Making a difference; Student Centered Medical Education in Myanmar Medical Universities Knowledge Sharing

Contents

- Sydney medical program
- Student selection
- Learning teaching
- Student support
- Learning environment
- QA

Introduction

- **Title of the Training –**
  Making a difference; Student-centered Medical Education in Myanmar

- **Place of Training –**
  *Sydney Medical University, Australia
  *RPA hospital (observing clinical skill training)
  *Charles Perkins Centre (Attending TBL sessions,
  small group learning sessions, X lab)
  *Royal North Shore Hospital (observation of OSCE, Clinical Skill training)

- **AAF 17 fellows**
  15 senior faculty members from 4 medical universities

Opening Ceremony

4

Host institutions

Sydney medical university is

- number one in Australia and
- 17th Worldwide in Medicine category of the 2016 QS World University Ranking
- 35th in the clinical, preclinical and health category of the Times Higher Education World University Ranking 2016-2017.

Main Discussion Points in the training

1. Overview of the Sydney Medical Program including graduates outcomes, curriculum development and integrating basic and clinical sciences
2. Selection and admission
3. Curriculum development as a whole group project
4. Curriculum mapping, Curriculum Planning
5. Theory and practice of team based learning and getting experience by attending TBL sessions of Year 1 student

Main Discussion Points in the training

6. Online learning of basic science, teaching of basic science, writing of TBLs
7. Anatomy and histology pedagogy and practice
8. Clinical teaching at central clinical school, Procedural skill
9. Clinical studies and teaching
10. Observation and discussion at Sydney clinical skills and simulation centre
11. Principles of programmatic assessment
12. Assessment item banking, writing assessment item types
13. Design and implementation of OSCEs
14. e-learning design and platforms

Main Discussion Points in the training

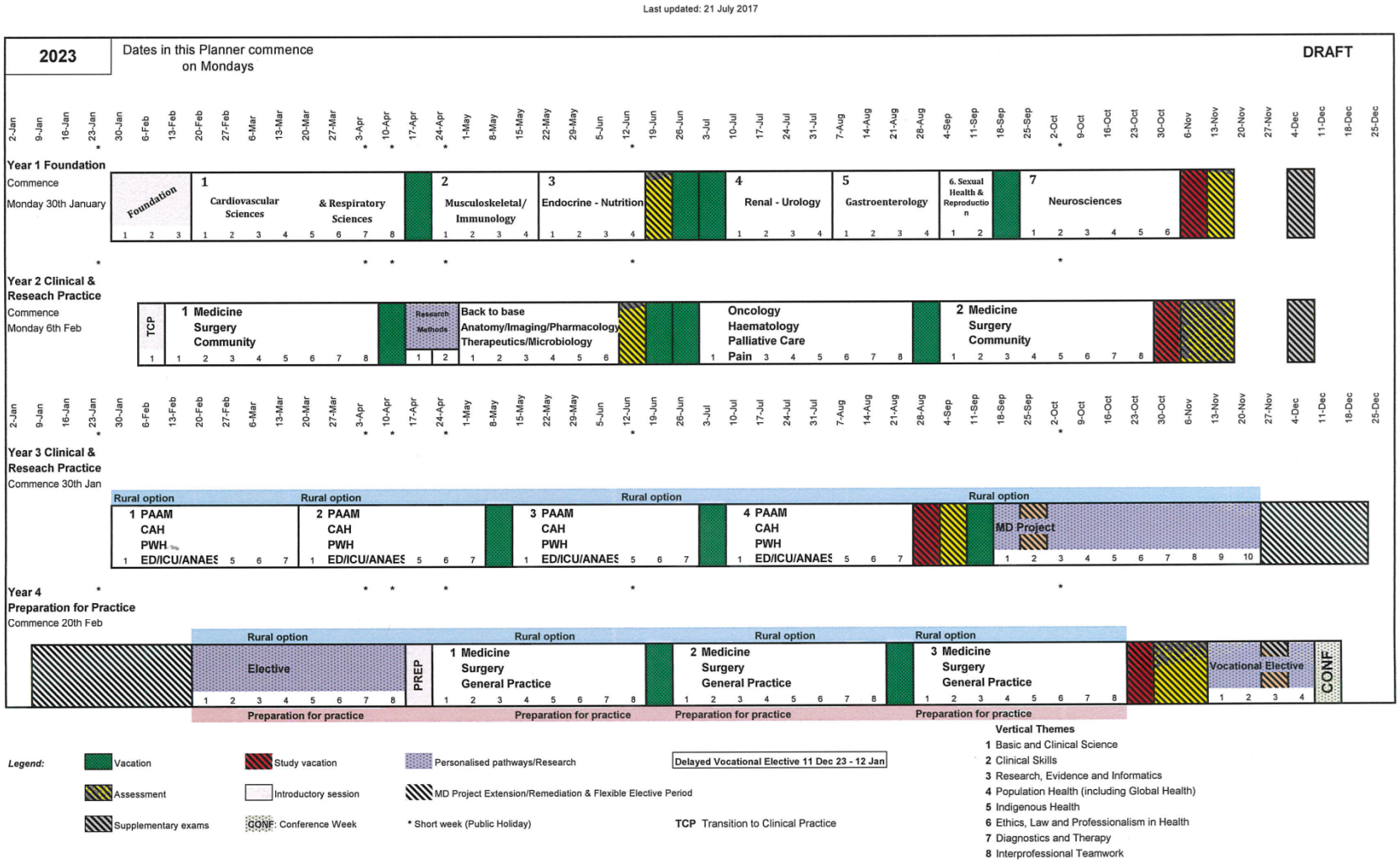
15. Ethics and professionalism within SMP, Role modeling in medical education
16. How to teach communication skills to students
17. Principles of learning portfolio
18. Student support, health and well being
19. Faculty development and administration staff development
20. Standards, accreditation and quality
21. Collaboration of research in medical education
22. IPE

Sydney Medical Program

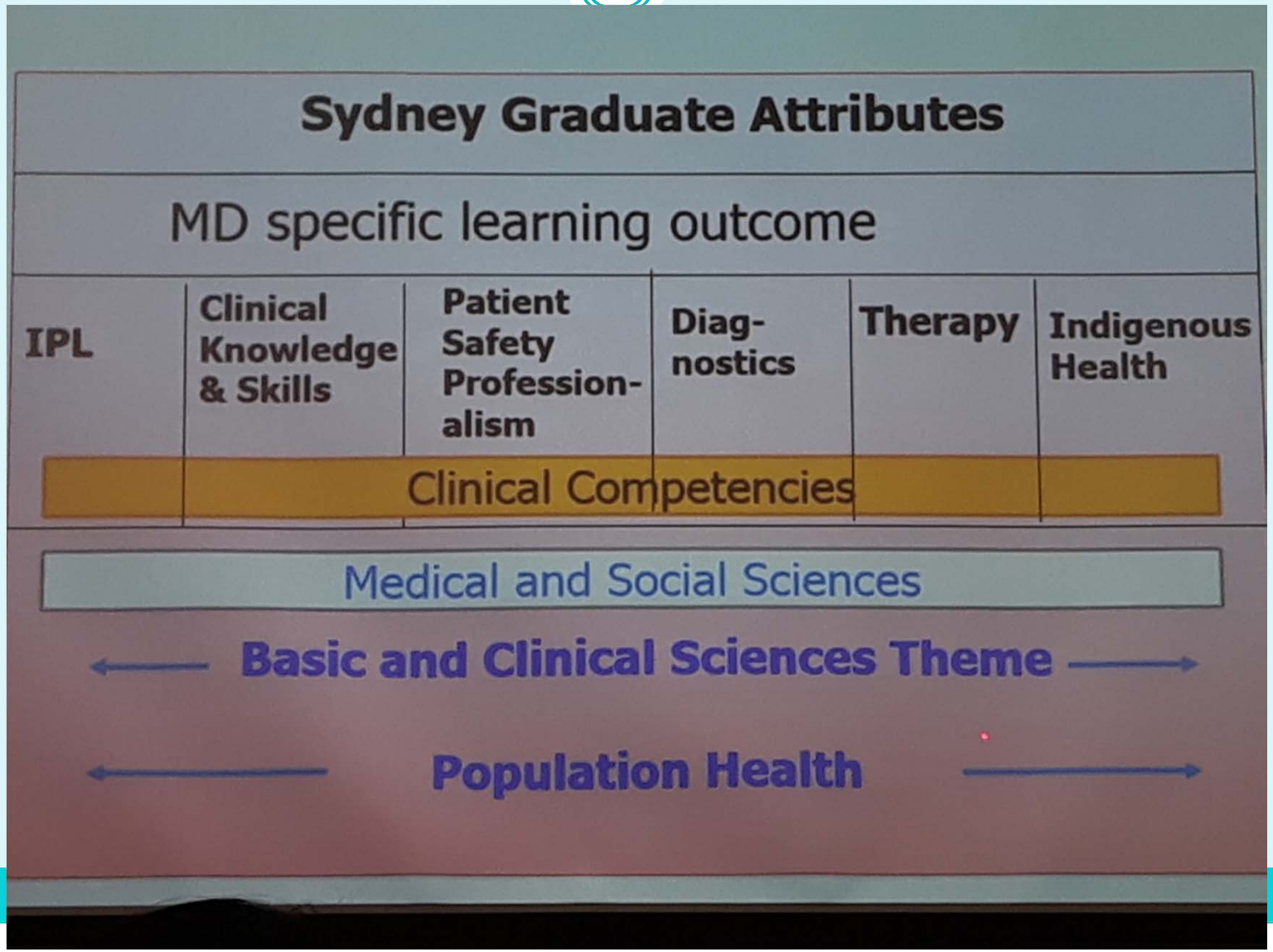
- Entry –postgraduate Course

  (Undergraduate degree – biological science, arts and science, law, political science)
- Duration – 4 years
- Degree - MD
- 2 years in campus (stage 1 and 2)
- 2 years in clinical schools (stage 3)
- Internship after graduation

Planning for year 2023



Sydney Medical Education Program



Graduate outcomes

- **Basic and clinical sciences-** provides the scientific foundation for medical studies (covering anatomy, physiology, pharmacology, histology, pathology)
- **Patient and doctor –**sessions cover clinical knowledge and skills, clinical reasoning, clinical communication and patient safety. (bedside teaching)
- **Population Medicine –** includes the epidemiology and the delivery of health care, through the knowledge and understanding of different heath systems and the role of the doctor within them
- **Personal and professional development-** covers aspects of personal development and professionalism, the law relevant to medical practice, ethics, medical humanities and patient safety. PPD transform a student to a healthcare professional with responsibilities to self, collegues and the patients

Early Clinical Exposure

- from the beginning of year 1, spend 1 day each week in clinical schools.
- Learn how to take history from a patient and perform clinical examination.
- Year 3 and 4 based in clinical schools.

Research training

- gain formal training in year 1 encompassing
  - the basic principles of health and medical research,
  - research governance and ethics and
  - the basics of research methods in biomedical, clinical and public health.

- Student have to conduct a research project as part of the course, gaining experience in
  - project organization and management,
  - data analysis,
  - oral presentation skills and
  - scientific writing

Admission requirement

- Domestic and international applicants need to have a bachelor degree with a minimum credit average (6.5 or better)
- domestic applicant need to have competitive score in GAMSAT(Graduate Australian Medical School Admission Test) (50%)
- International applicants can submit GAMSET or MCAT (Medical College Admission Test) results

- Multimini-interview (situation judgment test) (50 %)

Entry

- No of student 300 students

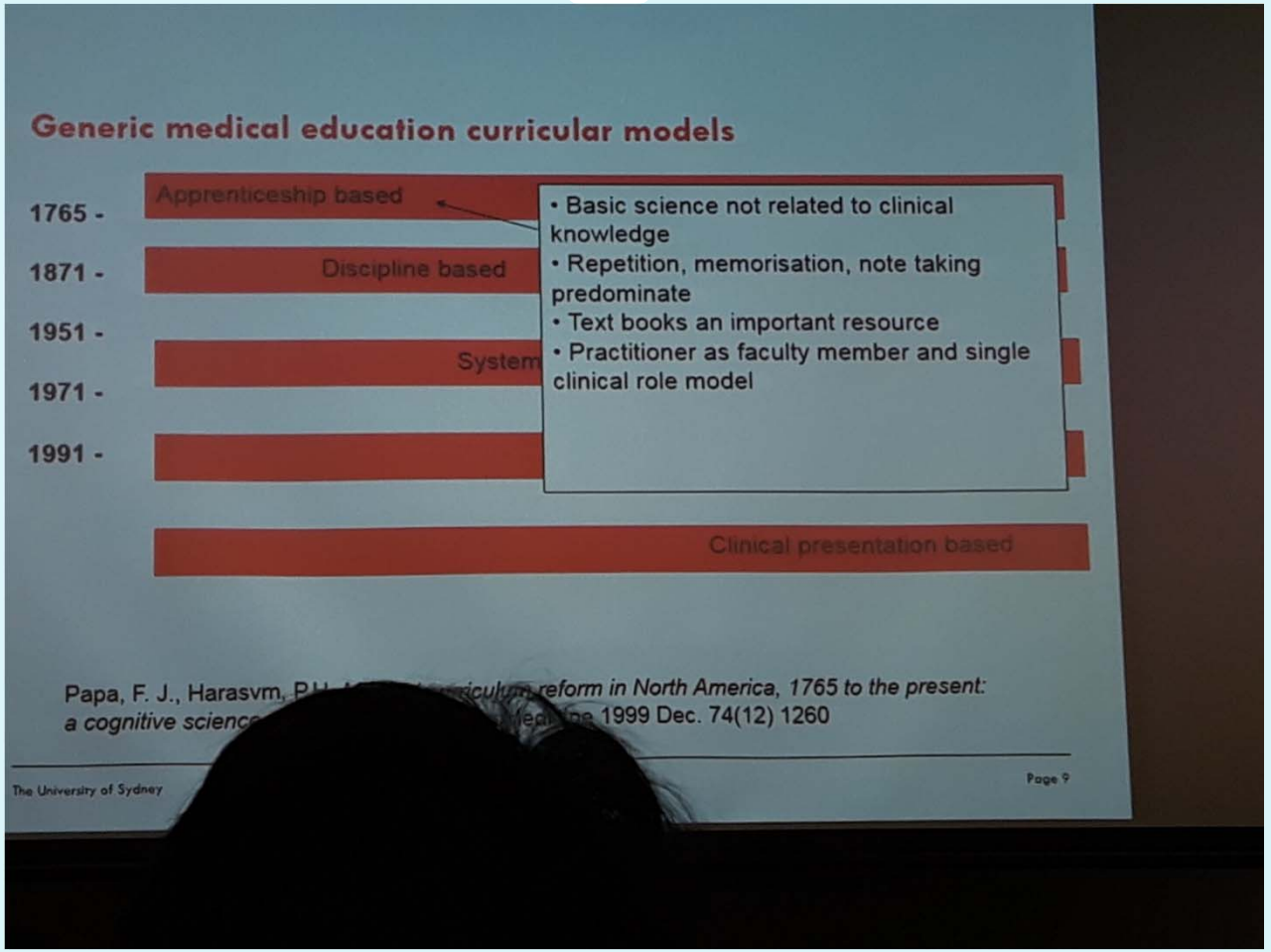
  - 220 domestic
  - 70 international
  - 10 reserved for outstanding students in matriculation

- Age of commencing – 24 years

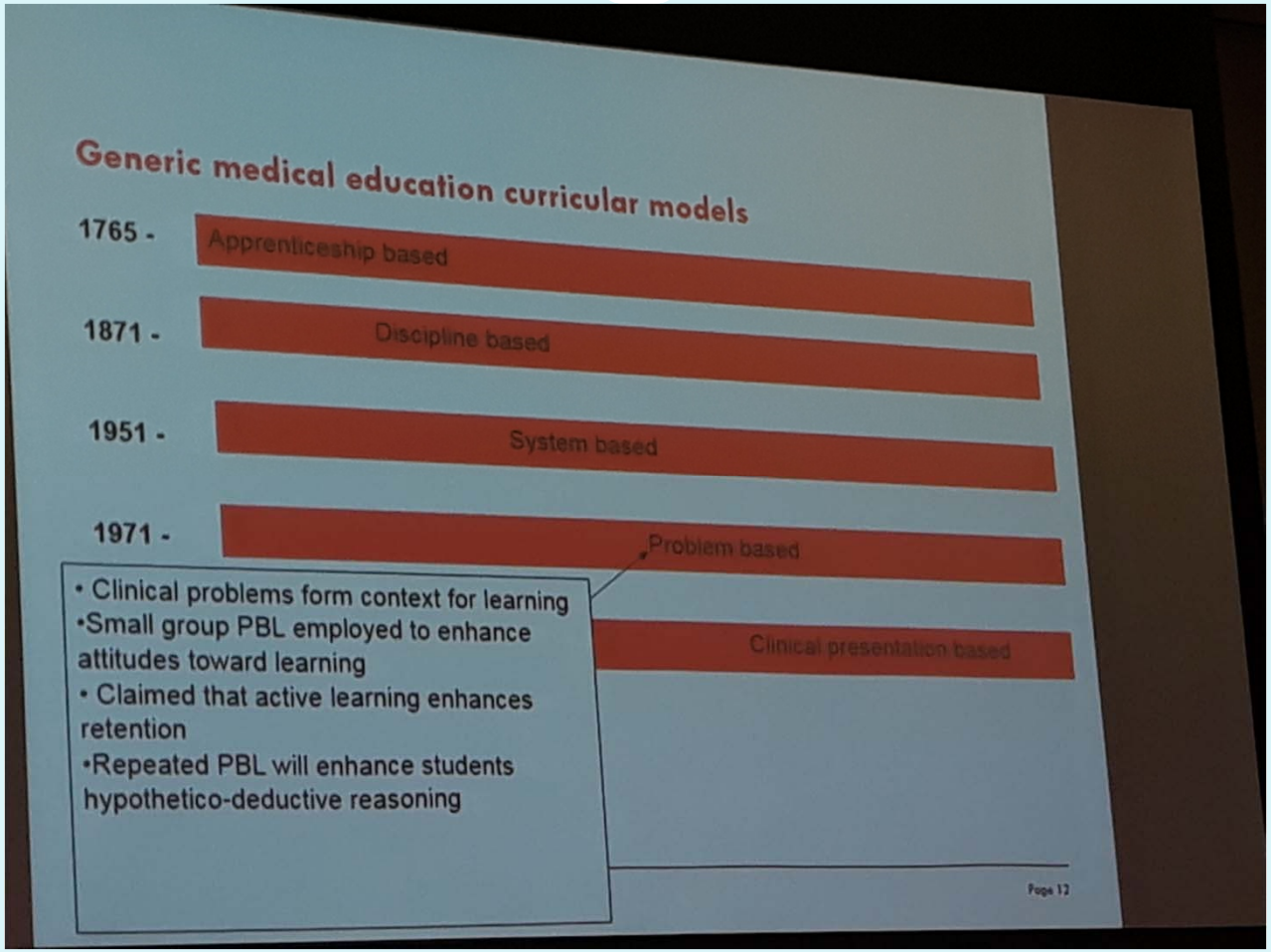
Learning/Teaching

- After 20 years experience with PBL
- now in the transitional period to change to TBL
- because former curriculum is not ready to do clinical works.
- Cases are written around 120 core clinical problems.
- Year 1 students are training with team based learning.
- Main learning teaching method use is small group learning with excellent, well equipped learning environment.

