Biol115
The Thread of Life

Lecture 1

Introduction to Biol115

Aims, hopes and aspirations

“It is important that students bring a certain ragamuffin, barefoot irreverence to their studies; they are not here to worship what is known, but to question it.

~Jacob Bronowski

The Pale Blue Dot

The Thread of Life

- An introductory course in cell and molecular biology.
- A description of life at the microcosm.
- Cells, as the fundamental units of life, straddle the boundary between living and non-living.
  - How cells are organised, function and socialise
- A ‘wierd’ dimension beyond the range of normal human experiences.
- Underpins all of biology.

Unit organisation

Lecturer and Unit Convenor

Dr Sham Nair

sham.nair@mq.edu.au

Senior Tutor

(prac classes, assessments, marks)

Julian May

julian.may@mq.edu.au

Tutors

(practicals, tutorials, assignments)

Practical class tutors

Textbook

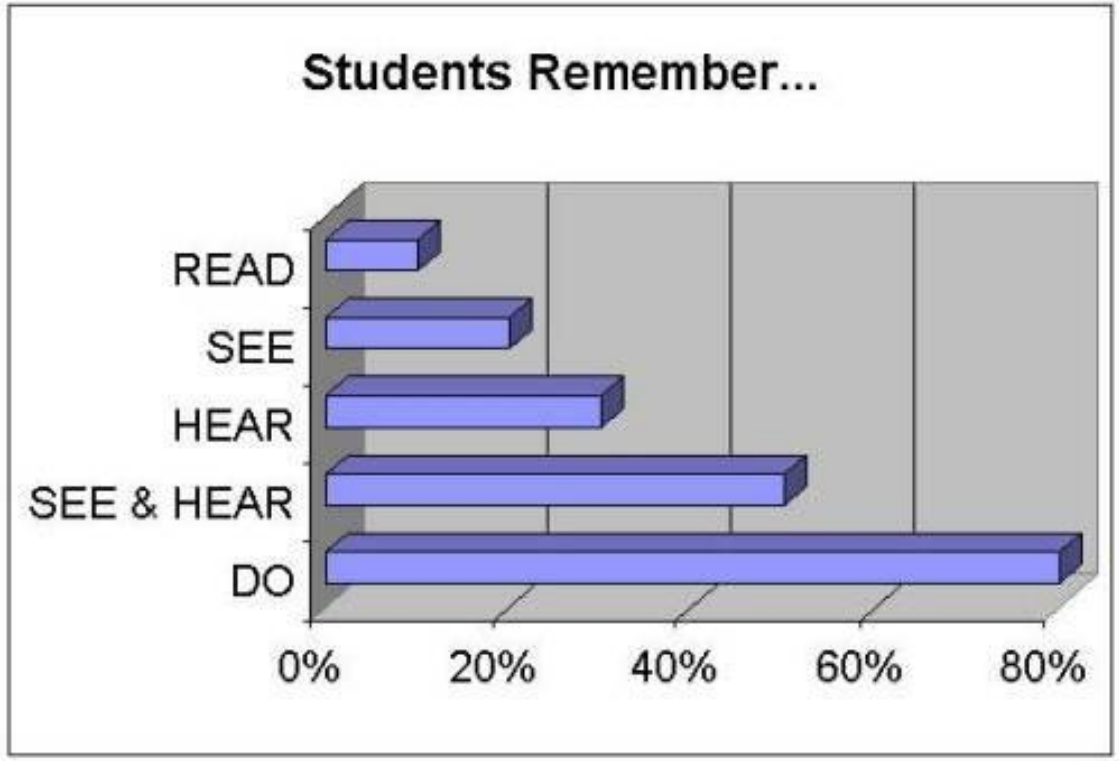
- **Principles of Biology** (http://www.nature.com/principles)
- This is an ebook and is available for most electronic platforms (Mac, PC, iPad, etc). You can purchase an access code from the **Co-op** bookshop or directly online. Once you have registered your copy, you will need the following **access code** to view the contents: **26603018**

