Draft Proposal - Goldsmiths Research Methods in Psychology

Gordon Wright & Caroline Rix

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Proposal for Psychology Department Research Methods 2024-5

Research Skills

The Psychology department at Goldsmiths has a number of differentiating features, upon which it must build in order to ensure it remains attractive and distinctive.

- Alchemical, interdisciplinary research programmes and projects
- Passion for empowering students and producing creative, skillful, disruptive agents of change
- Blend of Art and Science, craft, entrepreneurship, massively transferable mind-set/skill-set

Research Methods has to be an adventure, “Alive” with enthusiasm, inspiring curiosity and intellectual problem-solving.

We have to break the A-Level preconception that Research Methods is dry, maths-like or indeed difficult.

This must be achieved by: - Practical First - The majority of lab sessions should be practical and ‘hands on’! - Only present research/methods/topics that are ‘ownable’ - where we have expertise, cachet and competitive advantage - and that could NOT be done at school - ‘Relevant & Applicable’ above all else. Nothing is taught ‘because the BPS says we have to’ or that doesn’t have widespread use in a range of future endeavours - Demonstrate and model intellectual virtue, curiosity, empiricism, skepticism, humility and

Psychology can be a stimulating and joyful endeavour, and learning it is best achieved in a safe, but challenging environment.

> ❗ Important
>
> Psychology is a diverse and highly interdisciplinary field of study that involves the varied application of systematic methods of inquiry to the exploration of behavior, mental processes, and social relationships.
> As a department we support students in discovering the core knowledge and skills of the field of psychology, extending a history and tradition of widening participation, respecting diverse viewpoints and methods and forging important connections with other disciplines and areas of practice.
> It is our mission to promote intellectual virtue and inspire curiosity, creativity, critical and analytic thinking in all our students.
> Across our exciting portfolio of programmes, we strive to create an open, supportive, challenging and dynamic learning environment. We share our passion for psychology through close and active mentorship and support in labs, lecture halls and beyond.
> We believe that the best way to train these virtues is by modelling them, and so we invest heavily in giving students access to our active research groups, we encourage and support students in finding a psychology that is relevant to them and gives them agency to solve whatever challenges they choose to address.

Warning

At a departmental level we consider the following to be crucial
1) Demonstrate understanding and competence regarding the use of research methodology in psychology from across the range of Qualitative and Quantitative technique, and use them to collect high quality data.
2) Skillfully analyse and correctly interpret data using appropriate techniques and tools in a Open and Reproducible way.
3) Communicate complex ideas and empirical results clearly, succinctly, and in a range of relevant media and contexts.
4) To appreciate the broad and important application of Psychology.
5) Demonstrate a clear understanding of key concepts, theoretical approaches, empirical results, and historical debates in the field of Psychology.
6) Develop meta-learning, meta-cognitive and reflective skills suitable to support a life of learning.
7) Recognize, understand, respect and champion diversity, inclusivity and stuff.
8) Reflect on the ethical imperatives of Psychological practice and research, and be an agent for good.

Weekly structure (all levels)

2 hours lecture (+1 hour pre-reading)

We moved to 1 hour (from 2) during the pandemic, and it has severely limited the amount that can be reasonably covered. In addition to doubling the lecture time (as is merited by credit weighting alone), we propose to introduce a weekly expectation that an hour is spent reading in preparation for the following session.

This could be diverted to other preparatory activities, but the expectation will be clearly set that a MINIMUM of an hour of preparation is expected for every lecture.

---

2 hours lab (+1 hour pre-reading)

Labs are valuable practical sessions and a similar expectation exists that a student will have completed whatever preparation is expected. Of course, we understand if things don't always go to plan, so if you can, please do turn up, but by being prepared, and understanding the activity being conducted, the learning outcomes are far more achievable.

It will often be the case the the preparation is mostly 'setting the scene', or giving detailed instructions about what will be happening that are better delivered in writing, or clarifying what you will be expected to have done or produced by the end of the lab.

In this module, it is easier to ‘keep up than catch up’.

---

2 hours Interactive Data Skills Tutorials (with short weekly assessment)

Think of this as focussed time students are dedicated to working on their computers, and so anything that sits within the browser is fair game here. It’s NOT just Stats. Library skills, literature searching, learning logs and portfolios, as well as collaborative writing or finding information.