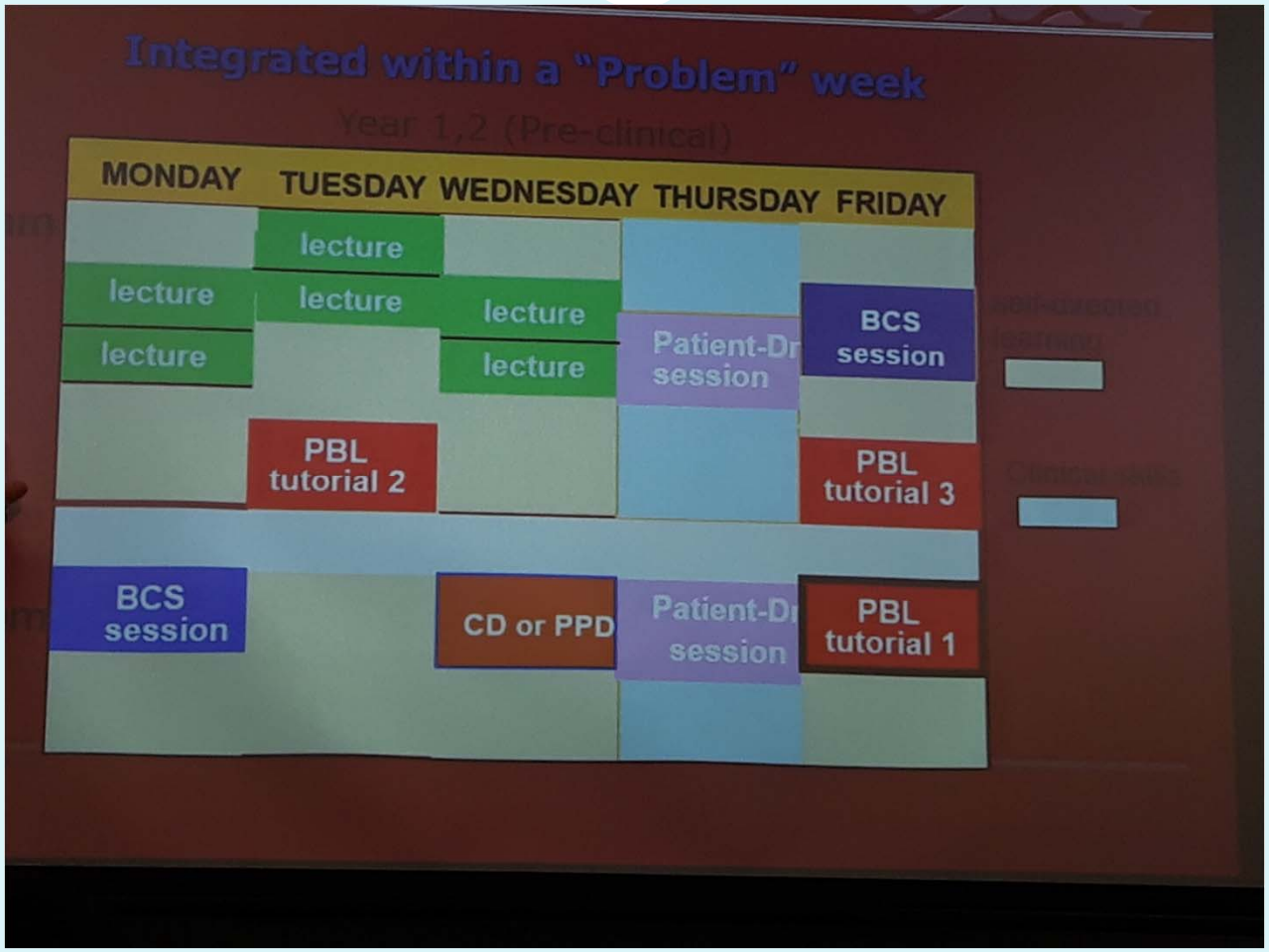
Changing trends



Changing trends 2



Integration PBL



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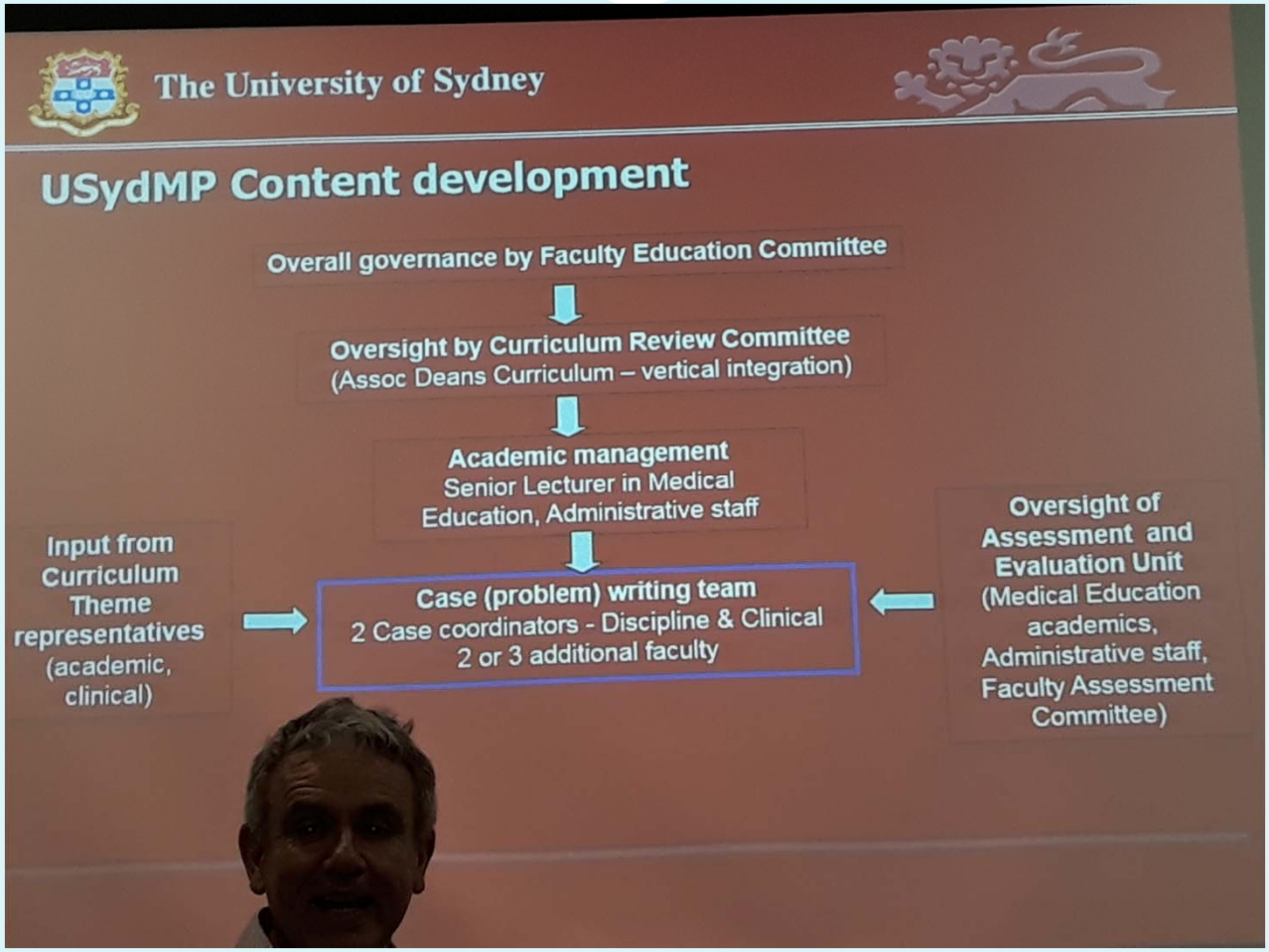
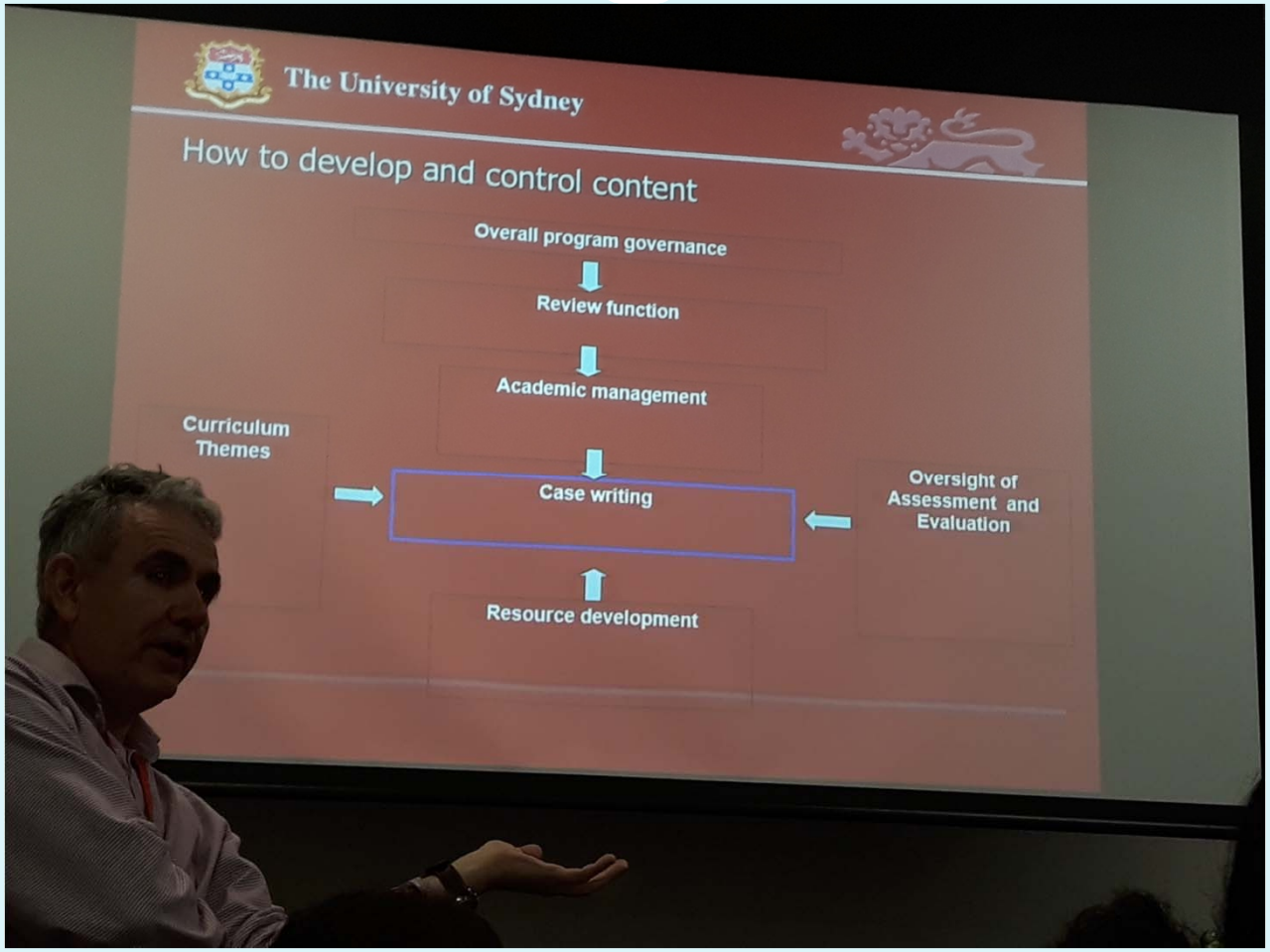


Content control

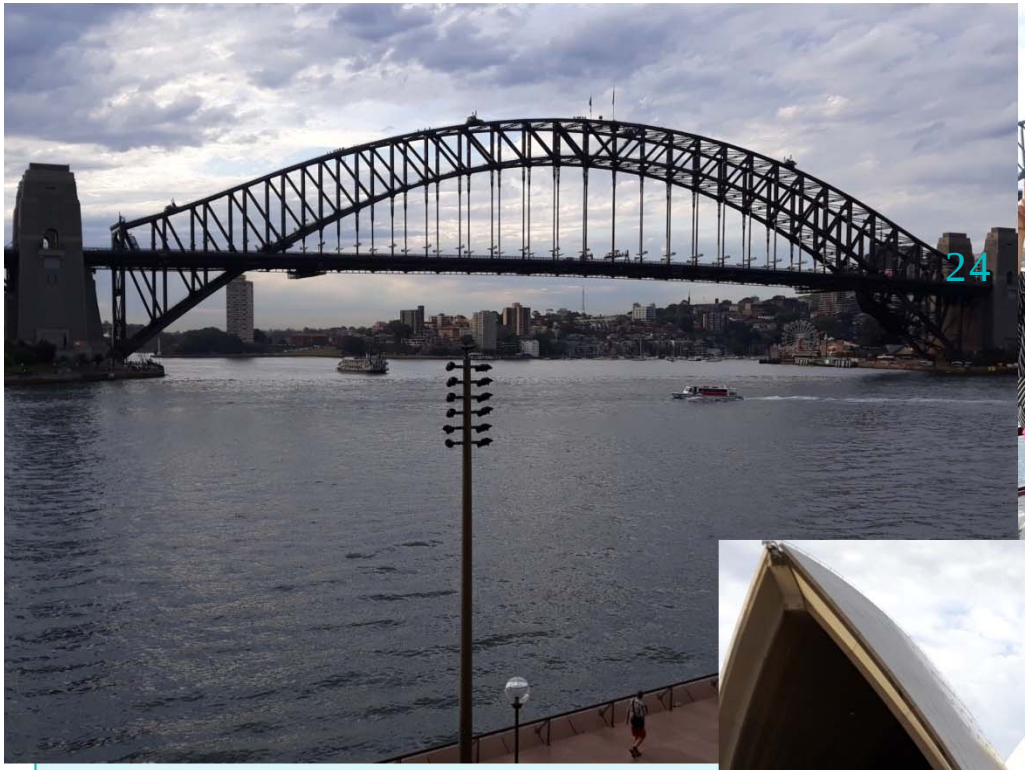


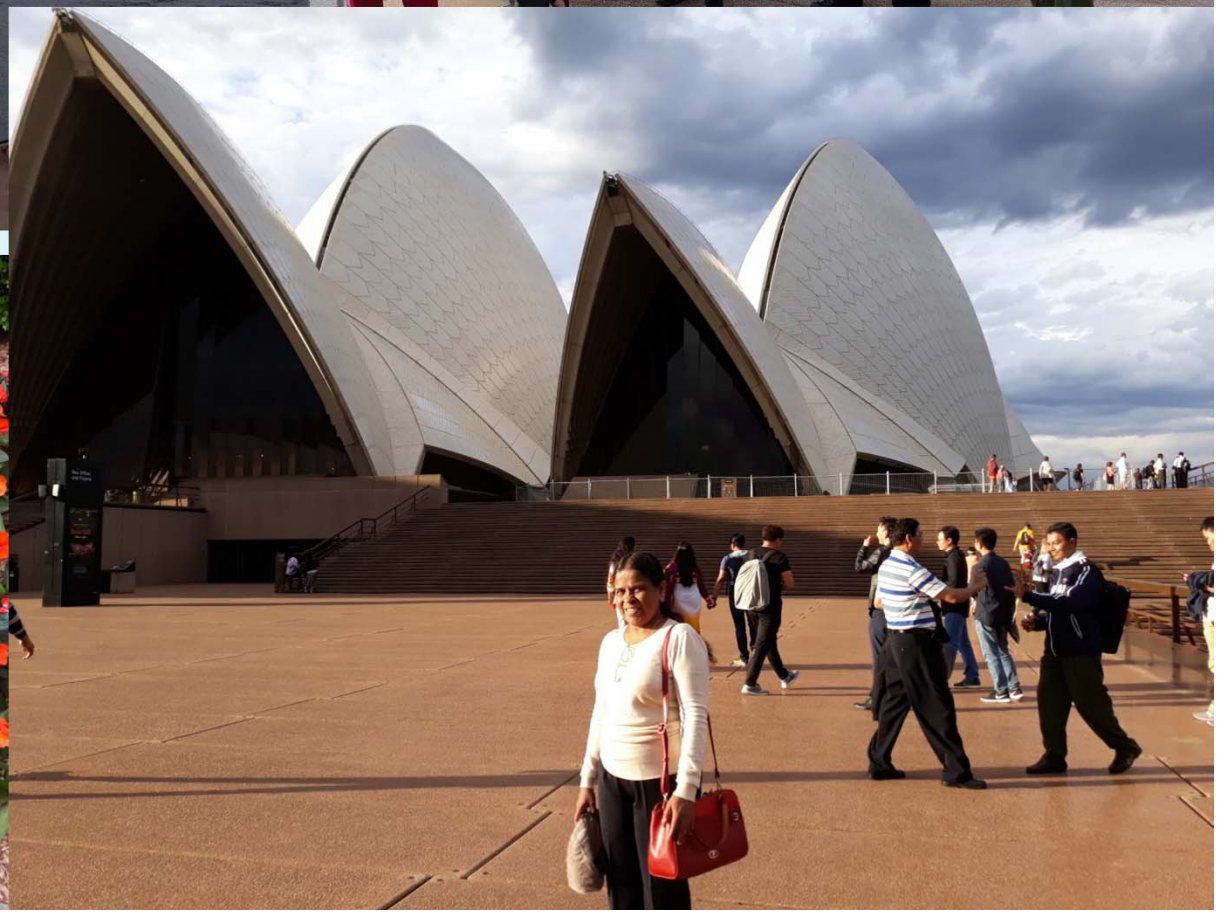
Generic Timetable

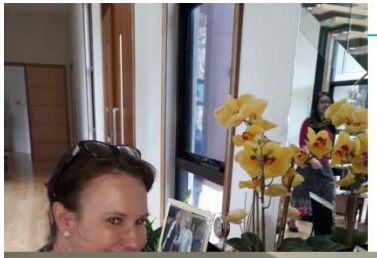
2018 — STAGE 1 - GENERIC

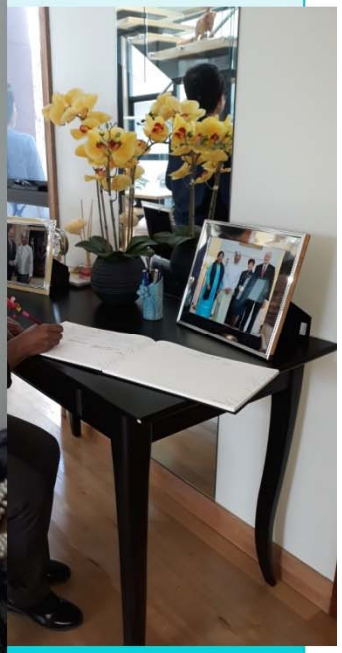
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
8:00 AM	Strand A - Clinical Day	TBL - 6 rooms at once	Strand B - Clinical Day		
8:15 AM					
8:30 AM					
8:45 AM					
9:00 AM				RESCHEDULE	LECTURE 7
9:15 AM					
9:30 AM					
9:45 AM					
10:00 AM				LECTURE 5	LECTURE 8
10:15 AM					
10:30 AM					
10:45 AM					
11:00 AM		LECTURE 1		LECTURE 6	LECTURE 9 / PPD Grand round
11:15 AM					
11:30 AM					
11:45 AM					
12:00 PM		*Lunch*		PRAC 1 - Class 1*	*Lunch*
12:15 PM					
12:30 PM					
12:45 PM					
1:00 PM		LECTURE 2			PRAC 2 - Class 3	Seminar
1:15 PM						
1:30 PM						
1:45 PM				PRAC 1 - Class 2		
2:00 PM		LECTURE 3				
2:15 PM					PRAC 2 - Class 1	Seminar
2:30 PM						
2:45 PM						
3:00 PM		LECTURE 4				
3:15 PM						
3:30 PM						
3:45 PM				PRAC 1 - Class 3	PRAC 2 - Class 2	
4:00 PM		Seminar				
4:15 PM						
4:30 PM						
4:45 PM						
5:00 PM						
5:15 PM						
5:30 PM						
5:45 PM						
6:00 PM						