The undergraduate journey

- More than a linear journey.
  - Standards-based assessment in Biol115
- Work on your weaknesses
  - Study skills
  - Numeracy skills
  - Literacy skills
- Challenge and push your mental boundaries; reflect on your learning (metacognition)

Student behaviours that promote learning

- Develop good, lifelong learning habits
- Be bold.
- Be goal oriented.
  - Be careful if you don't have long term goals.
- Undertake active study.
- Undertake small group/collaborative learning.
- Challenge yourself.

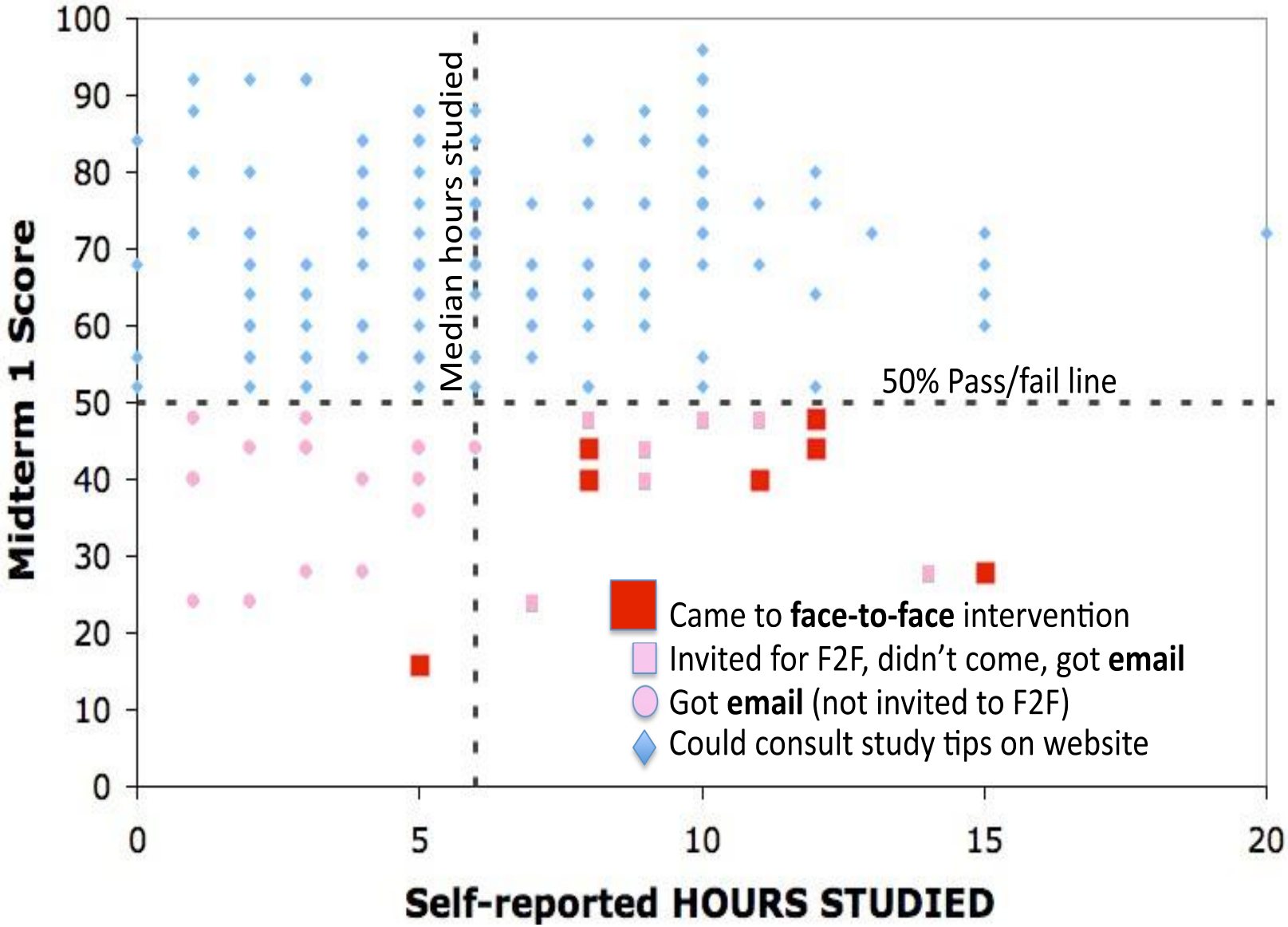


http://pegasus.cc.ucf.edu/~tbayston/eme6313/retension.jpg

How to do well in Biol115

detailed document on iLearn

- Attend lectures
- Attend practicals/tutorials
- Complete all assignments and course activities
- Engage in small group learning
- Commit to regular study outside of formal contact hours (deep, active learning)
- Communicate with your tutors and lecturers if you face issues that affect your study.



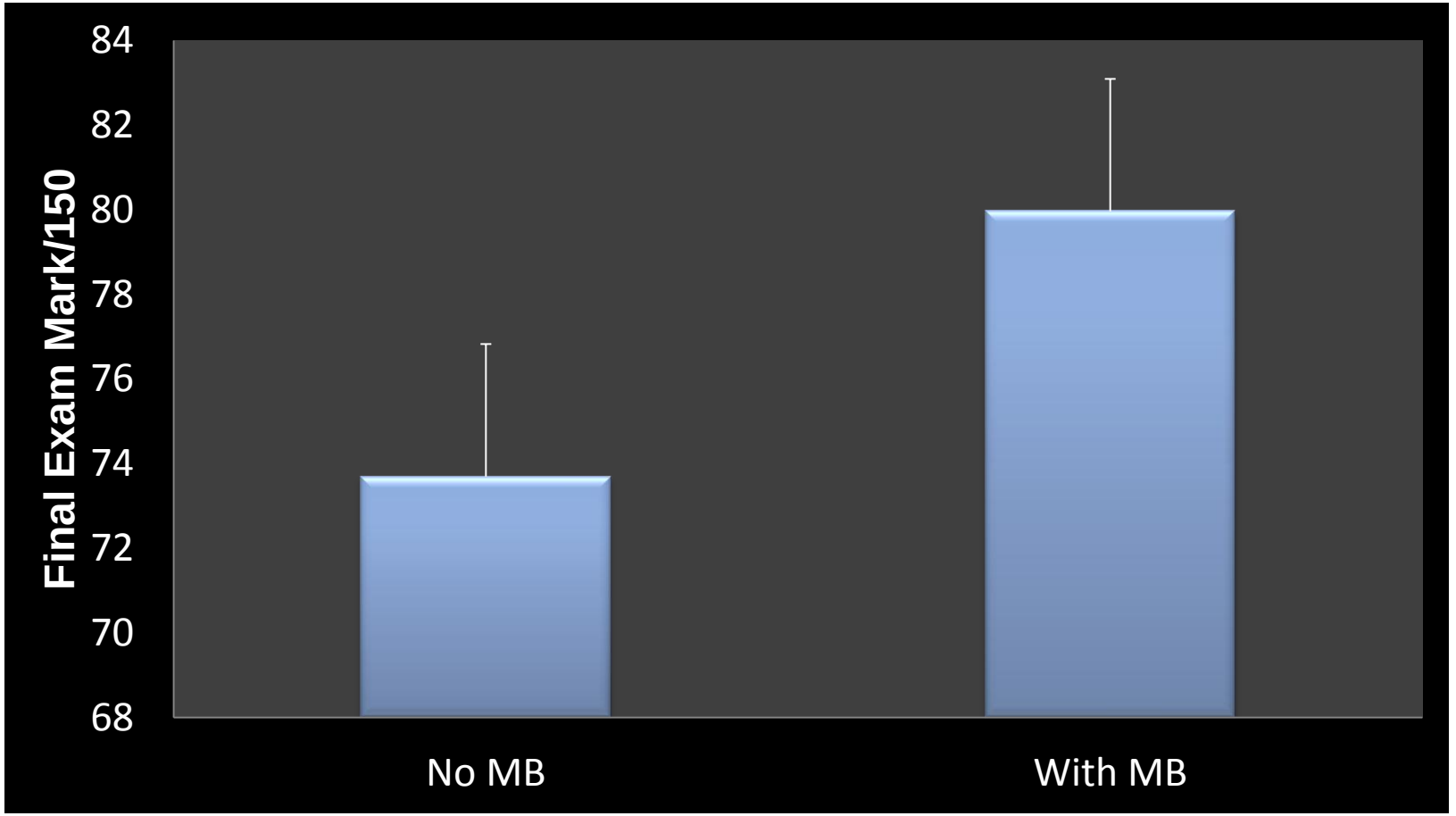
Data from Dr Sara Harris, University of British Columbia, Canada