Since the programme will employ an Open Educational Resource Online Textbook as the central resource for Lectures and Labs, this means that the notional 4 hours of ‘screen time’ allocated to this module may often be closely aligned, but it will also be the case that a wide range of activity types will be trained and developed, including the Goldsmiths Library and their extensive online resources, also extensive use of Posit Cloud will be made, the hub where students will produce technical reports, blogs and webpages, conduct data analysis and collaborate on coding and writing exercises.

Method-neutral and wide Open!

> Danger
>
> We embrace an Open Science approach in our efforts to cultivate your critical evaluation skills, enhance your understanding of the significance - and power - of research, and equip you with the necessary graduate-level skills to collect, handle, and interpret data using programming software for statistical model development, visualisation and analysis.

Hours specification (e.g.) Years 1 & 2

Table 1: Notional Hours = 300

Activity	Time	Note
Lectures	40	2hrs/week
Labs	40	2hrs/week
Data Skills (Online)	40	2hrs/week
Guided Reading/viewing	40	2hrs/week
RPS	20	1hr/week
Independent Study/Coursework	120	6hr/week

Still thinking about...

Pre-Arrival / Onboarding

Showcase in Induction week - Staff labs and research projects for the year.

Year One students self-test

MSc Students - ditto and ability to shop around for supervision

Year 2 develop their pods? Show Y1 and Foundations what they did last year

Year 3/MSc students - Research Bootcamp and refreshers/skills workshops

Support PhD students and staff

Assessment & Delivery Overview

one word... FUN!!!

Labs should be Practical first.

And nothing that isn't 100% Goldsmiths or impossible to do at school. No more Milgram.

Flipped stats with screencasts and scaffolded tutorials - regular drop ins and forums

Evidence suggests that a flipped approach to teaching statistics significantly improves student performance (across a range of metrics) at the mean and throughout the achievement distribution, while controlling for baseline student characteristics Sathy & Moore (2020) (see tables 13.3 & 13.4 - specifically Anxiety, preparedness and under-represented minority status).

Assessments

> Teaching and Assessment
>
> Through lectures, interactive group discussions, online skills development modules, and practical lab sessions, we will ignite your enthusiasm for Psychology and Behavioural Science research and help you develop the fundamental skills, knowledge - and confidence - required to become a Psychology literate, disruptive scientist of the future. Tada!

A few words on Assessment

"Authentic assessment" generally refers to assignments that reflect the skills students will use in their post-graduation careers and life more generally. This is distinct from traditional assessments such as closed-book exams and academic essays.

For psychology, authentic assessments may involve the development of traditional science communication skills, such as lab reports, however there is a broader portfolio to choose from! In clinical psychology, Authentic challenges could include formulation of case studies or mock practitioner dialogues. Common challneges for many professions include writing for non-expert audiences, critical evaluation of media materials or the production of media materials that are rigorous... Reflective accounts and portfolios are part of a number of later training roles and research interviews are a hugely powerful transferable skill! All of these are designed to promote psychological literacy by encouraging communication with non-experts and application of psychology content.

Blog writing may be an effective assessment for capturing and promoting students' psychological literacy. They are also increasingly popular for assessing writing ability and conceptual knowledge.

Blog writing may help students take different perspectives, develop a critical appraisal of content, and become more reflective. Given the currency of blogging and the fact that it is a core channel for marketing and social media - it a rich target that assesses a distinctive set of skills. Students seem to enjoy it too.

Blog writing may help students overcome the challenge of academic essay writing (Ishak & Salter, 2017) since it is less rigidly governed by academic norms (Bennett et al., 2012) and involves more reflective, creative, and critical tone (Arslan & Aysel, 2010; Novakovich & Long, 2013). It also provides an opportunity to communicate psychology content to a wider audience (Gardiner et al., 2018; Schmidt, 2008; Relojo, 2017). It has been embedded successfully in many different subjects in higher education, such as pharmacy (Dunne & Ryan, 2016), anthropology (Walker & Chatzigavriil, 2017), professional development (Shanks, 2020), and English literature (Agarwal, 2017). The British Psychological Society, 2019 and the American Psychological Association (2013) stress the importance of critical evaluation and reflection, which is compatible with blog writing. Research shows that blog writing prompts critical thinking and reflection (Chretien et al., 2008; Novakovich, 2016). Challenges to implementing blog writing as an assessment include students having little to no previous experience (Kerawalla et al., 2009). Blog writing should be grounded effectively in course materials, have clear expectations, and be understood through a lens of psychological literacy (Cranney et al., 2008, 2012). We propose that blog writing may provide a useful opportunity to allow students to apply their psychology content in a critical, creative, and non-conventional way.