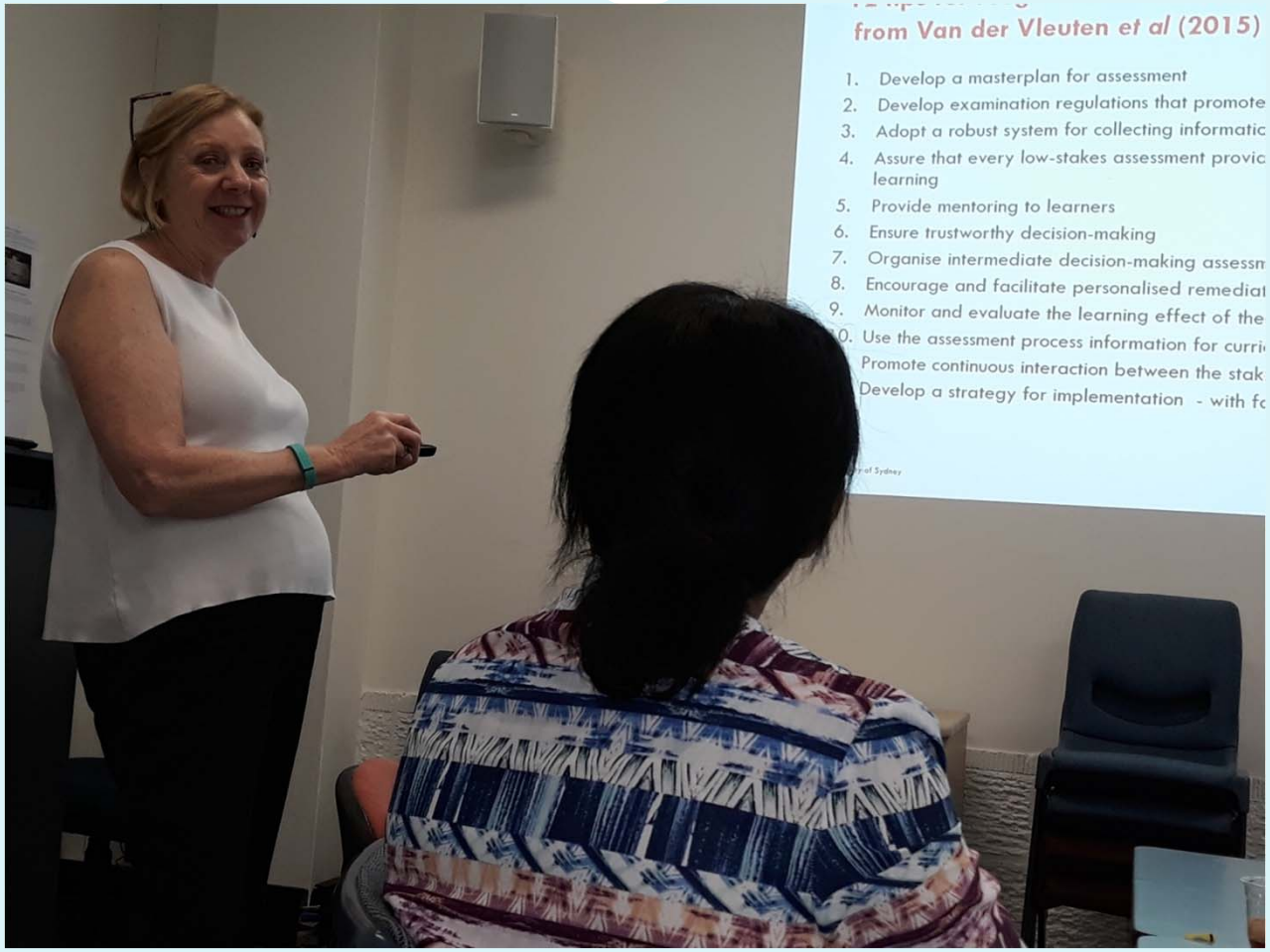
* Anatomy Prac 2hr; CPC Prac 1.5hr only - starting from 1pm
* Space for a THIRD prac in rotation provided there is no venue clash
* *Prac classes to rotate throughout year to be fairer with late finishes*

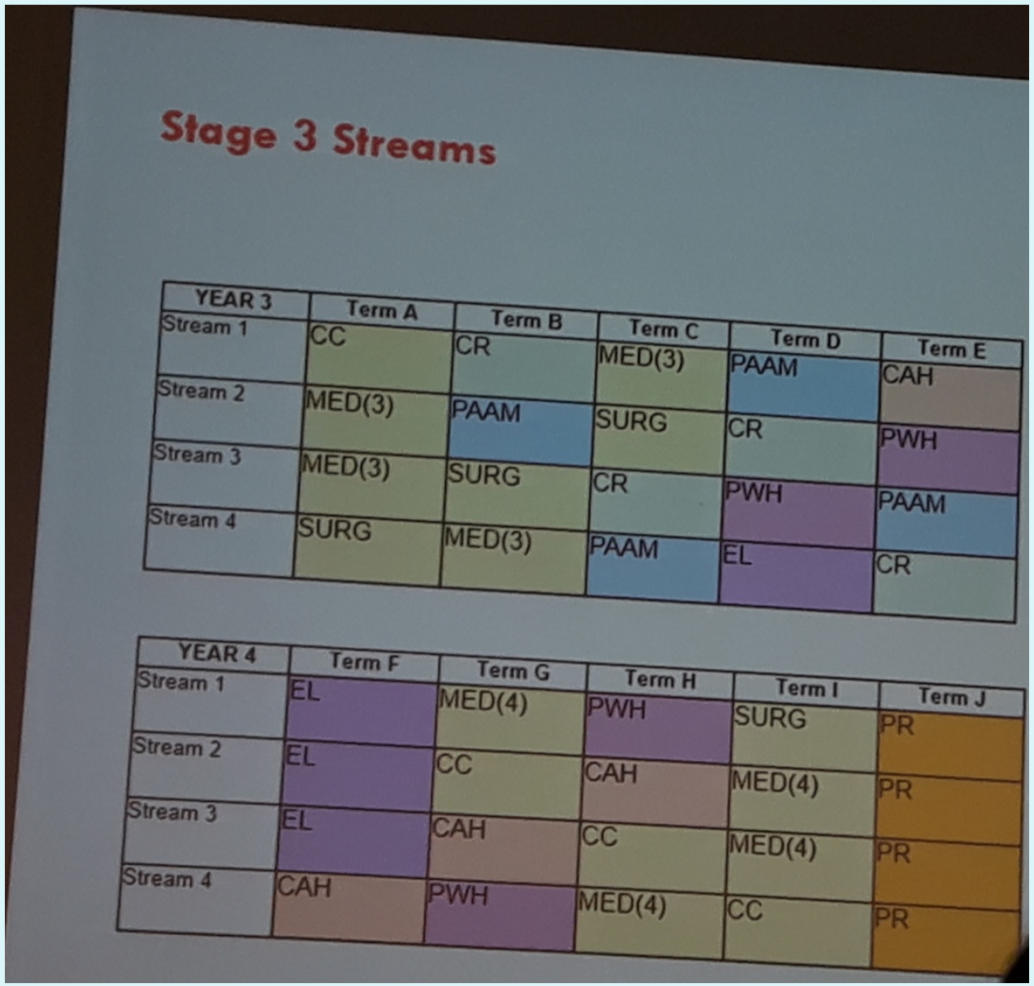








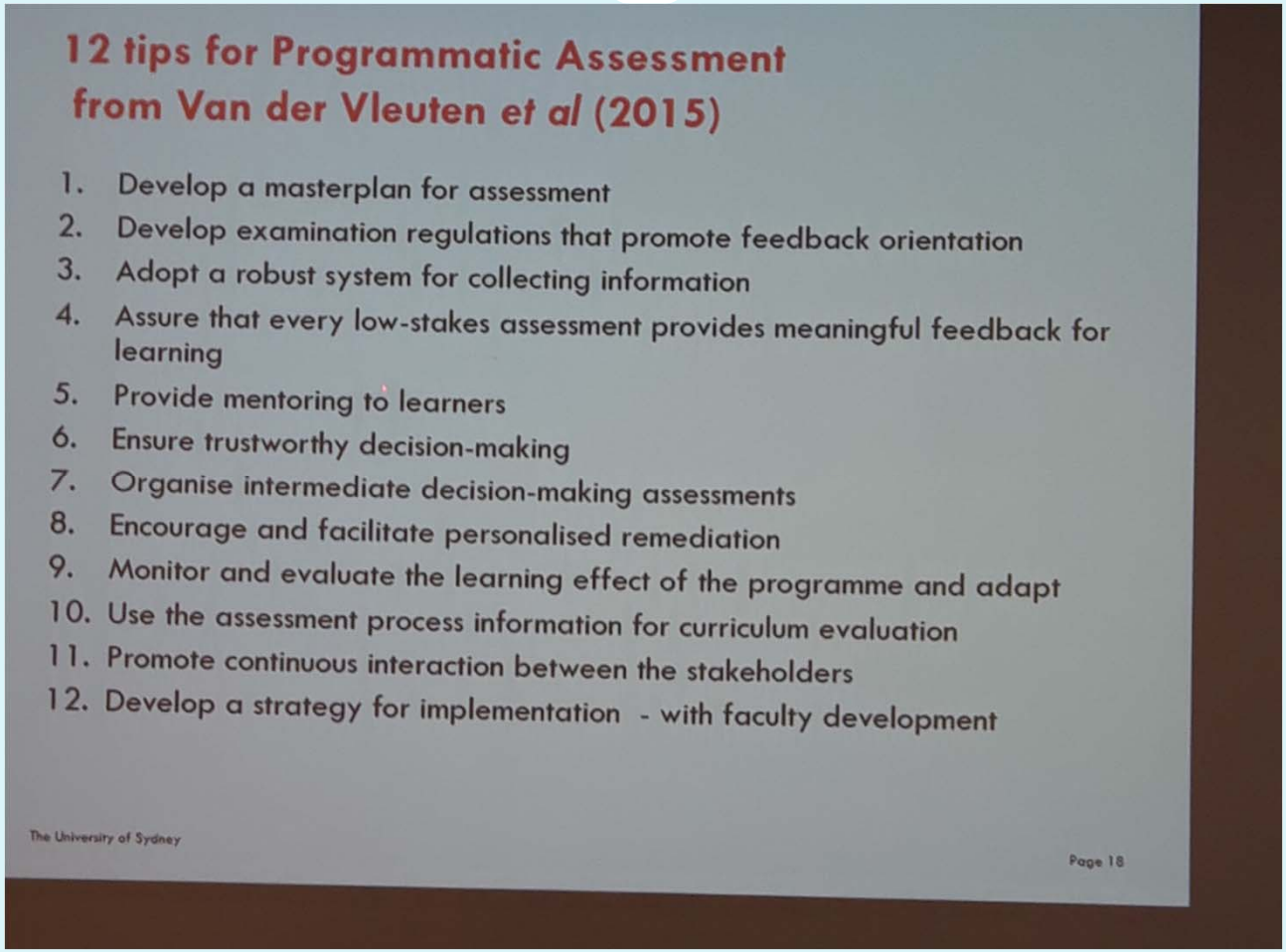

from Van der Vleuten et al (2015)
1. Develop a masterplan for assessment
2. Develop examination regulations that promote
3. Adopt a robust system for collecting informatic
4. Assure that every low-stakes assessment provic
learning
5. Provide mentoring to learners
6. Ensure trustworthy decision-making
7. Organise intermediate decision-making assessm
8. Encourage and facilitate personalised remediat
9. Monitor and evaluate the learning effect of the
10. Use the assessment process information for curri
Promote continuous interaction between the stak
Develop a strategy for implementation - with fc



Stage 3 Streams

YEAR 3	Term A	Term B	Term C	Term D	Term E
Stream 1	CC	CR	MED(3)	PAAM	CAH
Stream 2	MED(3)	PAAM	SURG	CR	PWH
Stream 3	MED(3)	SURG	CR	PWH	PAAM
Stream 4	SURG	MED(3)	PAAM	EL	CR

YEAR 4	Term F	Term G	Term H	Term I	Term J
Stream 1	EL	MED(4)	PWH	SURG	PR
Stream 2	EL	CC	CAH	MED(4)	PR
Stream 3	EL	CAH	CC	MED(4)	PR
Stream 4	CAH	PWH	MED(4)	CC	PR


12 tips for Programmatic Assessment
from Van der Vleuten et al (2015)
1. Develop a masterplan for assessment
2. Develop examination regulations that promote feedback orientation
3. Adopt a robust system for collecting information
4. Assure that every low-stakes assessment provides meaningful feedback for learning
5. Provide mentoring to learners
6. Ensure trustworthy decision-making
7. Organise intermediate decision-making assessments
8. Encourage and facilitate personalised remediation
9. Monitor and evaluate the learning effect of the programme and adapt
10. Use the assessment process information for curriculum evaluation
11. Promote continuous interaction between the stakeholders
12. Develop a strategy for implementation - with faculty development
The University of Sydney
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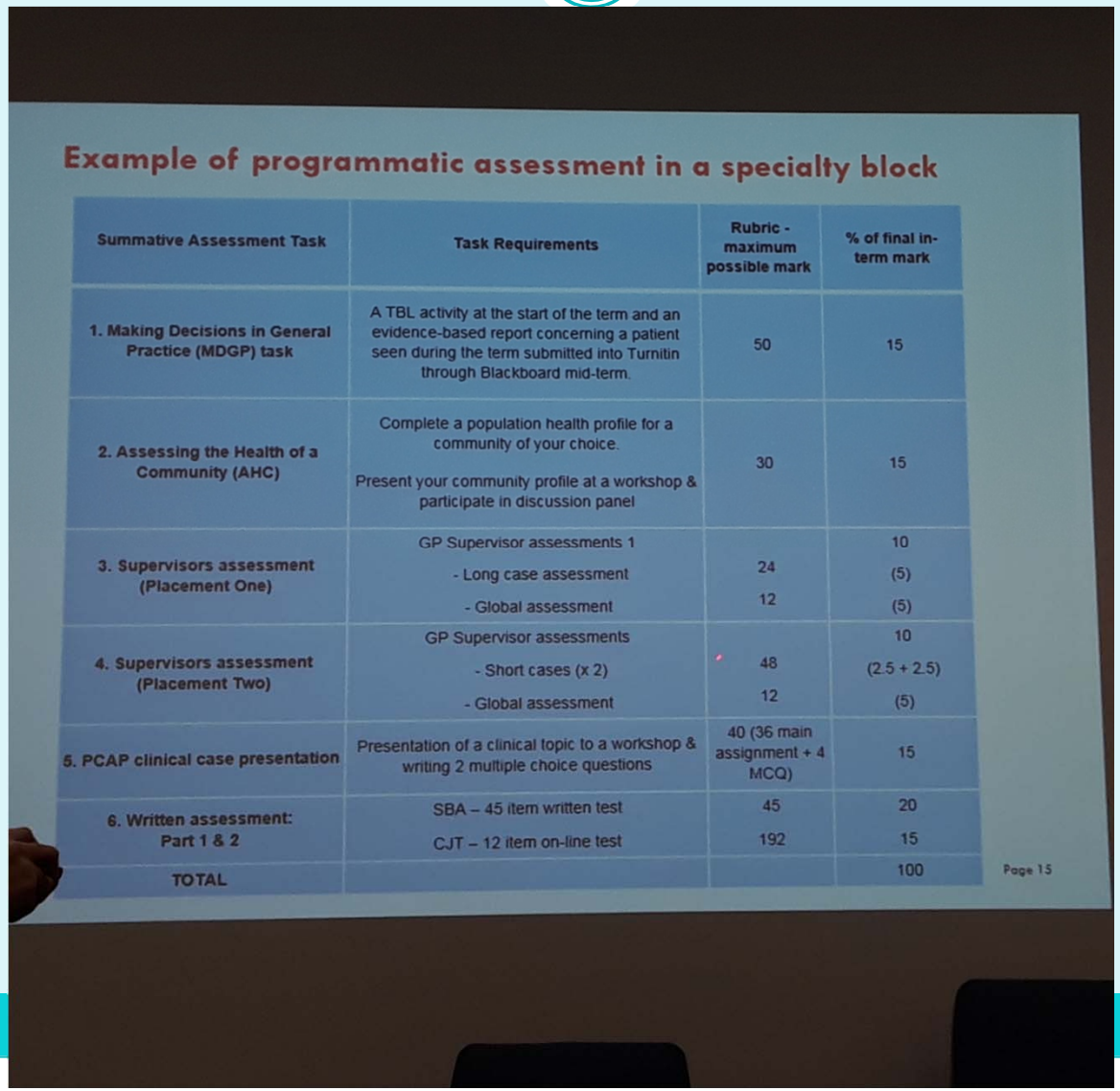
Year 3 Barrier Score

- The Year 3 Barrier Score determines progression to Year 4
- Students sit 4 assessment modules with a total of 270 SBA questions
  - 75 questions for Medicine 3
  - 75 questions for your Core Block completed in Year 3
  - 60 questions for your Term B/C Specialty Block
  - 60 questions for your Term D Specialty Block
- The Total Barrier Score is calculated so that the core blocks represent 75% and specialty blocks 25% if modules are completed.

