Studies	134-GEO01	42%	58%	24%	47%	50%	23%	81%	Teaching Rooms
Old CFS Block	003-001	44%	48%	21%	62%	48%	30%	81%	Teaching Rooms
Old CFS Block	003-002	37%	34%	12%	61%	49%	30%	81%	Teaching Rooms
Old CFS Block	003-032	51%	38%	19%	63%	47%	29%	81%	Teaching Rooms
Old CFS Block	003-041	47%	43%	20%	59%	49%	29%	81%	Teaching Rooms
Old CFS Block	003-042	44%	21%	9%	63%	49%	31%	81%	Teaching Rooms
SSED (FBE)	014-009A	62%	61%	38%	66%	50%	33%	81%	Teaching Rooms
SSED (FBE)	014-009B	65%	62%	41%	71%	49%	35%	81%	Teaching Rooms
SSED (FBE)	014-014A	49%	41%	20%	67%	47%	32%	81%	Teaching Rooms
SSED (FBE)	014-014B	51%	51%	26%	65%	48%	31%	81%	Teaching Rooms
SSED (FBE)	014-023	62%	61%	38%	71%	49%	35%	81%	Teaching Rooms

2014 Teaching Space Audit Report

SSED (FBE)	014-027	49%	31%	15%	63%	45%	29%	81%	Teaching Rooms
SSED (FBE)	014-103	30%	40%	12%	29%	34%	10%	81%	Teaching Rooms
SSED (FBE)	014-111	48%	34%	16%	56%	34%	19%	81%	Teaching Rooms
SSED (FBE)	014-112	57%	35%	20%	56%	29%	16%	81%	Teaching Rooms
SSED (FBE)	014-113	59%	55%	32%	66%	109%	72%	81%	Teaching Rooms
SSED (FBE)	014-114	58%	56%	32%	67%	49%	33%	81%	Teaching Rooms
SSED (FBE)	014-115	56%	54%	30%	67%	46%	31%	81%	Teaching Rooms
SSED (FBE)	014-116	61%	53%	32%	72%	45%	33%	81%	Teaching Rooms
SSED (FBE)	014-117	51%	49%	25%	61%	48%	29%	81%	Teaching Rooms
SSED (FBE)	014-FBEA01	29%	71%	21%	15%	30%	4%	81%	Teaching Rooms
SSED (FBE)	014-FBEA023	36%	29%	10%	37%	32%	12%	81%	Teaching Rooms
SSED (FBE)	014-GLAS	16%	44%	7%	11%	30%	3%	81%	Teaching Rooms
Stham Campus	202-113	5%	34%	2%	4%	110%	4%	81%	Teaching Rooms
Stham Campus	202-204A	26%	117%	30%	11%	104%	12%	81%	Teaching Rooms
Stham Campus	202-204B	4%	20%	1%	8%	133%	10%	81%	Teaching Rooms

ICT	048-317	23%	35%	8%	19%	30%	6%	81%	Teaching Rooms
TOTAL		45%	48%	22%	54%	49%	26%	81%	

9.5.3

Utilization Rate for Not Centrally Timetabled Rooms				
Building	Room No.	Semester 1.2014 Audited Room Frequency	Semester 1 2014 Audited Room Occupancy	Audited Utilization Rate (%)
Old CFS	003-029	9%	3%	0.3%
Humanities (FALE)	019-300	16%	9%	1.5%
Humanities (FALE)	019-301	23%	10%	2.4%
Humanities (FALE)	019-401	16%	6%	0.9%
SSED (FBE)	014-Tourism Room	31%	28%	8.7%
SSED (FBE)	014-Post Grad Lecture Rm	15%	2%	0.3%
Main Marine Studies	118-GE101	1%	1%	0.0%
Main Marine Studies	134-FIO LAB	42%	21%	8.7%
Main Marine Studies	118-GIS1	39%	22%	8.8%
Main Marine Studies	118-GIS2	38%	22%	8.5%
Stham Campus	201-Com Lab	31%	17%	5.2%
Stham Campus	201-Lecture rm	44%	24%	10.5%
Stham Campus	201-Moot Court	3%	2%	0.1%
Stham Campus	202-103	16%	9%	1.4%
Stham Campus	202-105	35%	20%	6.8%
Stham Campus	202-111	61%	33%	20.4%