> Candidate assessment types that we think could actually work!
>
> Blog
> Podcast
> Website
> Posters
> Information Packs Macandrew & Edwards (2002)
> Portfolios (or ProcessFolio)
> Interview (and self-reflection)
> Clinical Assessment
> Skills assessment
> Oral Examination (mock job interview)
> Self and Peer evaluation (360°)
> Literature Search & Review (with or without annotations)
> Annotated Code
> Computational documents (Lab Reports)
> Design and Proposal (Pre-registration)
> Data analysis (Results section)

Technical Overview

Technical Overview

R is primarily a computer programming language for statistical analysis. It is *free*, and *open-source* (many people contribute to developing it), and runs on most operating systems or through an internet browser, and so there are few obstacles to its use by the normal undergraduate population (compare to SPSS).

It is a powerful language that can be used for all sorts of mathematical operations, data-processing, analysis, and graphical display of data - it is used more a more frequently in corporate settings, unlike 'pay to play' software such as SPSS.

I even used R to write this lab manual. And, I use R all the time for my own research, because it makes data-analyis fast, efficient, transparent, reproducible, and exciting

Posit is name of the Integrated Development Environment in which the R Language (and Python/Julia/Observable+) are run. It is Open Source and offers free access to everyone.

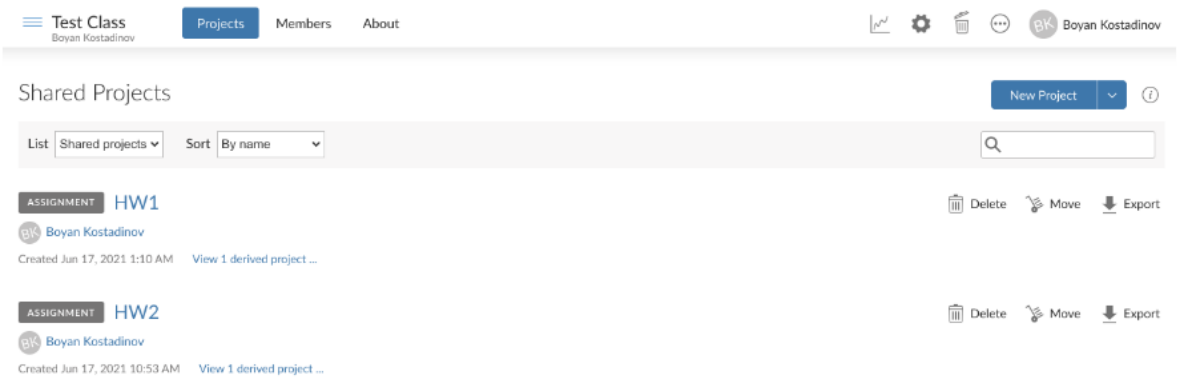
Posit Cloud is a paid-for service that allows users to access the Posit environment without downloading anything - it's browser based, and you can run analysis and create publication-ready documents on your phone.

Posit Cloud would likely be my suggestion as to the infrastructure we employ.

Free accounts are available to all students for a processing duration of 25 project hours per month, with free hosting of published content. Instructors pay a small amount, and it can be arranged that payment is made by student, instructor or organisation if a student were to exceed their Posit Cloud allowance.

The point is important to make however, that energised users simply have to download and install the free software and they can use it as much as they want, thus the high-rate users usually, very quickly, wean themselves off the browser-based platform.

The Posit Cloud has classroom functionality and is designed to deliver teaching, tutorials and content



quarto®

Quarto is an open-source scientific and technical publishing system built on Pandoc. Quarto documents are authored using markdown, an easy to write plain text format.