Exam Module	RAW SCORE	SCALE SCORE	% Weighting
Medicine 3	75	150	37.5%
Other Core	75	150	37.5%
Specialty 1	60	50	12.5%
Specialty 2	60	50	12.5%
TOTAL	**270**	**400**	**100.0%**

Programmatic assessment



Example of programmatic assessment in a specialty block

Summative Assessment Task	Task Requirements	Rubric - maximum possible mark	% of final in-term mark
1. Making Decisions in General Practice (MDGP) task	A TBL activity at the start of the term and an evidence-based report concerning a patient seen during the term submitted into Turnitin through Blackboard mid-term.	50	15
2. Assessing the Health of a Community (AHC)	Complete a population health profile for a community of your choice. Present your community profile at a workshop & participate in discussion panel	30	15
3. Supervisors assessment (Placement One)	GP Supervisor assessments 1 - Long case assessment - Global assessment	 24 12	10 (5) (5)
4. Supervisors assessment (Placement Two)	GP Supervisor assessments - Short cases (x 2) - Global assessment	 48 12	10 (2.5 + 2.5) (5)
5. PCAP clinical case presentation	Presentation of a clinical topic to a workshop & writing 2 multiple choice questions	40 (36 main assignment + 4 MCQ)	15
6. Written assessment: Part 1 & 2	SBA – 45 item written test CJT – 12 item on-line test	45 192	20 15
TOTAL			100

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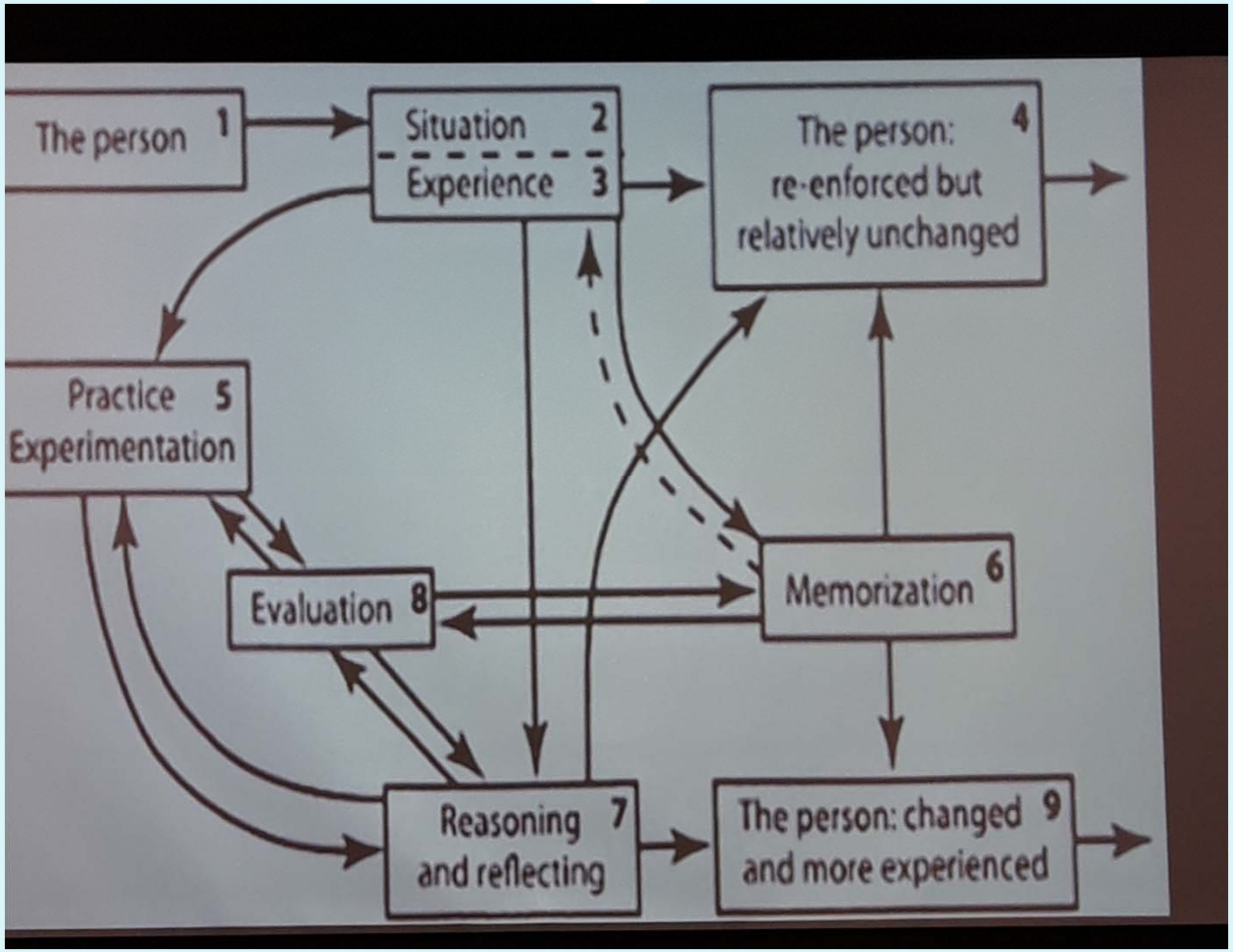
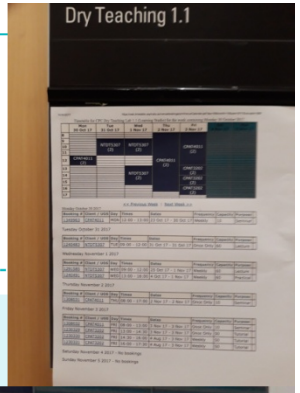

The person 1
Situation 2
Experience 3
The person: re-enforced but relatively unchanged 4
Practice Experimentation 5
Memorization 6
Evaluation 8
Reasoning and reflecting 7
The person: changed and more experienced 9

Charls Perkson Learning Centre

33



CPAT3202 (2)

<< Previous Week | Next Week >>

Monday October 30 2017

Booking #	Client / UOS	Day	Times	Dates	Frequency	Capacity	Purpose
1349963	CPAT4011	MON	12:00 - 13:00	23 Oct 17 - 30 Oct 17	Weekly	10	Seminar

Tuesday October 31 2017

Booking #	Client / UOS	Day	Times	Dates	Frequency	Capacity	Purpose
1240483	NTDT5307	TUE	09:00 - 12:00	31 Oct 17 - 31 Oct 17	Once Only	60	Lecture

Wednesday November 1 2017

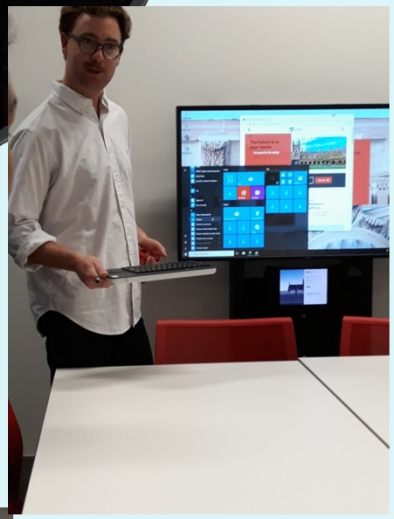
Booking #	Client / UOS	Day	Times	Dates	Frequency	Capacity	Purpose
1291585	NTDT5307	WED	09:00 - 12:00	25 Oct 17 - 1 Nov 17	Weekly	60	Lecture
1240491	NTDT5307	WED	13:00 - 16:00	4 Oct 17 - 1 Nov 17	Weekly	60	Practical

Thursday November 2 2017

Booking #	Client / UOS	Day	Times	Dates	Frequency	Capacity	Purpose
1308031	CPAT4011	THU	08:00 - 17:00	2 Nov 17 - 2 Nov 17	Once Only	10	Seminar

Friday November 3 2017

Booking #	Client / UOS	Day	Times	Dates	Frequency	Capacity	Purpose
1308032	CPAT4011	FRI	08:00 - 13:00	3 Nov 17 - 3 Nov 17	Once Only	10	Seminar
1230329	CPAT3202	FRI	13:00 - 14:30	3 Nov 17 - 3 Nov 17	Once Only	50	Tutorial
1230330	CPAT3202	FRI	14:30 - 16:00	4 Aug 17 - 3 Nov 17	Weekly	50	Tutorial
1230331	CPAT3202	FRI	16:00 - 17:30	4 Aug 17 - 3 Nov 17	Weekly	50	Tutorial



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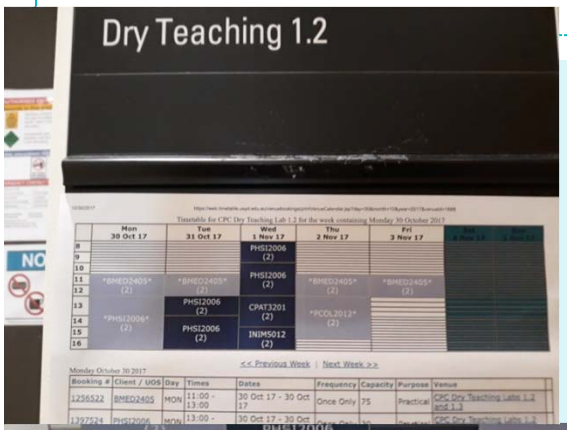
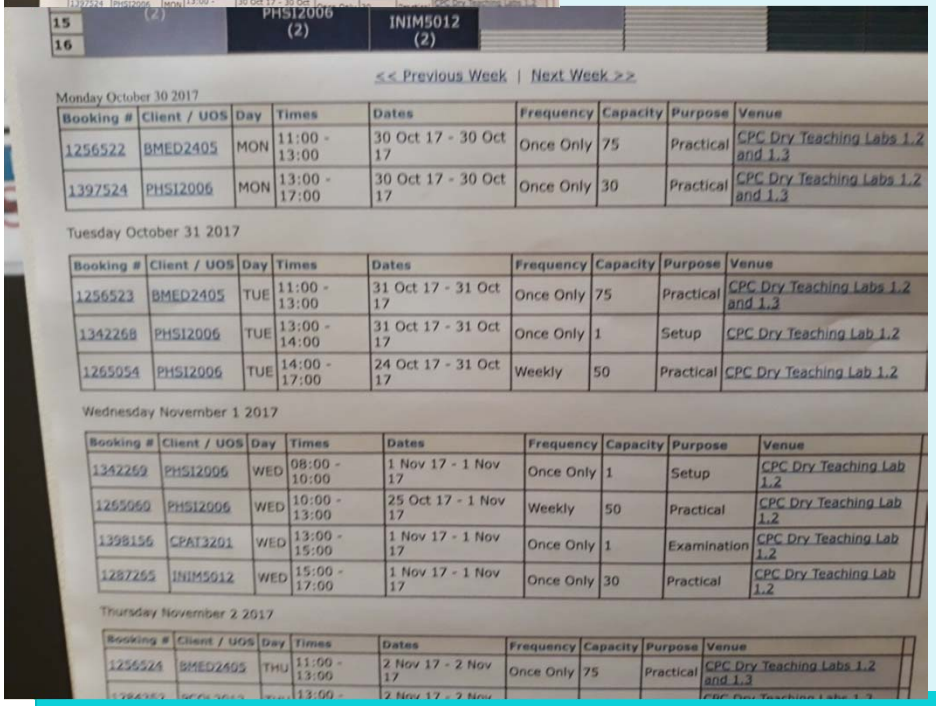
3
BACK TO BACK

Dry Teaching (Answering MCQ)





<< Previous Week | Next Week >>

Monday October 30 2017

Booking #	Client / UOS	Day	Times	Dates	Frequency	Capacity	Purpose	Venue
1256522	BMED2405	MON	11:00 - 13:00	30 Oct 17 - 30 Oct 17	Once Only	75	Practical	CPC Dry Teaching Labs 1.2 and 1.3
1397524	PHSI2006	MON	13:00 - 17:00	30 Oct 17 - 30 Oct 17	Once Only	30	Practical	CPC Dry Teaching Labs 1.2 and 1.3

Tuesday October 31 2017

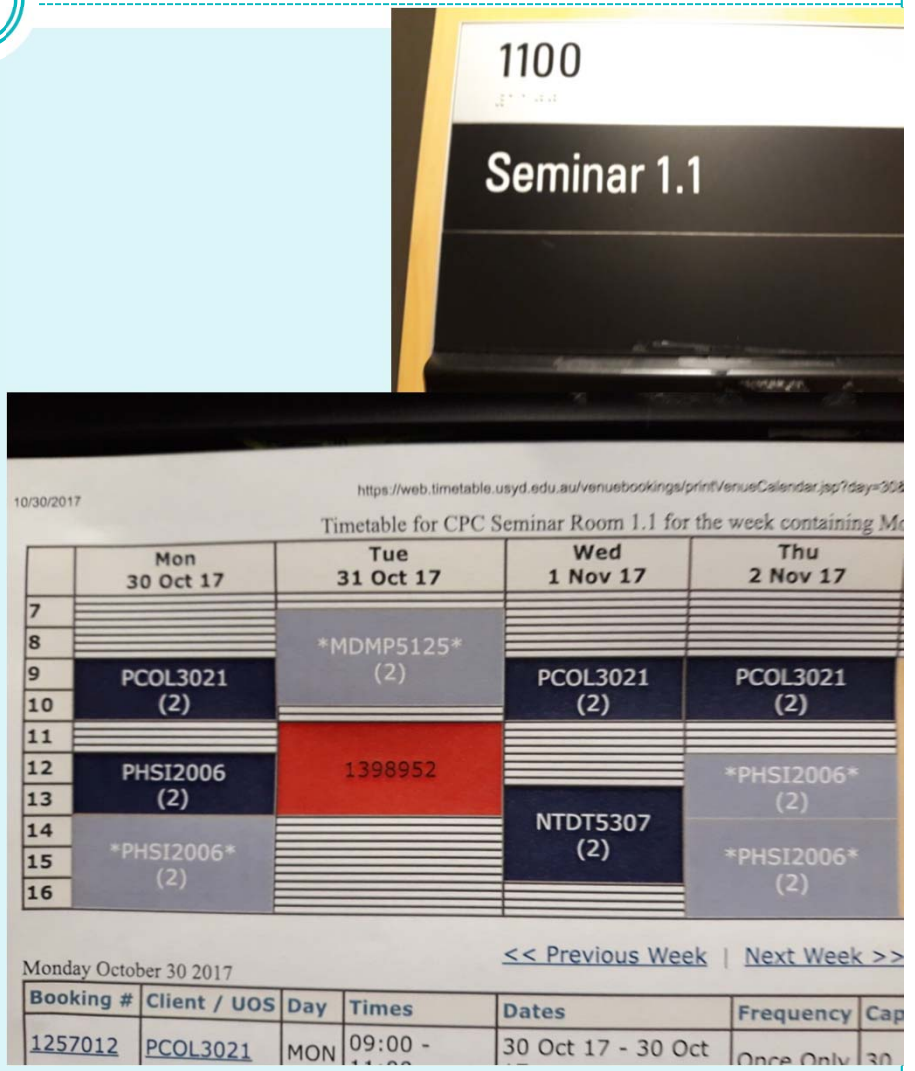
Booking #	Client / UOS	Day	Times	Dates	Frequency	Capacity	Purpose	Venue
1256523	BMED2405	TUE	11:00 - 13:00	31 Oct 17 - 31 Oct 17	Once Only	75	Practical	CPC Dry Teaching Labs 1.2 and 1.3
1342268	PHSI2006	TUE	13:00 - 14:00	31 Oct 17 - 31 Oct 17	Once Only	1	Setup	CPC Dry Teaching Lab 1.2
1265054	PHSI2006	TUE	14:00 - 17:00	24 Oct 17 - 31 Oct 17	Weekly	50	Practical	CPC Dry Teaching Lab 1.2

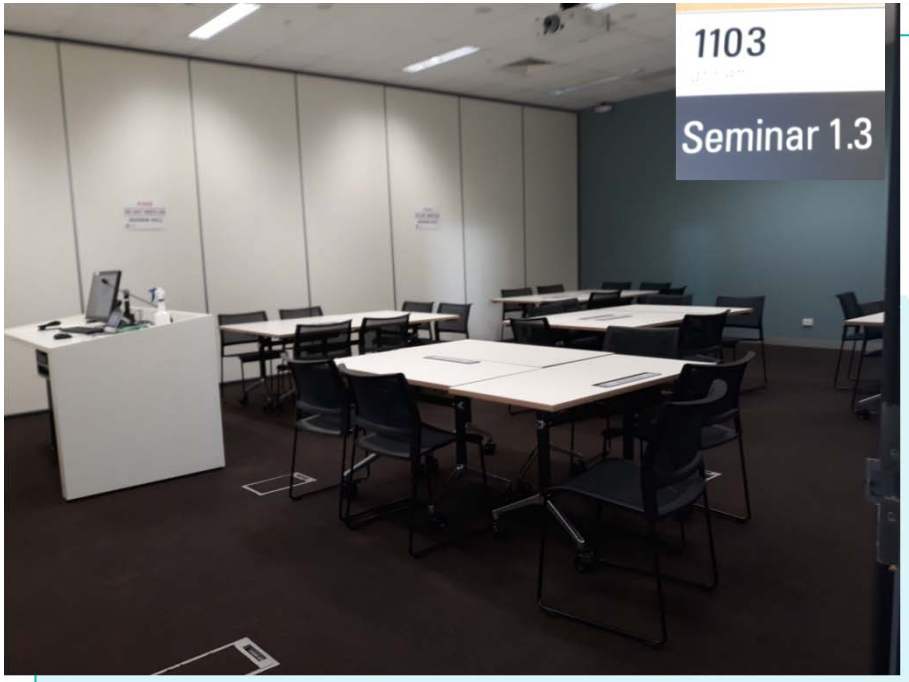
Wednesday November 1 2017

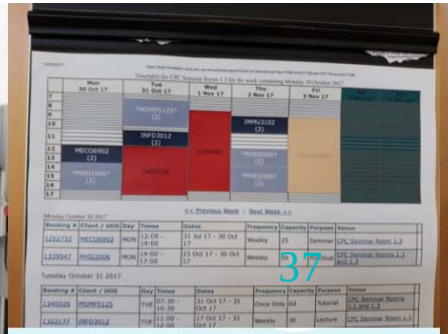
Booking #	Client / UOS	Day	Times	Dates	Frequency	Capacity	Purpose	Venue
1342269	PHSI2006	WED	08:00 - 10:00	1 Nov 17 - 1 Nov 17	Once Only	1	Setup	CPC Dry Teaching Lab 1.2
1265060	PHSI2006	WED	10:00 - 13:00	25 Oct 17 - 1 Nov 17	Weekly	50	Practical	CPC Dry Teaching Lab 1.2
1398156	CPAT3201	WED	13:00 - 15:00	1 Nov 17 - 1 Nov 17	Once Only	1	Examination	CPC Dry Teaching Lab 1.2
1287265	INIM5012	WED	15:00 - 17:00	1 Nov 17 - 1 Nov 17	Once Only	30	Practical	CPC Dry Teaching Lab 1.2

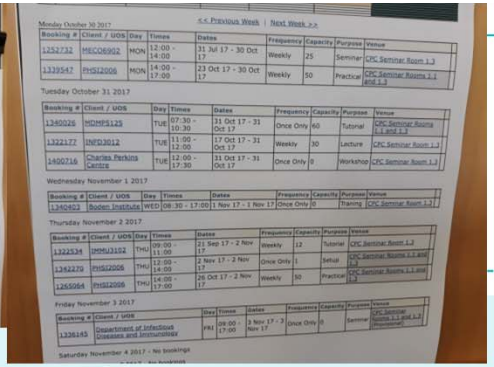
Thursday November 2 2017

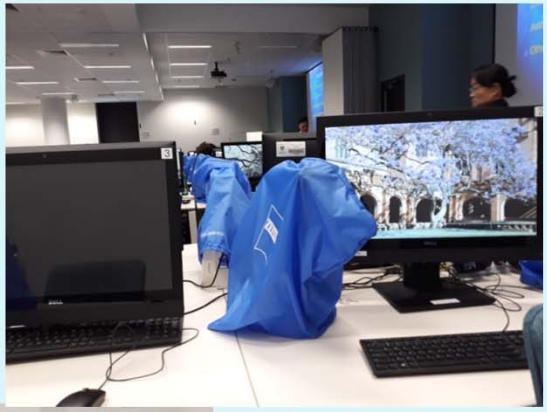
Booking #	Client / UOS	Day	Times	Dates	Frequency	Capacity	Purpose	Venue
1256524	BMED2405	THU	11:00 - 13:00	2 Nov 17 - 2 Nov 17	Once Only	75	Practical	CPC Dry Teaching Labs 1.2 and 1.3

