Welcome to 🐝-DA

BIOL2022 – **B**iology **E**xperimental **D**esign and **A**nalysis

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The University of Sydney

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THE UNIVERSITY OF SYDNEY

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BIOL2022 in a nutshell

Feedback showcase (we are not perfect)

- *This is overall **the worst class I have taken at usyd.***
- *This might just be a me thing but **I got a migraine after every lab**, so maybe pick a lab or classroom not so* intense* on the **lights** and **whites** and **screens**, especially considering we're staring at a screen the whole time.*
- *Can we go to labs where **we don't have to wear lab coats**?? Hahaha and also a more **group-friendly** class, where we can talk to each other more easily.*
- *Drink in lab there are* no* chemicals.*
- *Certain demos seem to have **hella attitude** when you ask them a question. Its not fair to have a lecture Wednesday morning from 10-11am and then expect students coming to the lab at 2pm to have caught up on the lecture.*
- *The requirement for the **insect collection** should be told at the beginning of the semester*

Your suggestions matter

I, along with many other fellow students, were thoroughly **frustrated** with the lack of help on occasions using softwares such as Jamovi (which was one of the options that we had to use), when they didn't actually know how to use the software themselves. There was also a lot of software and skill use of concepts/methods that were never actually explained to us, or if so, very minimally, which **left us feeling very lost and useless**. That being said, the instructors [redacted], [redacted] and [redacted] were consistently clear, patient and well informed and actually guided us through exercises.

I have talked to quite the number of **disgruntled** classmates though- and I'm sure you've seen some of their survey responses- but I just want to put my two cents in and say that theres really nothing wrong with the material, assignments, teaching, etc. **Its just a hard class** that requires a good bit of effort and time and some people *just don't like that*.

The **practicals**. The format was very laid back, tutors were very relaxed when it came to learning. Questions were returned with a response that was "oh it doesn't really matter." It felt reassuring if there was a difficulty understanding something but it also was **not helpful in the long run**

Is there good feedback?

Yes!

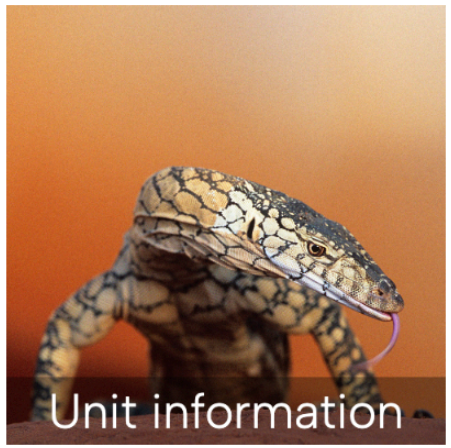
(This link will only work for the lecturer: click)

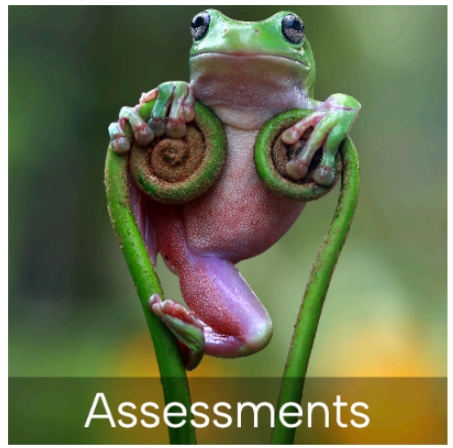
We are an *applied* and *practical* unit

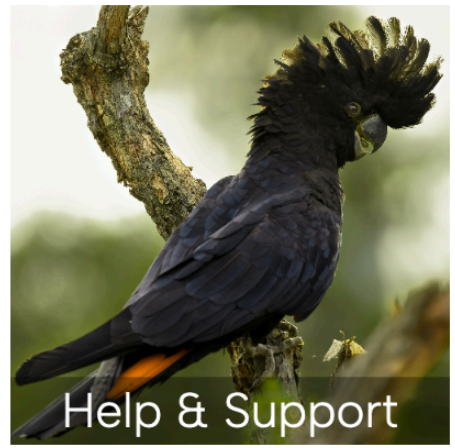
- Focus on **interpretation**, *not* complex statistical/mathematical derivations.
- **Software-agnostic**, use any software you like (R, SPSS, Jamovi, etc.) **BUT** some modules will recommend specifics e.g. Module 3 will use PRIMER v7.
- Hands-on with *real* data from real experiments, **practical attendance is mandatory**.

Canvas site

- ***All* information on the front page**
- **Unit Handbook** – your “bible” and a *living* document (PDF available).
- **Lectures and labs** – all resources in one place.
- **Assessments** – all assessment tasks and due dates.
- **Ed** – ask questions, share resources, etc.







Non-handbook links:

📨 Submit Assignments - use this link to submit assessments such as quizzes and reports.

🗣️ **Ed Discussion** - **please check for announcements daily.**

☣️ Risk Assessments - important information about safety as you attend practicals and conduct experiments.

Made with ❤️ by **Januar** (Unit Coordinator), **Clare** (Lecturer) and **Mat** (Lecturer).

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Check Help and Support for consultation times.

Modules and assessment

- **Module 1** – study design principles: introduces principles, computer-based labs | **EFT (5%) and Quiz (10%)**
- **Module 2** – univariate experimental design: design and conduct a univariate experiment | **Report 1 (25%)**
- **Module 3** – multivariate study design: design and conduct a multivariate experiment | **Report 2 (20%)**
- **Exam** – written, no MCQ, *up to* 6 questions **(40%) HURDLE TASK**

Expectations

Learning by osmosis won't work here…

- **4 hours** of timetabled activities per week (2 lectures, 1 practical).
- **6 hours of self-study per week (minimum)** – based on the University's recommendation of 10 hours per week for a 6 credit point unit.
- Don't leave things to the last minute…

Important

You must be comfortable with asking questions. **No question is too silly!** Ask on Ed or in-person in the practicals.

Communication and feedback

- **Announcements and discussions on Ed.**
- Talk to us any time after the lecture, or during practicals.
- **Weekly drop-in sessions** for **questions** and **help** – hosted on Zoom (more details on Ed).
- Each assessment will include feedback to help you improve.

> **Important**
>
> **Email Januar** if you have a personal issue or need to discuss something in private.

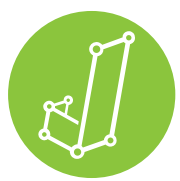
Before your first lab…

Take your pick

R – free, powerful, steep learning curve. Use with **RStudio**. You will need to be comfortable with writing `code`.

Jamovi – free, user-friendly and well-documented. Point and click, limited options but extensible via modules.Analyses are also transferrable to R.

SPSS (**winding-down support**) – user-friendly, expensive, limited. Point and click – no coding required. **Unfortunately, needs licensing.** Use via Citrix or on Lab computers.



JASP (**not supported**) – free, user-friendly (more so than Jamovi). Point and click. Not extensible, but has lots of features out of the box (e.g. Bayesian stats).

I’m a beginner, what should I do?

Use the first practical session this week to test drive the software.

1. Jamovi/R

- Try **Jamovi** – it’s free and user-friendly, **and you can always switch to R later.**
- If you don’t mind the initial learning curve, **R** will be most beneficial in the long run.

2. SPSS

- Go ahead if this is the software you are *most* comfortable with. Licensing is required (but our lab computers have it installed).

Or, you can use your own software (PSPP, SAS, etc.) as long as you can export your results in a format that we can read in the reports.

Thanks!