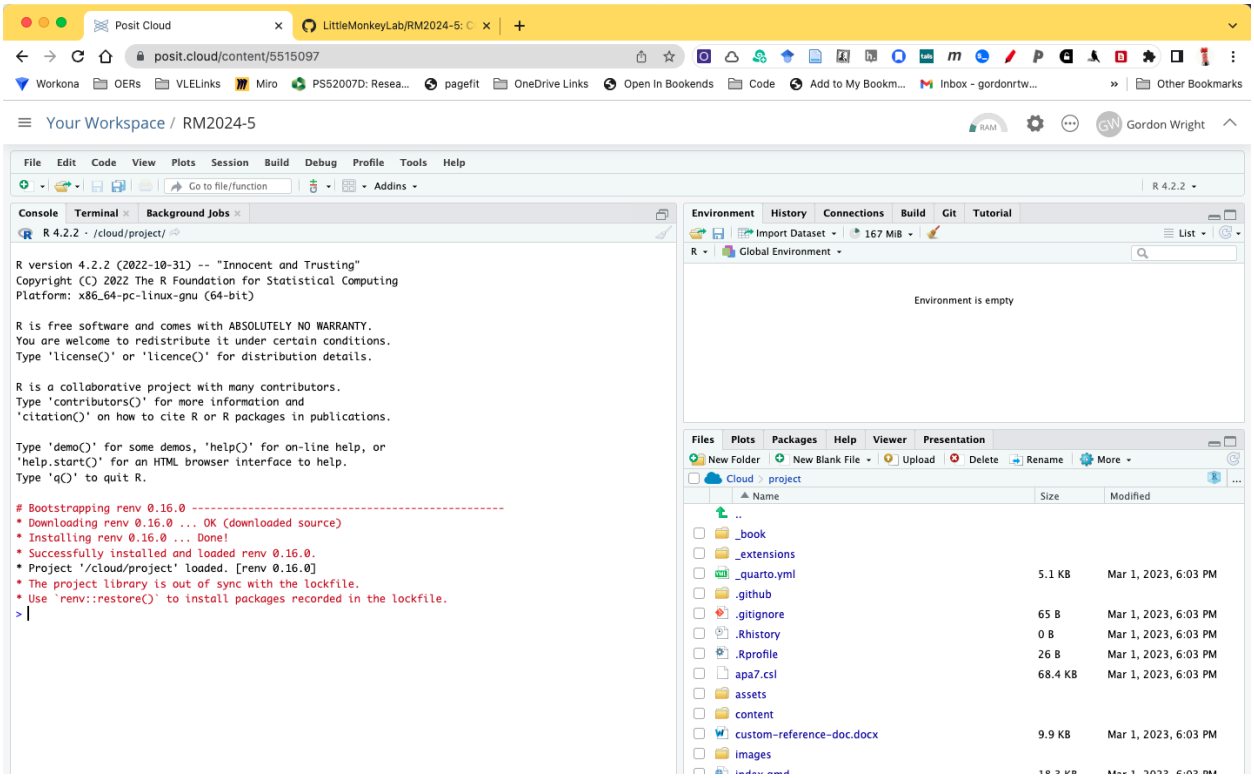
In addition to the core capabilities of Pandoc, Quarto includes:

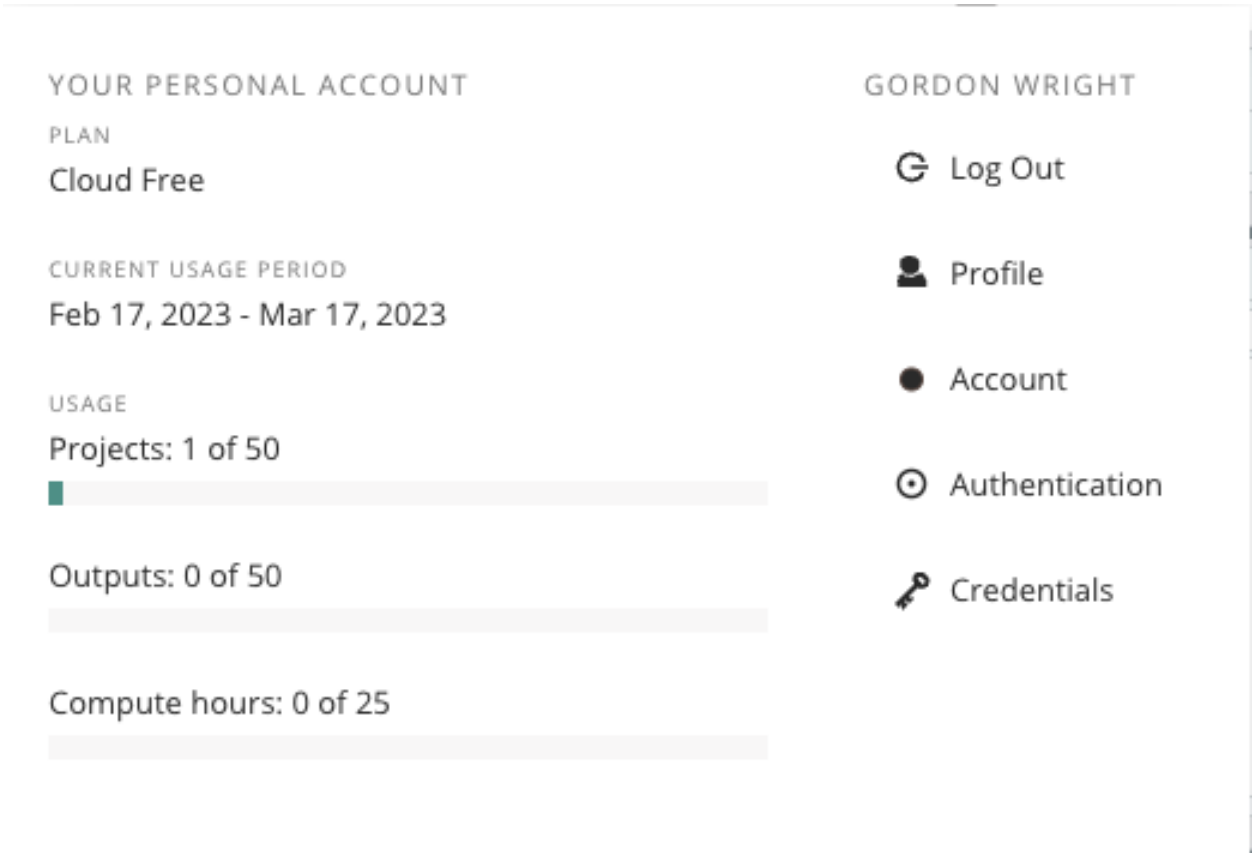
1. Embedding code and output from Python, R, Julia, and JavaScript via integration with Jupyter, Knitr, and Observable.
2. A variety of extensions to Pandoc markdown useful for technical writing including cross-references, sub-figures, layout panels, hoverable citations and footnotes, callouts, and more.
3. A project system for rendering groups of documents at once, sharing options across documents, and producing aggregate output like websites and books.
4. Authoring using a wide variety of editors and notebooks including JupyterLab, RStudio, and VS Code.
5. A visual markdown editor that provides a productive writing interface for composing long-form documents.

Learn more about Quarto at https://quarto.org.

hypothes.is

Zotero


Posit Cloud
LittleMonkeyLab/RM2024-5:
posit.cloud/content/5515097
Workona
OERs
VLELinks
Miro
PS52007D: Resea...
pagefit
OneDrive Links
Open In Bookends
Code
Add to My Bookm...
Inbox - gordonrtw...
Other Bookmarks
Your Workspace / RM2024-5
Gordon Wright
File Edit Code View Plots Session Build Debug Profile Tools Help
Go to file/function
Addins
R 4.2.2
Console
Terminal
Background Jobs
R 4.2.2 · /cloud/project/
R version 4.2.2 (2022-10-31) -- "Innocent and Trusting"
Copyright (C) 2022 The R Foundation for Statistical Computing
Platform: x86_64-pc-linux-gnu (64-bit)
R is free software and comes with ABSOLUTELY NO WARRANTY.
You are welcome to redistribute it under certain conditions.
Type 'license()' or 'licence()' for distribution details.
R is a collaborative project with many contributors.
Type 'contributors()' for more information and
'citation()' on how to cite R or R packages in publications.
Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.
Bootstrapping renv 0.16.0 ----------
* Downloading renv 0.16.0 ... OK (downloaded source)
* Installing renv 0.16.0 ... Done!
* Successfully installed and loaded renv 0.16.0.
* Project '/cloud/project' loaded. [renv 0.16.0]
* The project library is out of sync with the lockfile.
* Use `renv::restore()` to install packages recorded in the lockfile.
Environment
History
Connections
Build
Git
Tutorial
Import Dataset
167 MiB
List
Global Environment
Environment is empty
Files
Plots
Packages
Help
Viewer
Presentation
New Folder
New Blank File
Upload
Delete
Rename
More
Cloud
project
Name
Size
Modified
_book
_extensions
_quarto.yml 5.1 KB Mar 1, 2023, 6:03 PM
.github
.gitignore 65 B Mar 1, 2023, 6:03 PM
.Rhistory 0 B Mar 1, 2023, 6:03 PM
.Rprofile 26 B Mar 1, 2023, 6:03 PM
apa7.csl 68.4 KB Mar 1, 2023, 6:03 PM
assets
content
custom-reference-doc.docx 9.9 KB Mar 1, 2023, 6:03 PM
images