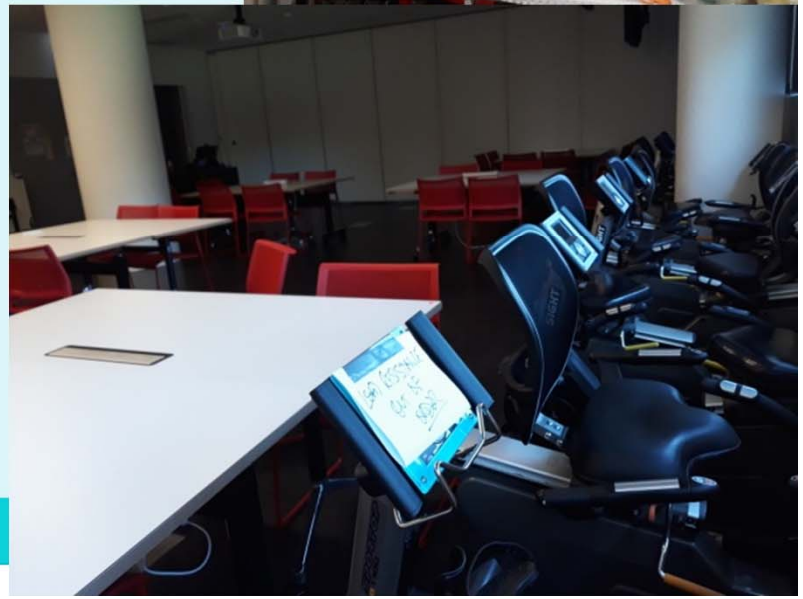


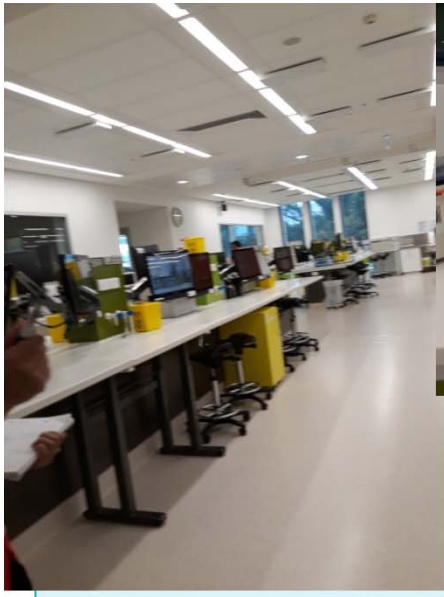

1103
Seminar 1.3

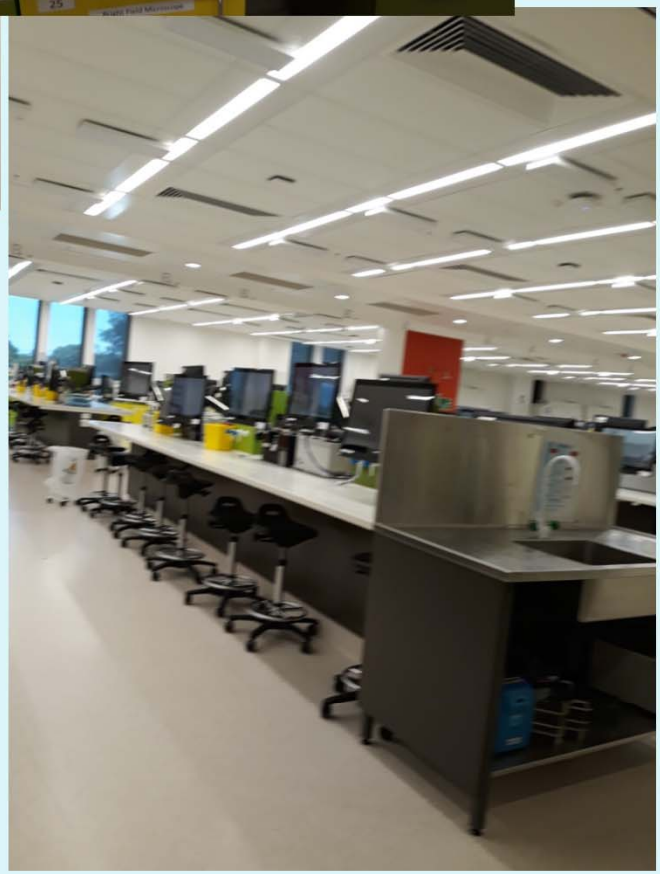


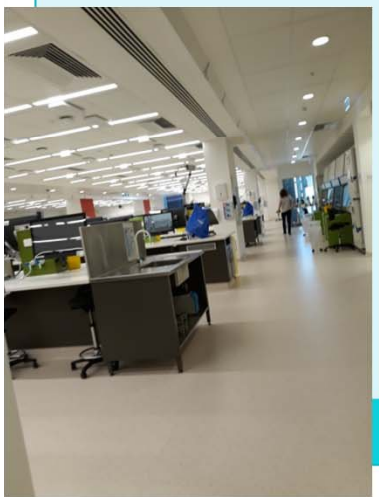












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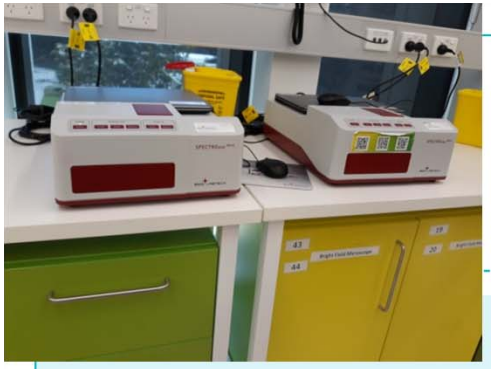
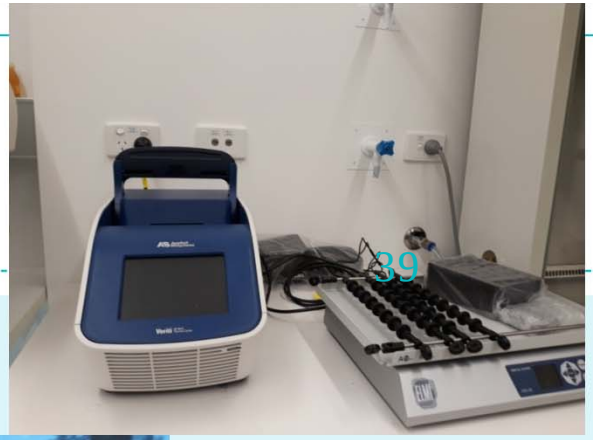
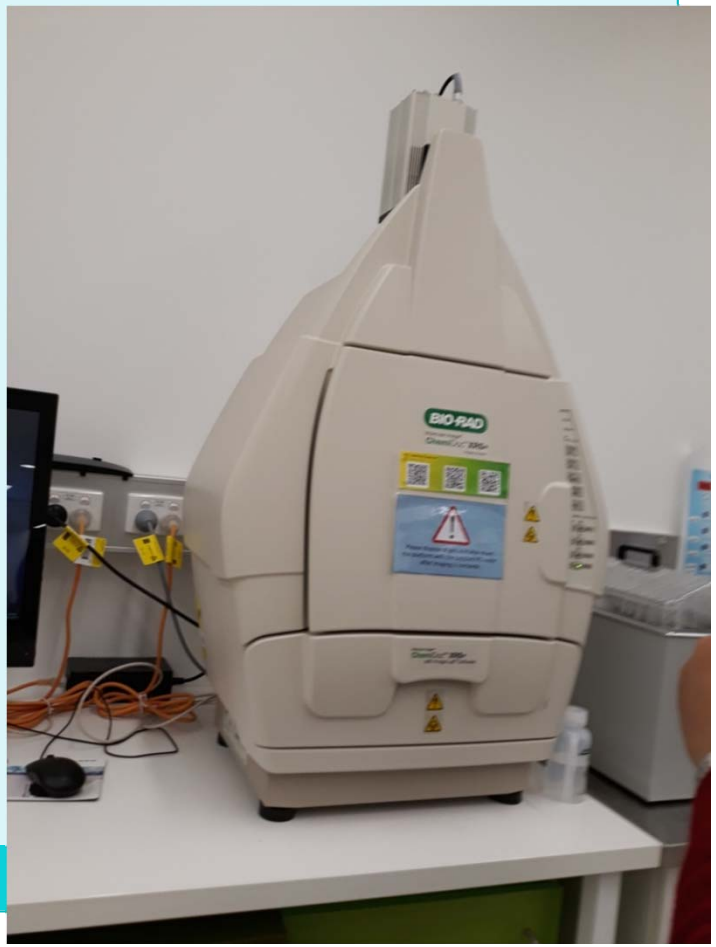
FLOID
FLOID



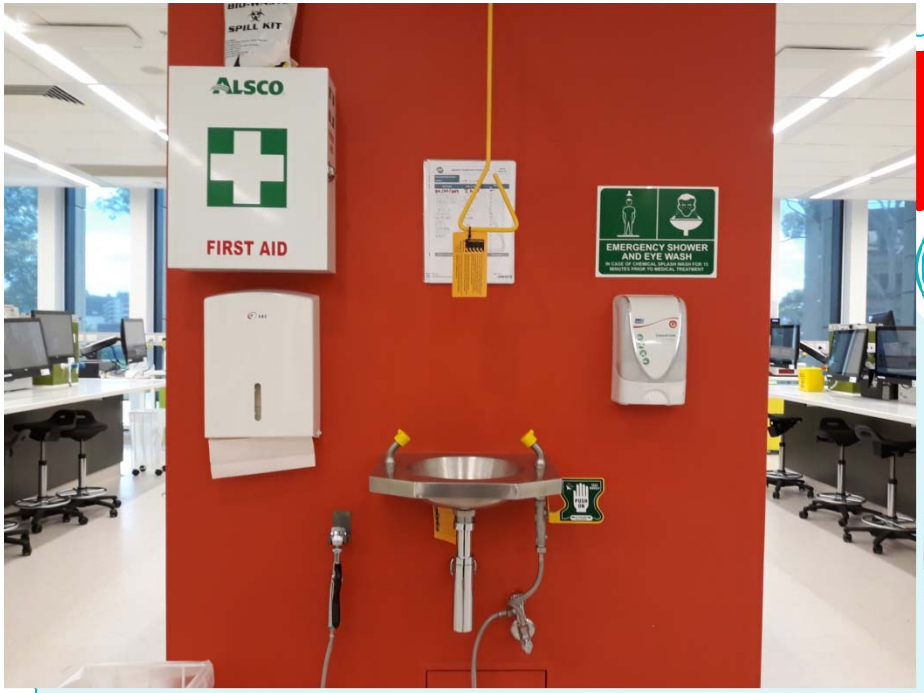


11
12
Bright Field Microscope


BIO-RAD

Safety

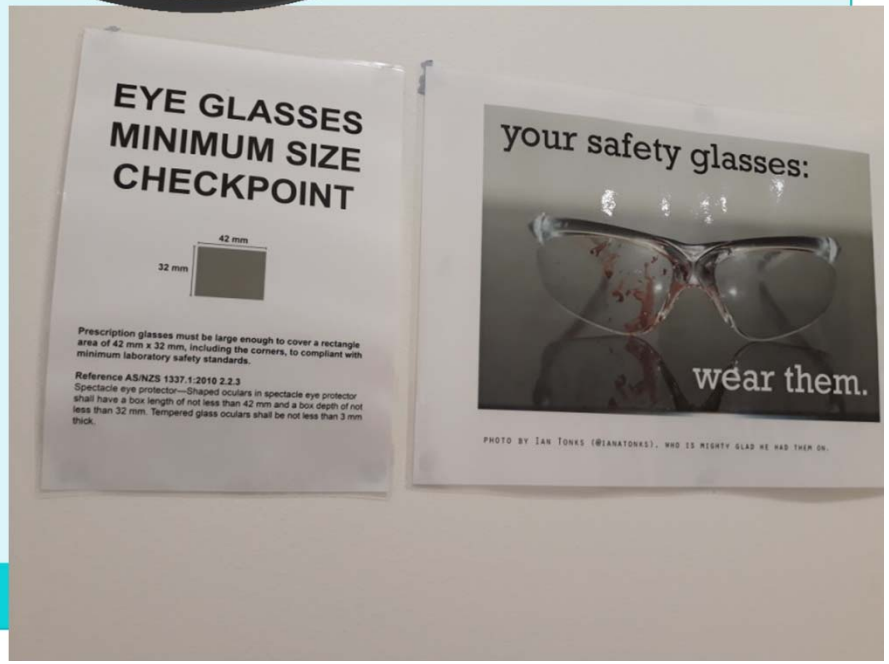
40

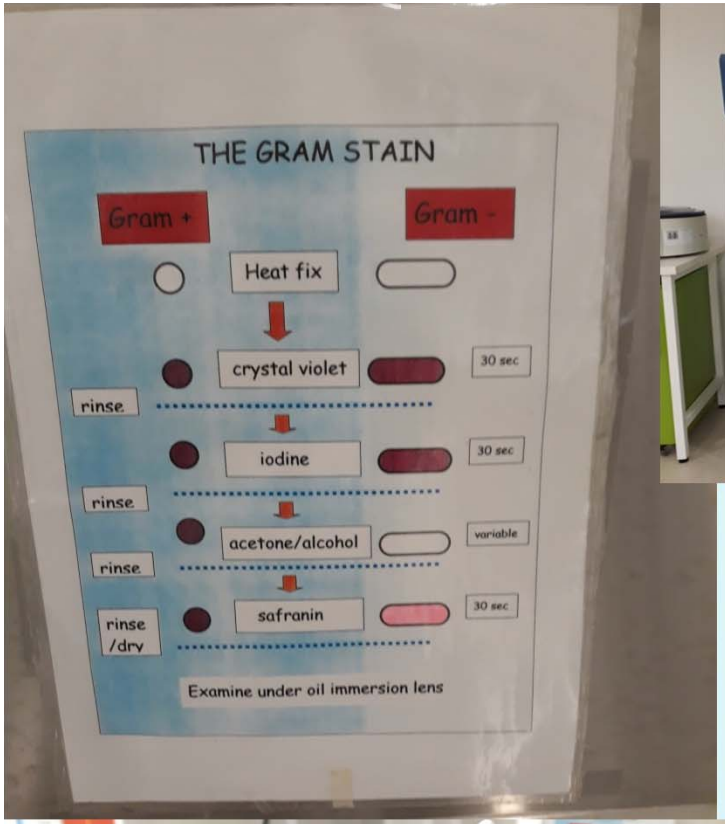

SPILL KIT
ALSCO
FIRST AID
EMERGENCY SHOWER
AND EYE WASH

Appropriate Footwear
Closed shoes that cover the entire foot are required in all CPC laboratories. Those not wearing appropriate footwear will not be permitted to enter CPC lab spaces.

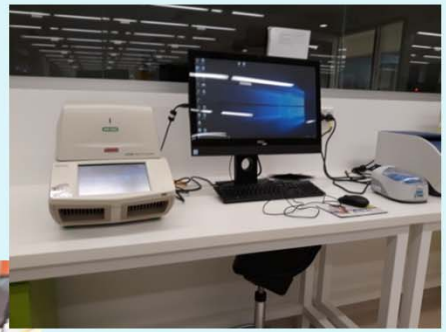
Safety Comes First!
Students and Staff Must Wear:
Enclosed Shoes
Lab Coat
Safety Glasses
Every Class – Every Time
Always!

B1
SAFE 2020

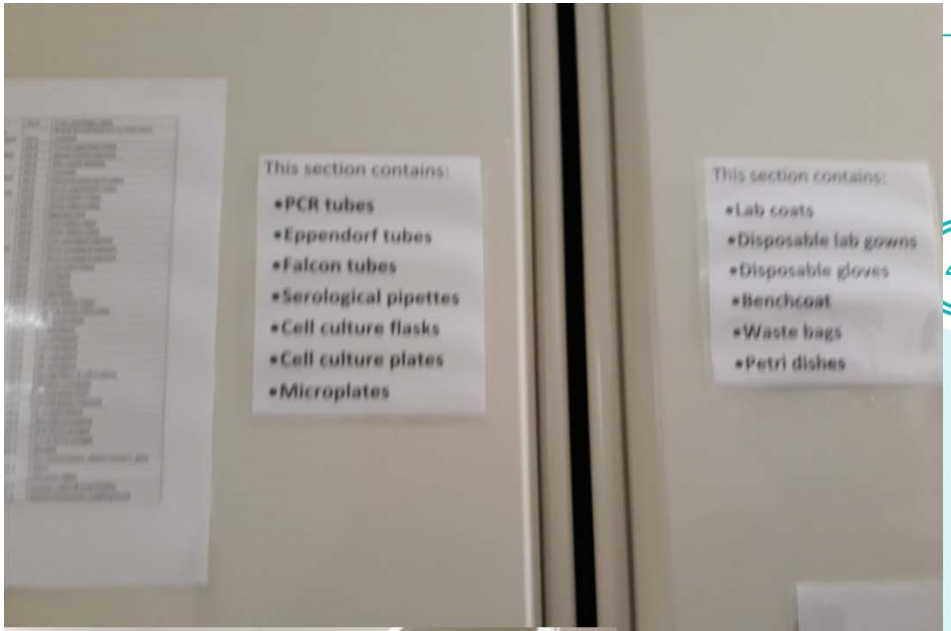

EYE GLASSES
MINIMUM SIZE
CHECKPOINT
42 mm
32 mm
Prescription glasses must be large enough to cover a rectangle area of 42 mm x 32 mm, including the corners, to compliant with minimum laboratory safety standards.
Reference AS/NZS 1337.1:2010 2.2.3
Spectacle eye protector—Shaped oculars in spectacle eye protector shall have a box length of not less than 42 mm and a box depth of not less than 32 mm. Tempered glass oculars shall be not less than 3 mm thick.
your safety glasses:
wear them.
PHOTO BY IAN TONKS (@IANATONKS). WHO IS MIGHTY GLAD HE HAD THEM ON.