Results

	M1 (%)	FE (%)	FE-M1
Intervention (P)	64.5	72.6	8.1
Intervention (NP)	77.4	72.9	-4.5
No intervention	81.5	76	-5.7

P: active study; NP: no activity study

Improved performance by students who attempted online quizzes (MB)



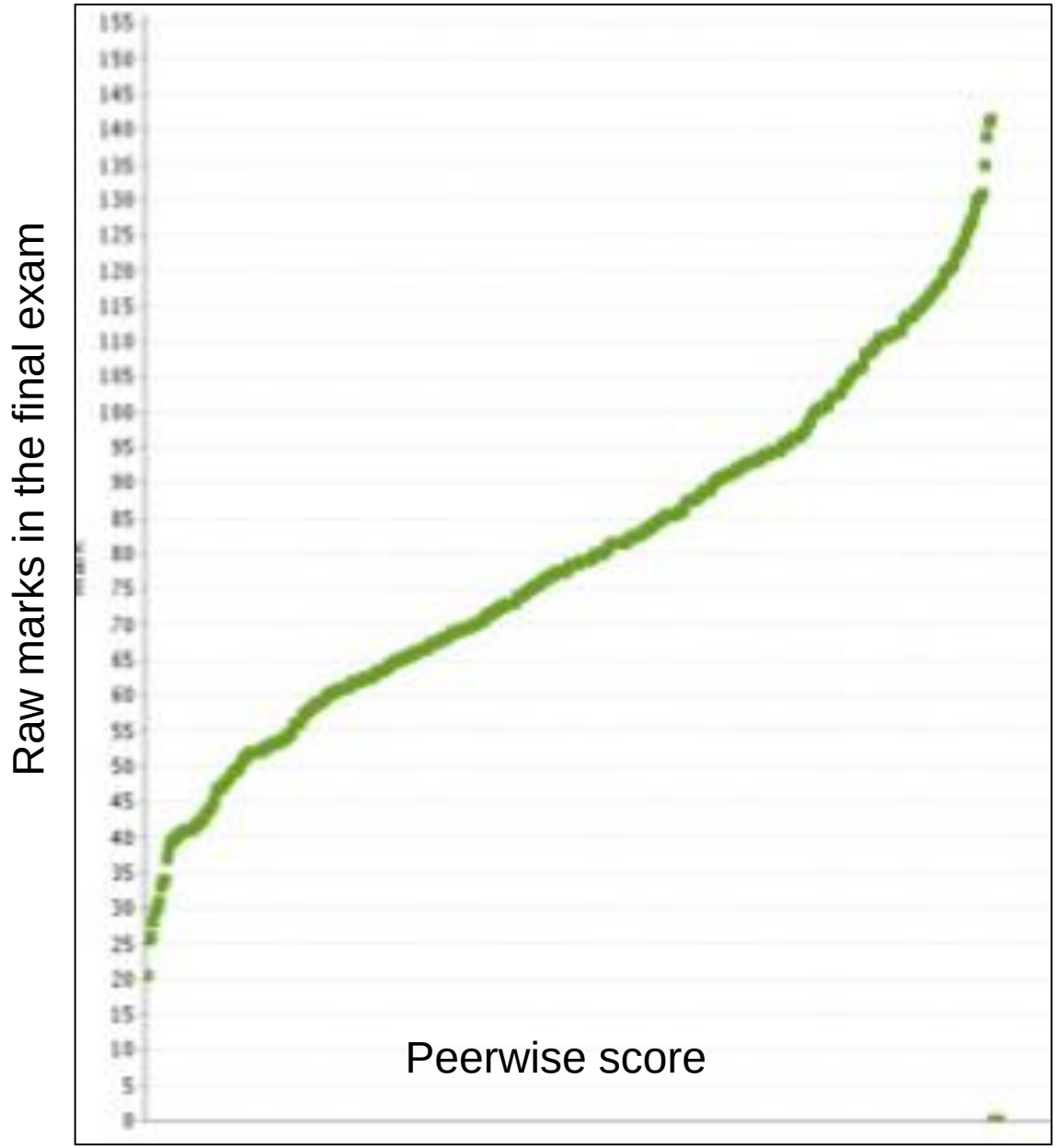
P<0.05

Collaborative learning - PeerWise

- Student feedback – extremely popular activity and high learning value.
- 92% authored more than min # of questions; 95% answered more than min # of questions.
- >17,000 questions in the Biol115 Peerwise database.

100-499 Qs	**61%**
500-999 Qs	5%
>1000 Qs	2%

Peerwise supports deep learning



Biol115 Unit organisation

Day	Time	Location	Notes
Monday	10 am – 11 am	Mason Theatre	First weekly lecture
Friday	3 pm – 4 pm	Mason Theatre	Second weekly lecture
Tuesday	12 pm – 1 pm	X5BT1	Repeat of Monday's lecture
Friday	4 pm – 5 pm	Mason	Repeat of Friday's (3 pm) lecture

Practicals (internals)

DAY	TIME	Locations
Monday	12 pm - 3 pm	E8A120, E8A160
	3 pm - 6 pm	E8A120, E8A160
Tuesday	9 am - 12 pm	E8A120, E8A160
	2 pm - 5 pm	E8A120, E8A160
Wednesday	9 am - 12 pm	E8A120, E8A160
	12 pm - 3 pm	E8A120, E8A160
	3 pm - 6 pm	E8A120, E8A160
Thursday	9 am - 12 pm	E8A120, E8A160

Practicals (external)

Group	Sessions	Times	Notes
1	1	30-31 Aug	Prac 1-4
	2	22-23 Sep	Prac 5-7 (includes mid-semester test)
2	1	6-7 Sep	Prac 1-4
	2	23-24 Sep	Prac 5-7 (includes mid-semester test)

Biol115 Assignments

- Abstract writing (10%)
  - You will be required to produce a 300 word abstract (summary) of a scientific article.
- Annotated bibliography (10%)
  - You will provide annotation of 8-10 peer-reviewed articles on selected topics in cell and molecular biology (details will be provided later).
- Peerwise (10%)
  - Peerwise is an online collaboration tool. You will use Peerwise to develop context-specific questions and attempt problems. This is a semester-long assignment. Details will be provided later.

Biol115 Assessments

Assessment component	Weightage
Final examination	50%
Mid-semester test	10%
Practical class quizzes	10%
Assignment 1 (Abstract)	10%
Assignment 2 (Annotated bibliography)	10%
Assignment 3 (Peerwise)	10%

Prac class allocation

- If you have not been allocated a prac class, please see Julian May:

Julian.may@mq.edu.au