Statham Campus	202-112	10%	4%	0.4%
Statham Campus	206-MBA Lab 1	36%	6%	2.1%
Statham Campus	206-MBA Lab 2	3%	1%	0.0%
Statham Campus	206-MBA Conference	27%	12%	3.1%
Statham Campus	202-113 MBA Lecture Rm1	23%	11%	2.6%
Statham Campus	206-MBA Lecture Rm2	16%	6%	1.0%
Communication	020-ITS 19	59%	30%	17.6%
Communication	020-ITS 20	32%	17%	5.4%
ICT A	047- G.Lab A1	51%	40%	20.6%
ICT A	047- G.Lab A2	3%	2%	0.1%
AusAid	093-008	49%	40%	19.6%
AusAid	093-101	54%	39%	21.0%
AusAid	093-102	58%	39%	22.7%
AusAid	093-105	59%	46%	26.8%
AusAid	093-106	61%	42%	25.7%
Engineering	009-Mechanic Lab	6%	4%	0.2%
Engineering	009-Electronics	6%	4%	0.2%
TOTAL		30%	17%	5.1%

9.5.4

Utilization Rate for Lab

Building	Room No.	Semester 1 2014 Audited Room Frequency	Semester 1 2014 Audited Room Occupancy	Audited Utilization Rate (%)	Semester 1 2014 Planned Room Frequency	Semester 1 2014 Planned Room Occupancy	Planned Utilization Rate (%)	Space Management Policy	Type of Space
Engineering	009-120	8%	35%	3%	13%	43%	5%	37.5%	Specialized Lab
Engineering	009-FLUID	6%	9%	1%	34%	44%	15%	37.5%	Specialized Lab
Engineering	009-INTEL	0%	0%	0%	4%	50%	2%	37.5%	Specialized Lab
Engineering	009-TECH	12%	64%	8%	15%	39%	6%	37.5%	Specialized Lab
Chemistry	090-007	34%	54%	19%	44%	50%	22%	37.5%	Specialized Lab
Chemistry	090-010	37%	82%	31%	25%	50%	13%	37.5%	Specialized Lab
Main SPAS (FSTE)	010-030	35%	58%	20%	44%	49%	22%	37.5%	Specialized Lab
Main SPAS (FSTE)	010-032	49%	62%	31%	61%	21%	13%	37.5%	Specialized Lab
Main SPAS (FSTE)	010-053	19%	24%	5%	23%	50%	11%	37.5%	Specialized Lab
Main SPAS (FSTE)	010-102	34%	66%	22%	43%	47%	20%	37.5%	Specialized Lab
Main SPAS (FSTE)	010-120	32%	65%	20%	38%	55%	21%	37.5%	Specialized Lab
Main SPAS (FSTE)	010-131	2%	42%	1%	5%	50%	3%	37.5%	Specialized Lab
Main SPAS (FSTE)	010-142	26%	84%	22%	20%	50%	10%	37.5%	Specialized Lab
Main SPAS (FSTE)	010-152	23%	98%	23%	27%	50%	13%	37.5%	Specialized Lab
ICT B	048-324	28%	43%	12%	37%	86%	32%	81%	Computer Lab

2014 Teaching Space Audit Report

ICT B	048-327	41%	131%	53%	23%	73%	17%	81%	Computer Lab
Main Marine Studies	134-124	25%	94%	23%	39%	49%	19%	37.5%	Specialized Lab
TOTAL		24%	59%	14%	29%	50%	15%		