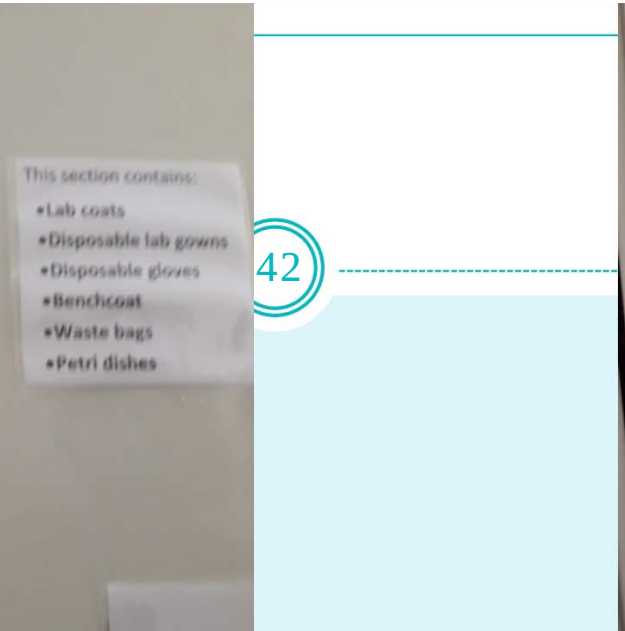

THE GRAM STAIN
Gram +
Gram -
Heat fix
crystal violet
30 sec
rinse
iodine
30 sec
rinse
acetone/alcohol
variable
rinse
safranin
30 sec
rinse /dry
Examine under oil immersion lens

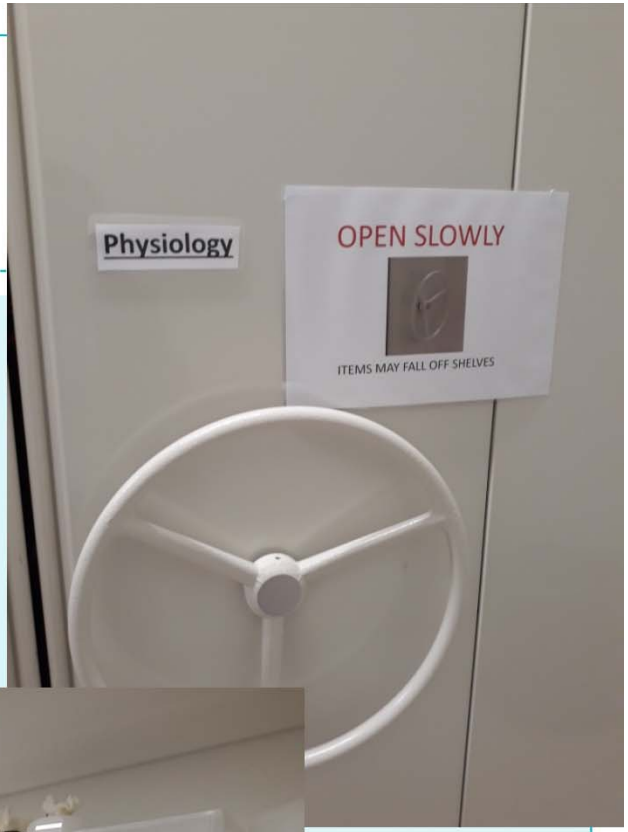
Veriti



37.0
Supplied by
Pathtech
1800 069 161
pathtech.com.au
Benchmark


This section contains:
•PCR tubes
•Eppendorf tubes
•Falcon tubes
•Serological pipettes
•Cell culture flasks
•Cell culture plates
•Microplates


This section contains:
•Lab coats
•Disposable lab gowns
•Disposable gloves
•Benchcoat
•Waste bags
•Petri dishes

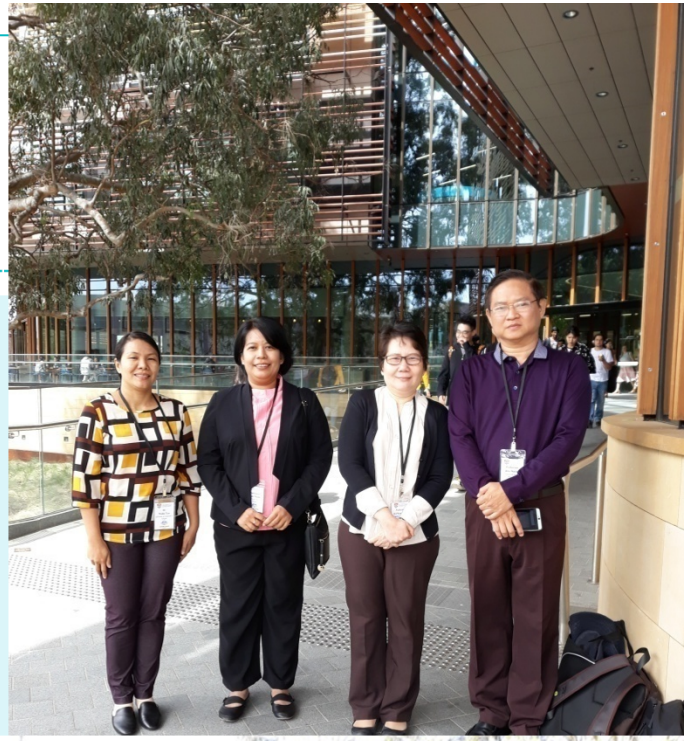

Physiology
OPEN SLOWLY
ITEMS MAY FALL OFF SHELVES

TBL

43

Differences in PBL & TBL

PBL	TBL
1 x facilitator 10 students	1 x facilitator 20-100 students
No inter-team interaction Lots of small rooms	Inter-team interaction One large room
Different individual preparation	Same individual preparation
No test	Pre-test
Groups of 10 students	Groups of 5 students
Variable feedback	Immediate feedback

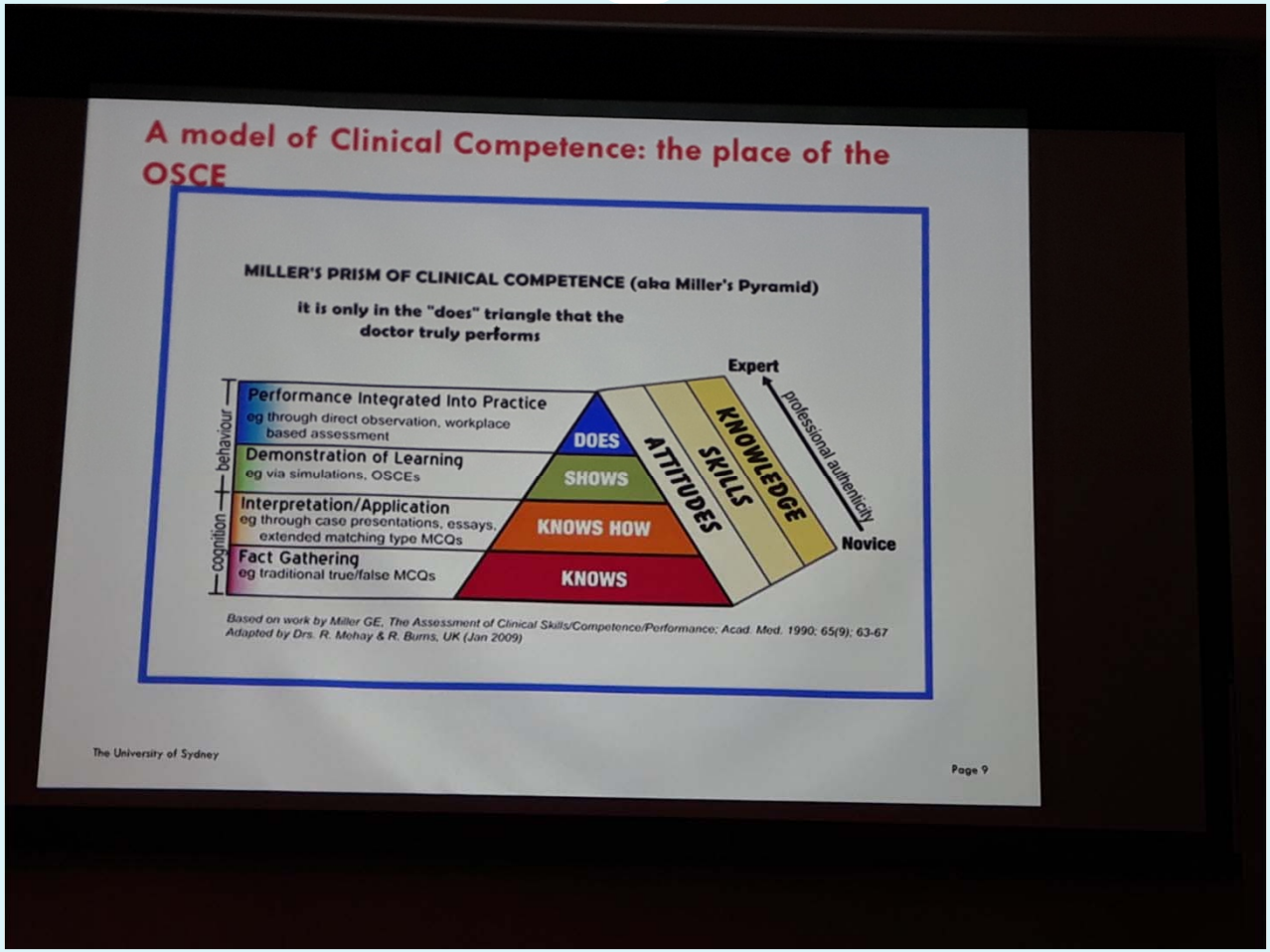


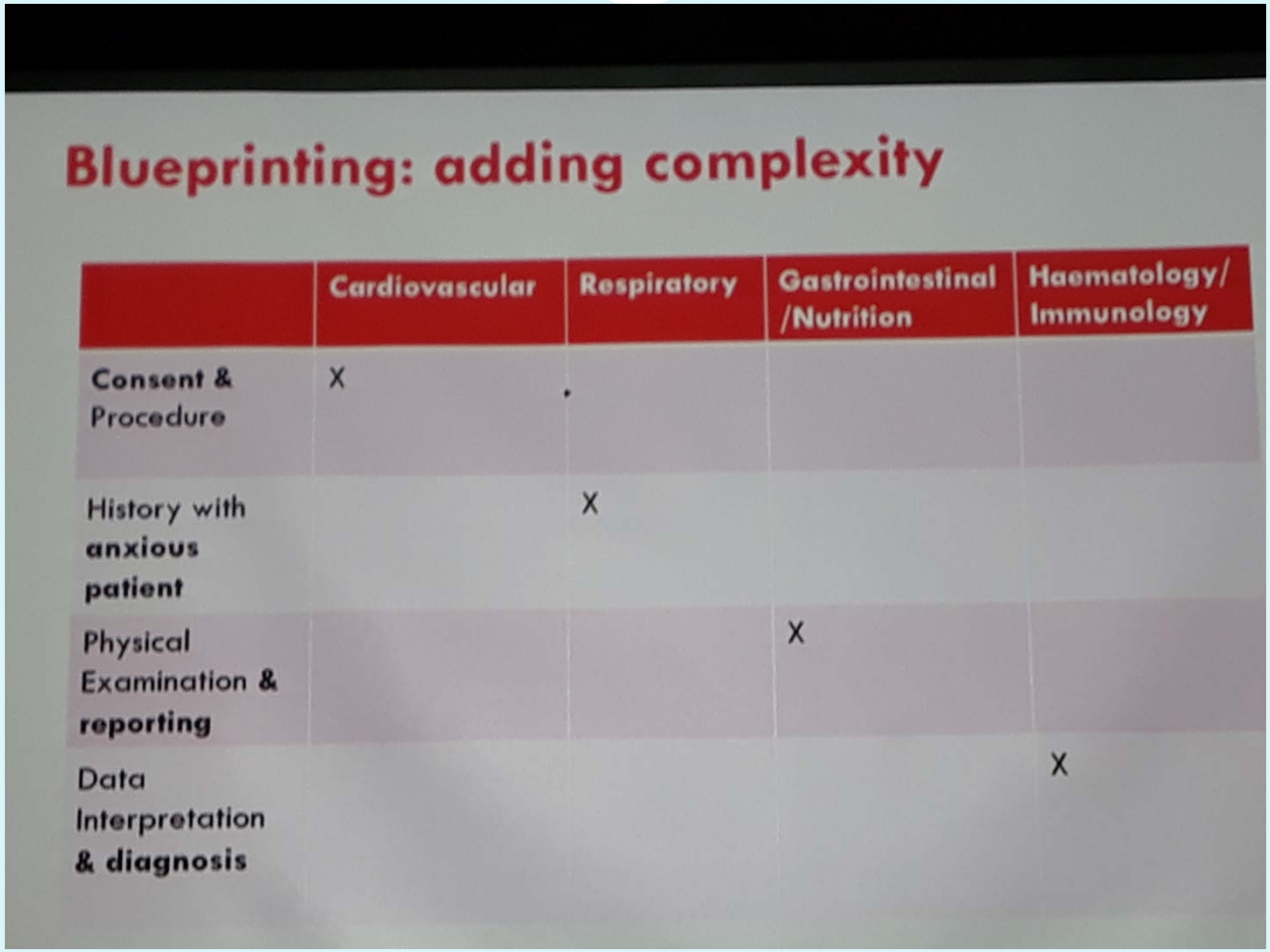
Five Key Steps - TBL

1. Group Allocation
2. Pre-class preparation
3. Readiness assurance tests
4. Immediate feedback
5. Problem solving activities

Year 1 OSCE

45

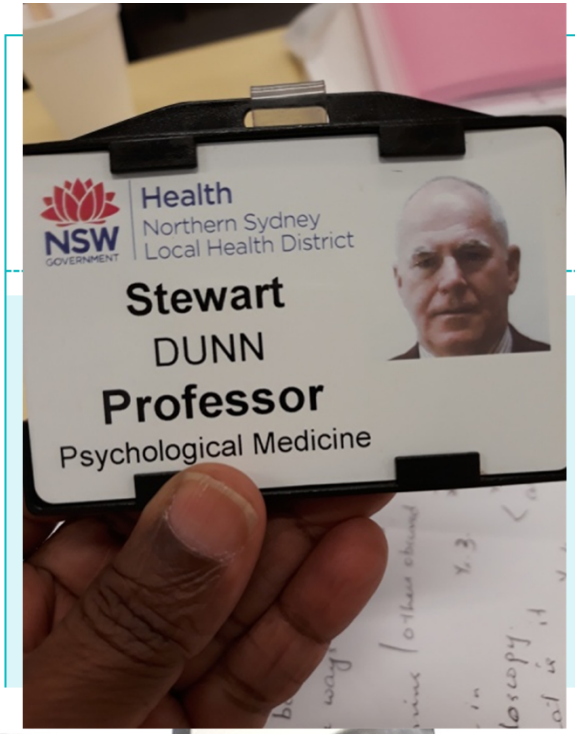

A model of Clinical Competence: the place of the OSCE
MILLER'S PRISM OF CLINICAL COMPETENCE (aka Miller's Pyramid)
it is only in the "does" triangle that the doctor truly performs
Performance Integrated Into Practice
eg through direct observation, workplace based assessment
Demonstration of Learning
eg via simulations, OSCEs
Interpretation/Application
eg through case presentations, essays, extended matching type MCQs
Fact Gathering
eg traditional true/false MCQs
behaviour
cognition
DOES
SHOWS
KNOWS HOW
KNOWS
ATTITUDES
SKILLS
KNOWLEDGE
Expert
professional authenticity
Novice
Based on work by Miller GE, The Assessment of Clinical Skills/Competence/Performance; Acad. Med. 1990; 65(9): 63-67
Adapted by Drs. R. Mehay & R. Burns, UK (Jan 2009)
The University of Sydney
Page 9

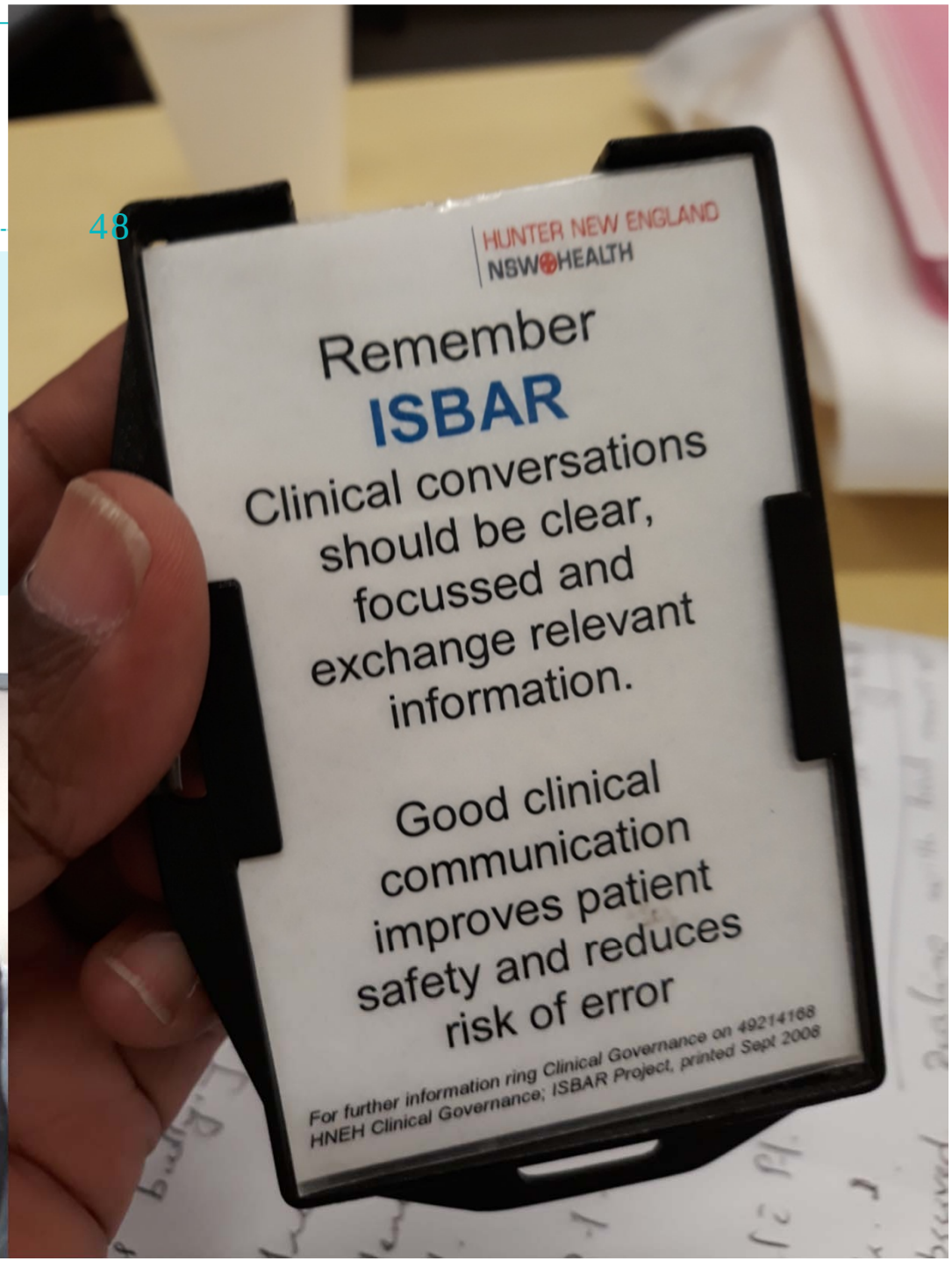


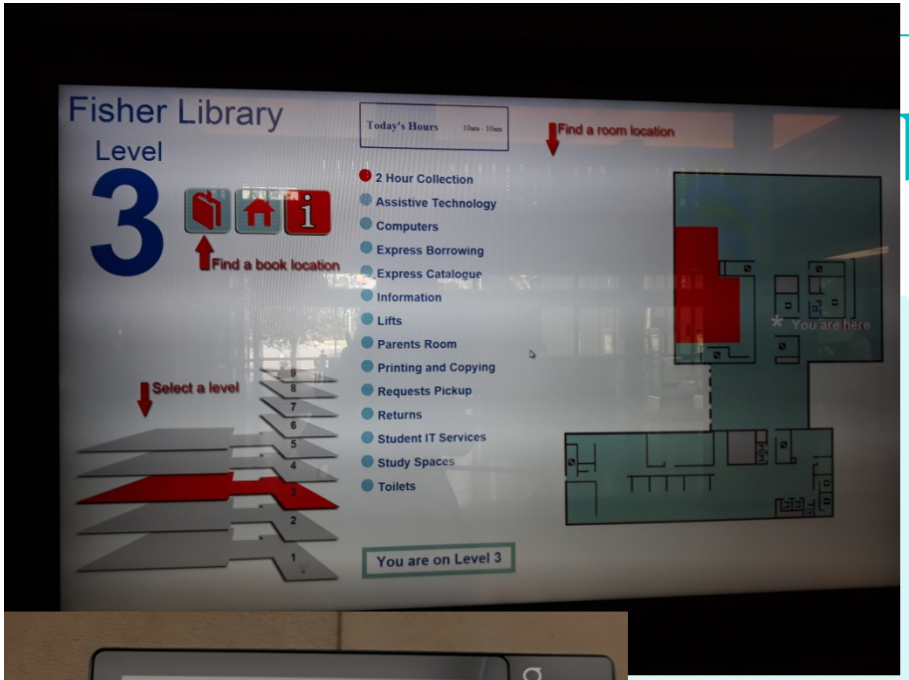
Blueprinting: adding complexity

	Cardiovascular	Respiratory	Gastrointestinal /Nutrition	Haematology/ Immunology
Consent & Procedure	X			
History with **anxious patient**		X		
Physical Examination **& reporting**			X	
Data Interpretation **& diagnosis**				X

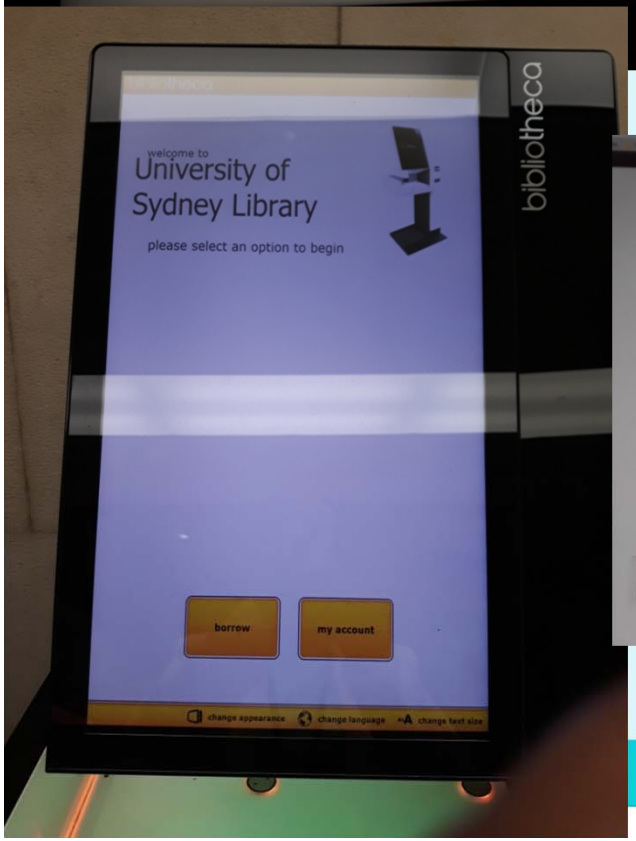
CS

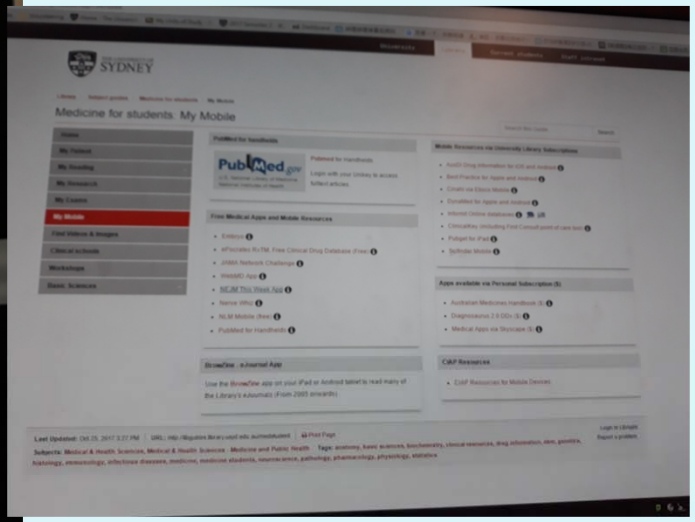

Health
Northern Sydney
Local Health District
NSW GOVERNMENT
Stewart
DUNN
Professor
Psychological Medicine

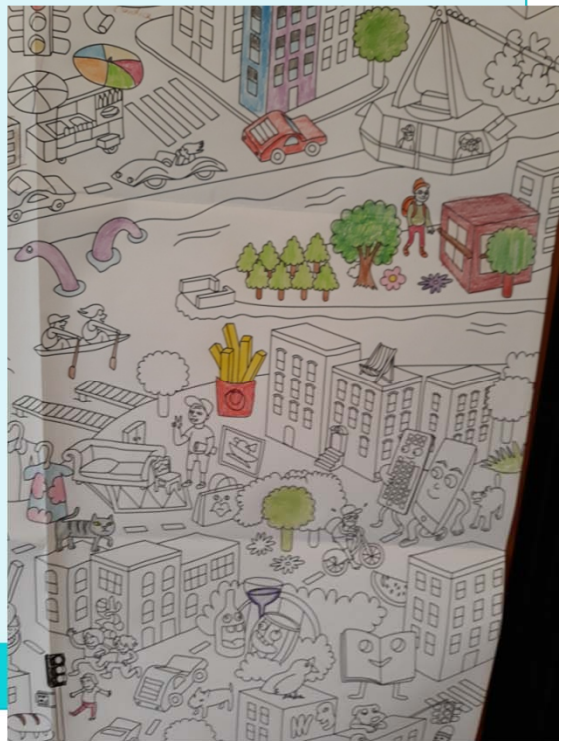

HUNTER NEW ENGLAND
NSW HEALTH
Remember
ISBAR
Clinical conversations should be clear, focussed and exchange relevant information.
Good clinical communication improves patient safety and reduces risk of error
For further information ring Clinical Governance on 49214168
HNEH Clinical Governance; ISBAR Project, printed Sept 2008


Fisher Library
Level
3
Find a book location
Today's Hours
Find a room location
2 Hour Collection
Assistive Technology
Computers
Express Borrowing
Express Catalogue
Information
Lifts
Parents Room
Printing and Copying
Requests Pickup
Returns
Student IT Services
Study Spaces
Toilets
You are here
Select a level
You are on Level 3

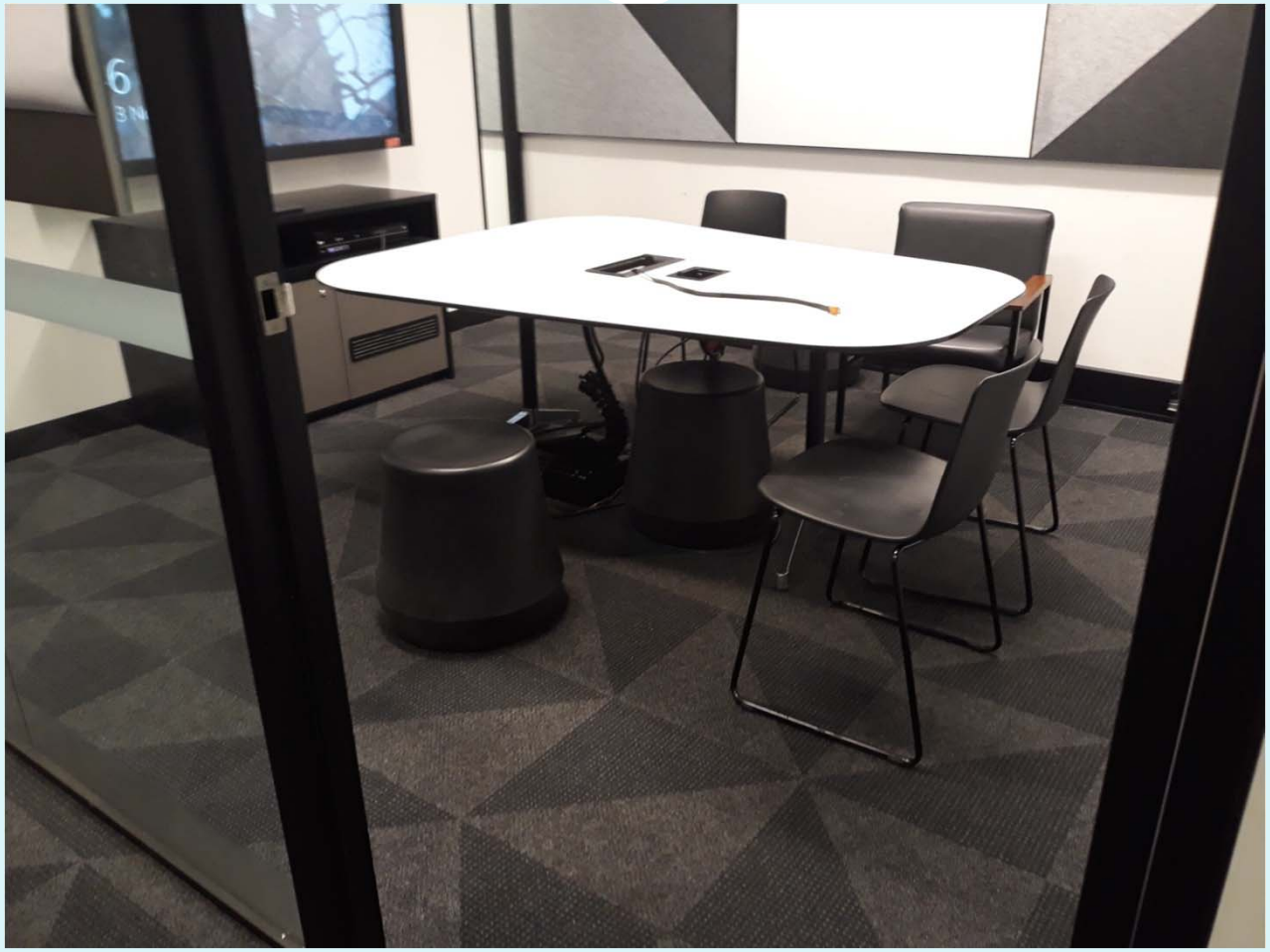
LONDON


bibliotheca
welcome to
University of
Sydney Library
please select an option to begin
borrow
my account
change appearance
change language
change text size

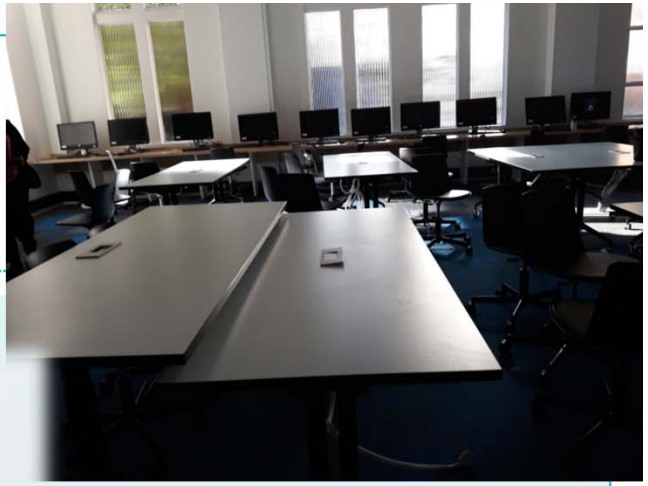

SYDNEY
Medicine for students: My Mobile
PubMed.gov

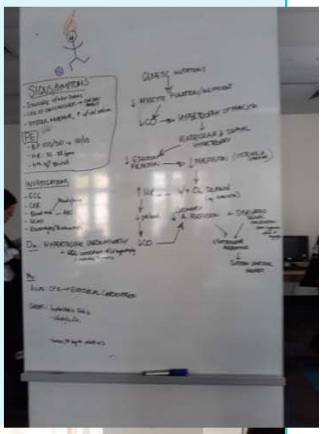


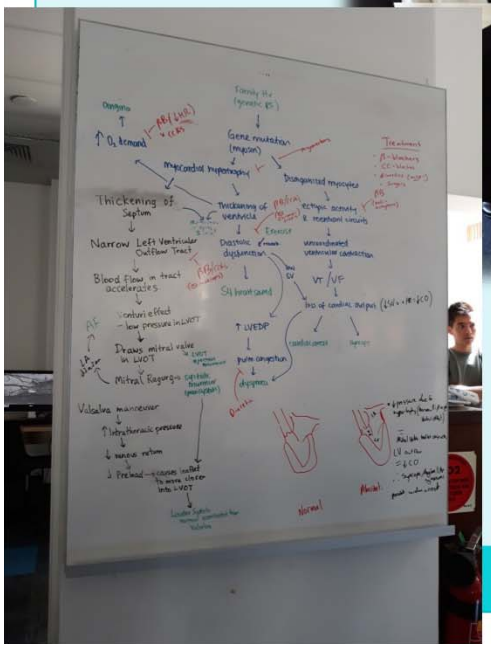
Learning room

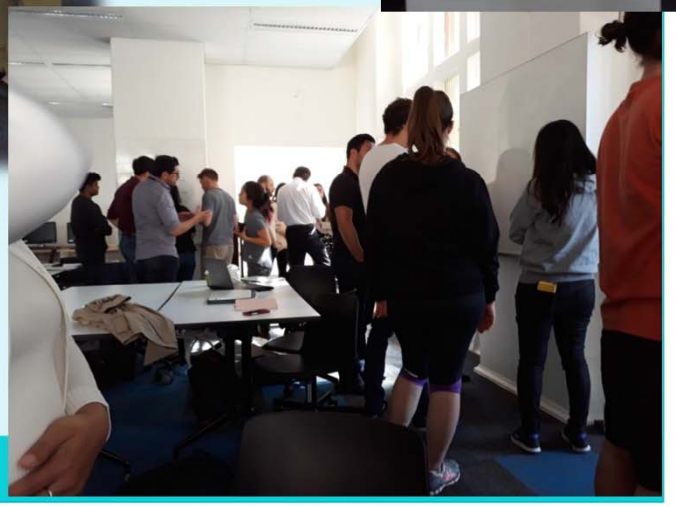


TBL class

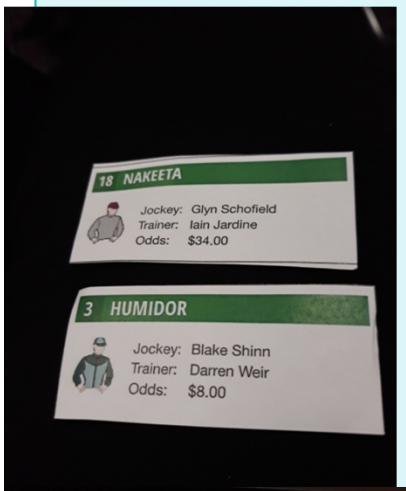




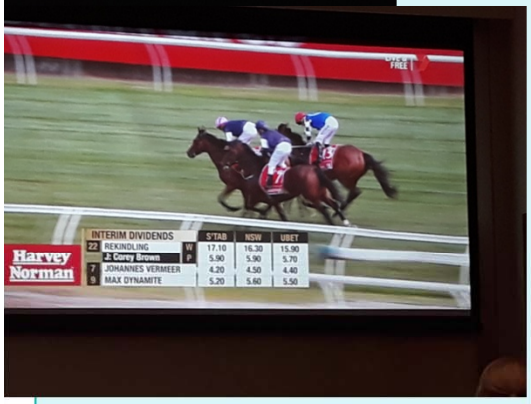

Thickening of Septum
Narrow Left Ventricular Outflow Tract
Blood flow in tract accelerates
Valsalva manoeuvre

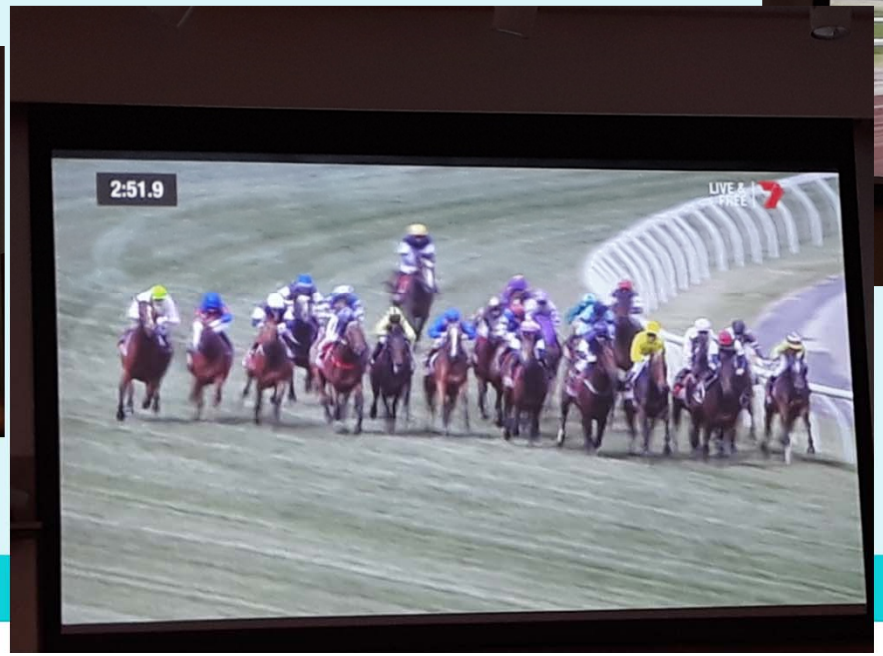


TAB.COM.AU
26.00
NSW
28.10
8.90
UBET
27.50
8.90
2016 TURNBULL STAKES (2000M)

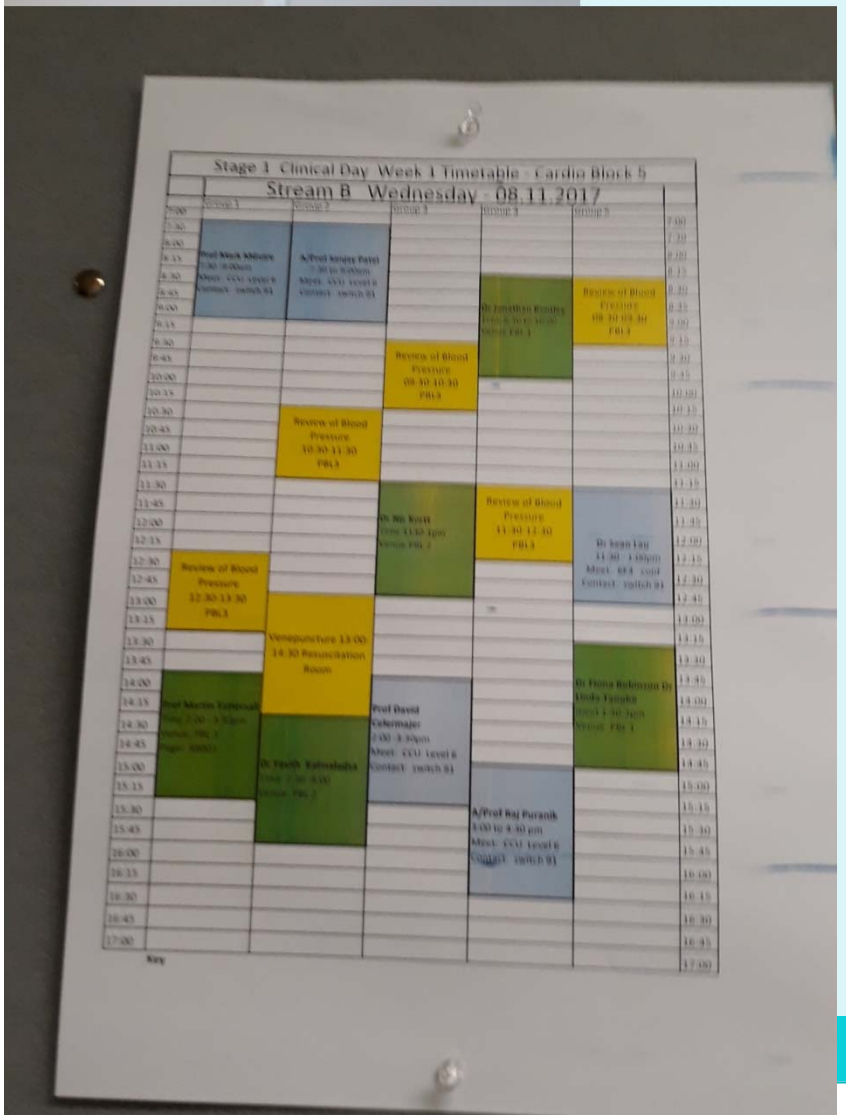

18 NAKEETA
Jockey: Glyn Schofield
Trainer: Iain Jardine
Odds: $34.00
3 HUMIDOR
Jockey: Blake Shinn
Trainer: Darren Weir
Odds: $8.00

1:51.4

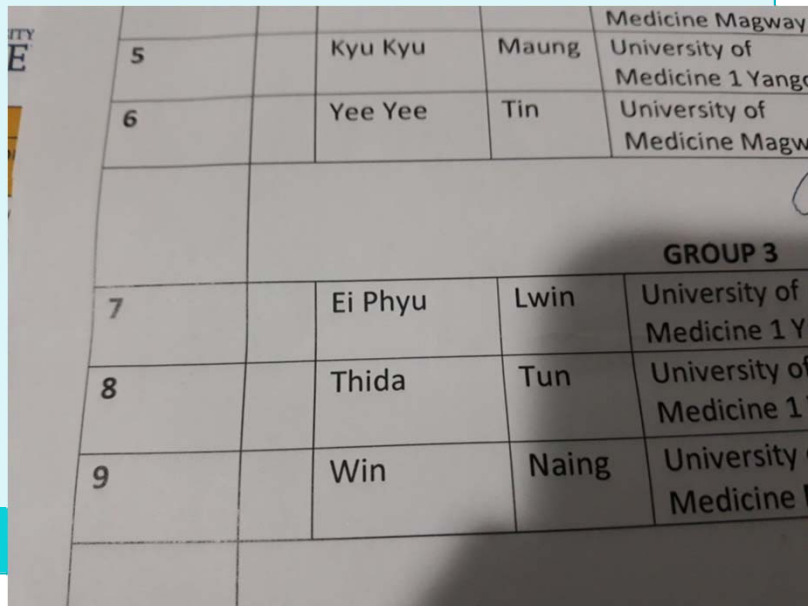

INTERIM DIVIDENDS
S'TAB
NSW
UBET
22 REKINDLING
17.10
16.30
15.90
J: Corey Brown
5.90
5.90
5.70
7 JOHANNES VERMEER
4.20
4.50
4.40
9 MAX DYNAMITE
5.20
5.60
5.50
Harvey Norman

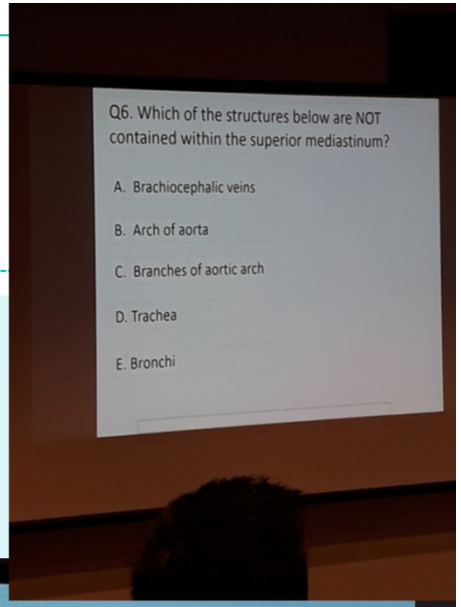

2:51.9

Medical Training
& Administration Unit
Central Clinical School

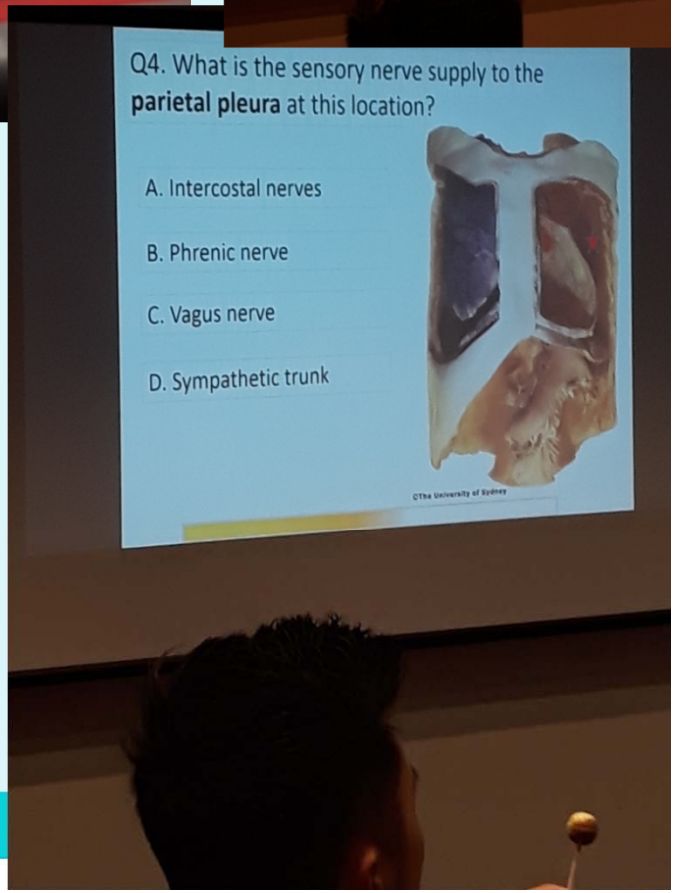

Stage 1 Clinical Day Week 1 Timetable - Cardio Block 5
Stream B Wednesday - 08.11.2017

BY 78 TD

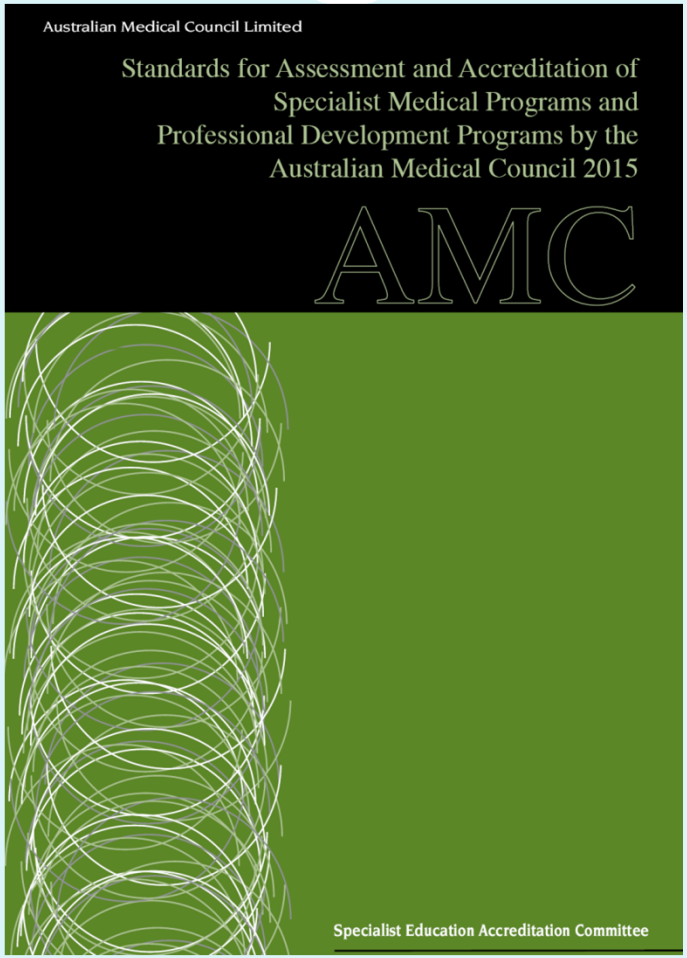

Medicine Magway
5 Kyu Kyu Maung University of Medicine 1 Yango
6 Yee Yee Tin University of Medicine Magw
GROUP 3
7 Ei Phyu Lwin University of Medicine 1 Y
8 Thida Tun University of Medicine 1
9 Win Naing University Medicine



Anatomy Game



Quality Assurance and accreditation



Quality standards and accreditation

- Why – dealing with human life
- What – AMC standards
- Process

  1. medical school has to do a report showing they're meeting the standards
  2. Accreditating committee come, look, make interviews
  3. decision

Who involve in Accreditation committee?

AMC ask to norminate deans to involve in Acc team

Chair – dean of another U

Vice chair – dean of another U

Members – mix up of people who have enough knowledge in ME from

- clinical science
- Basic science
- Dean
- Leaders of ME
- Assessment expert

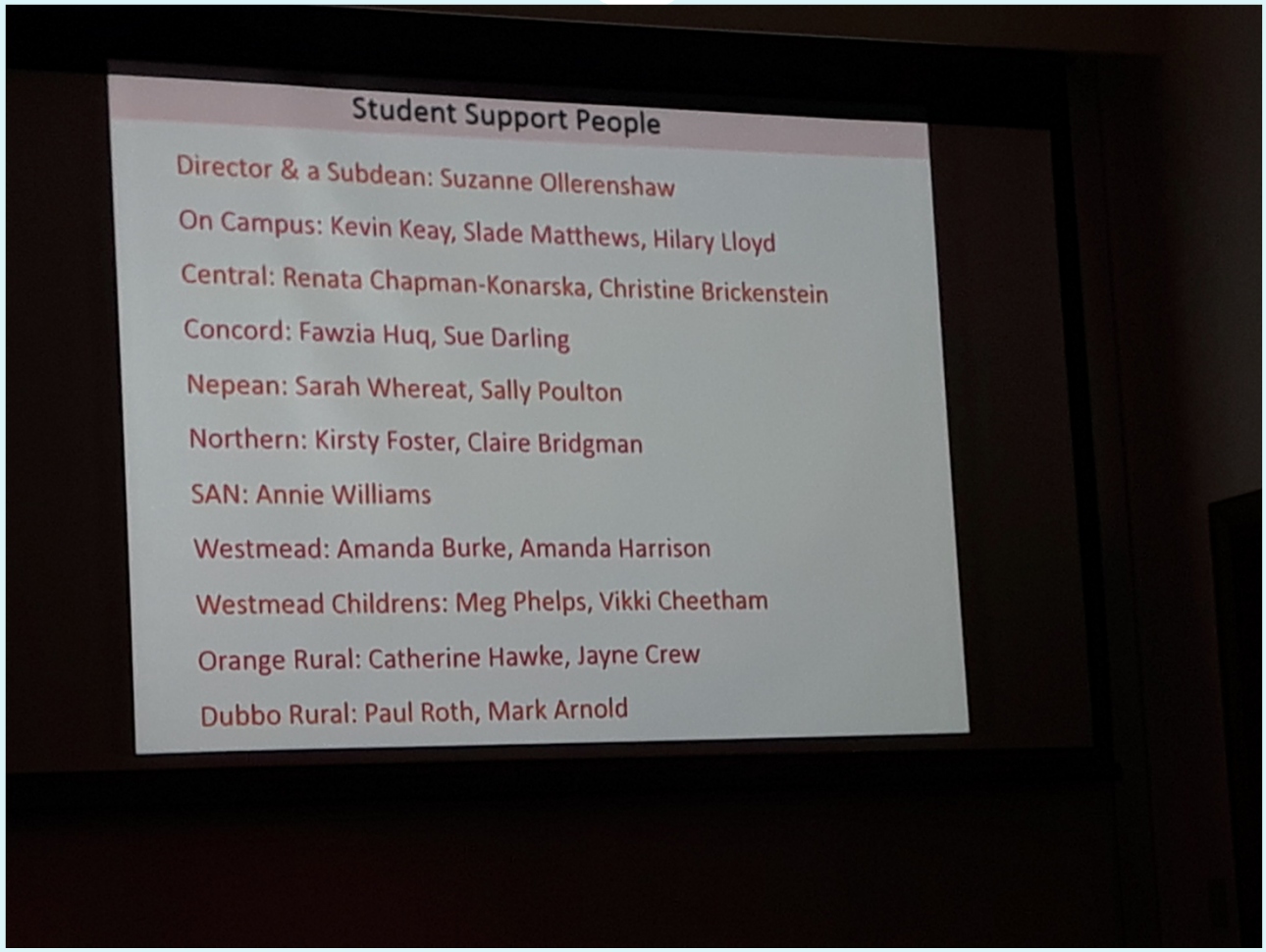
What to see?

1. The context of medical program
2. The outcomes of the medical curriculum
3. Learning teaching methods (good for student/ promote patient centered care)
4. Assessment of student learning (assessment throughout the program
5. Implementation of curriculum (student, environment)
6. Curriculum monitoring and evaluation
7. Student – No, policy for disability, representation
8. Learning environment – library, IT, room, facilities, hospitals, lockers, places

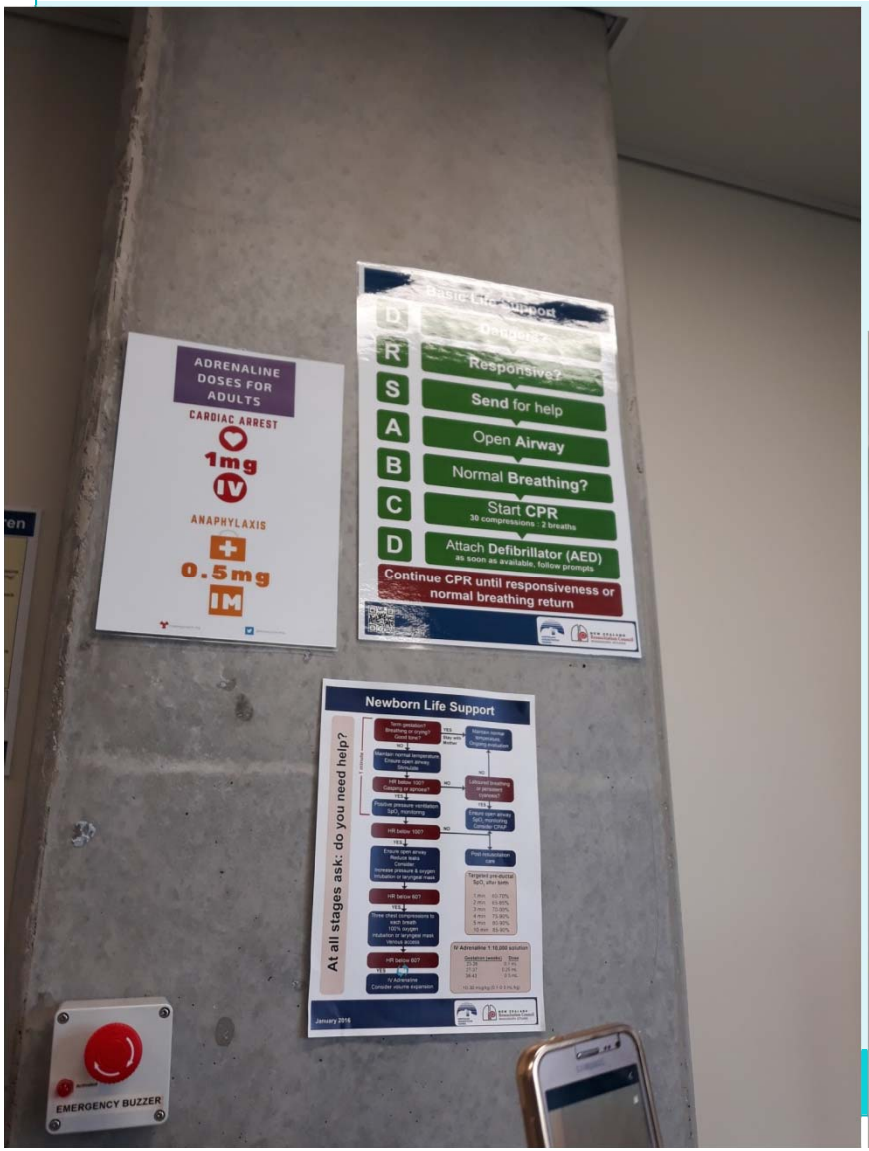
e-learning

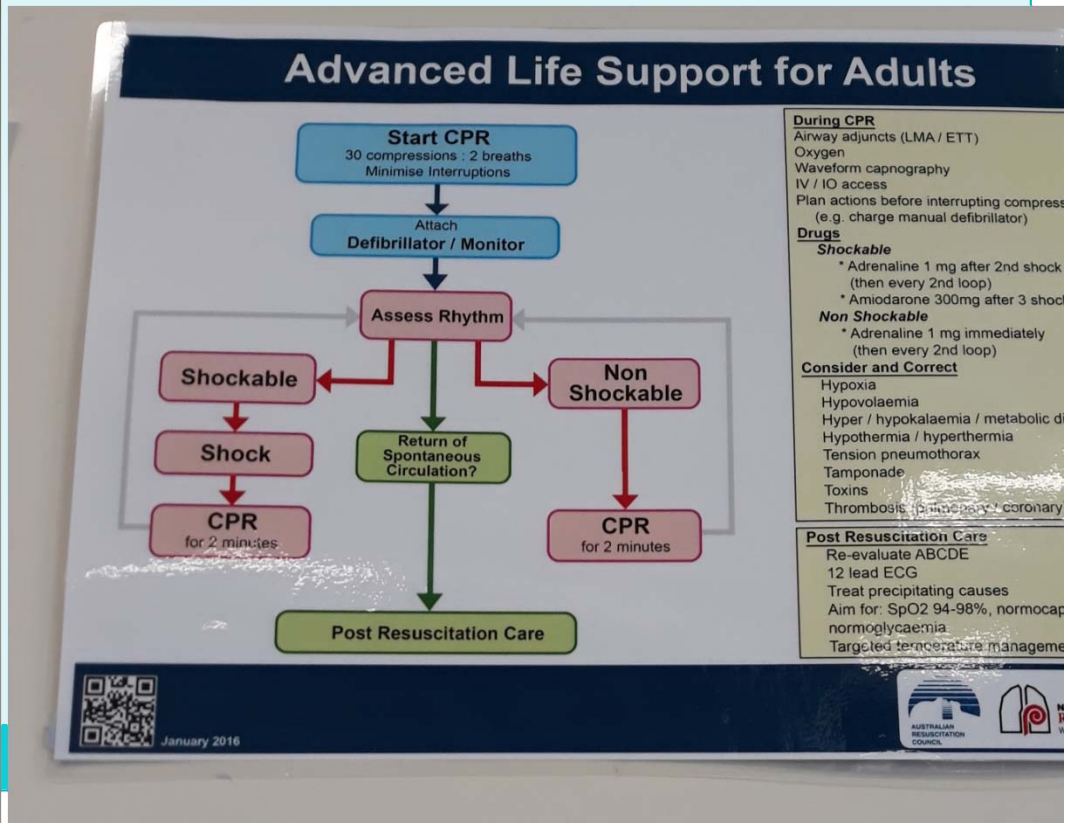
- Learning management system is used
- Blackboard
- Each student has own password and access U website

Student support



Reducing stress


ADRENALINE DOSES FOR ADULTS
CARDIAC ARREST
1mg
IV
ANAPHYLAXIS
0.5mg
IM
Basic Life Support
D Danger?
R Responsive?
S Send for help
A Open Airway
B Normal Breathing?
C Start CPR
30 compressions : 2 breaths
D Attach Defibrillator (AED)
as soon as available, follow prompts
Continue CPR until responsiveness or normal breathing return
Newborn Life Support
At all stages ask: do you need help?
EMERGENCY BUZZER


Advanced Life Support for Adults
Start CPR
30 compressions : 2 breaths
Minimise Interruptions
Attach
Defibrillator / Monitor
Assess Rhythm
Shockable
Non Shockable
Shock
Return of Spontaneous Circulation?
CPR
for 2 minutes
CPR
for 2 minutes
Post Resuscitation Care
During CPR
Airway adjuncts (LMA / ETT)
Oxygen
Waveform capnography
IV / IO access
Plan actions before interrupting compress
(e.g. charge manual defibrillator)
Drugs
Shockable
* Adrenaline 1 mg after 2nd shock
(then every 2nd loop)
* Amiodarone 300mg after 3 shoc
Non Shockable
* Adrenaline 1 mg immediately
(then every 2nd loop)
Consider and Correct
Hypoxia
Hypovolaemia
Hyper / hypokalaemia / metabolic di
Hypothermia / hyperthermia
Tension pneumothorax
Tamponade
Toxins
Thrombosis
Post Resuscitation Care
Re-evaluate ABCDE
12 lead ECG
Treat precipitating causes
Aim for: SpO2 94-98%, normocap
normoglycaemia
Targeted temperature manageme
January 2016
AUSTRALIAN RESUSCITATION COUNCIL

Any Questions!
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