YOUR PERSONAL ACCOUNT
PLAN
Cloud Free
CURRENT USAGE PERIOD
Feb 17, 2023 - Mar 17, 2023
USAGE
Projects: 1 of 50
Outputs: 0 of 50
Compute hours: 0 of 25
GORDON WRIGHT
Log Out
Profile
Account
Authentication
Credentials

Open Educational Resources Texts

Overarching goals

Accessibility for our students

They don't buy textbooks, and jumping from webpage to webpage for stats support (for example) leads to more confusion than clarity. With the move to R, this means that our entire teaching of RM is 'Open source' and best of class. It's also cheaper for the student now and for ever, as it can be accessed through a browser, as a pdf, or as a number of different formats depending on taste.

We can also make sure that it is Text-reader friendly, dyslexia friendly, colourblind accessible, appropriate in terms of terminology and examples (e.g. Gender/Sexuality) etc.

This is a marketing opportunity

If we are able to encapsulate some of the Goldsmiths vibe, it is likely to be a very positive reflection of our programme. We can make a point to include elements that showcase our qualities, and advertise our culture/strengths. The University of Glasgow has won acclaim for their 2017 exercise to move to R and to open teaching resources. Have a look at some of them here. They are pretty cool, but VERY dry - mostly data wrangling and very little actual Psychology... https://psyteachr.github.io/

Cost implication

A range of free resources will be something that we can be proud to give to our students. If we are able to show that they are also high-quality... winner.

Process

Remix

I propose a 'Goldsmiths Remix' of existing resources, assembled from the wide variety of Research Methods, Statistics and general Psychology texts available. With a relatively small amount of effort, an initial version can be produced in the time available.

Remixing is a recognised and respectable enterprise. The only proviso is that if you choose to remix content, you have to 'share-alike' i.e. publish it in a similar open way. I do not see this as a problem.

We shall make sure to only remix quality content.

There is oodles of Quant and General Psych material to choose from. Qualitative work is a bit thinner on the ground. We have the opportunity to steal a march in this area potentially with an exciting 'methods neutral' toolkit.

Student participation

Ideally we would have students involved in the production of the resources, and make sure that they integrate newer technologies to make them 'living documents'. Current best practice is to host texts in GitHub repositories, inviting comments or edits, but also to employ social annotation tools (such as Hypothes.is https://web.hypothes.is/) - which allows webpages to be annotated wither publicly or privately, and for communities to be built around what might be considered a static resource.

Walking the walk

An ideal platform on which to build the book is Quarto, and indeed, due to the relative recency of the RMarkdown to Quarto shift, we will be amongst the first to develop a Psychology offering of this type. And since Quarto is proposed as a platform by which to support student writing, it shows expertise and commitment to what we are training.

If a job's worth doing...

With a little love, humour and creativity we could make our texts (and resources - Lectures/Labs/Datasets etc) more engaging than many others available. Indeed, if we make a concerted effort, it might be that we could

Conceptual Text

https://crumplab.com/ResearchMethods/

Statistical Text

https://crumplab.com/statistics/

Tutorials & Activities

https://crumplab.com/statisticsLab/ (Labs in R, Excel, SPSS and JAMOVI)

Lots of Data Science - e.g. Data Science in a box and MC-R Intro to Modern Statistics

plus Visualisations etc

plus https://lakens.github.io/statistical_inferences/index.html

plus https://openpress.usask.ca/introtoappliedstatsforpsych/

Qual Williams, D. D. (2018). *Qualitative Inquiry in Daily Life (1st ed.)*. EdTech Books. https://edtechbooks.org/qualitativeinquiry

Qual content is sparse, thus ownable!

Danielle Navarro - The GOAT - R stats gold standard https://learningstatisticswithr.com/

Data Sets included Versions with Jamovi, JASP, and SPSS via Matt Crump.

Questions for discussion

--- title: Considerations ---

Mini-Dissertation needs to be considered.

Independent projects in Y3 (needs to be considered)

MSc provision? Any changes required/wanted?

Preparation for 24/5

Need to begin preparation

Lectures x 40

Open Educational Resources Textbook for Research Methods CCBY4.0

Lab Practicals x 40

Open Educational Resources Textbook for Data Skills (e.g. Navarro) CCBY4.0

Recordings, videos, materials and worksheets for above x 40

Y3/MSc Bootcamp

Infrastructure

Recording suite

Materials storage

Estates and Facilities

Removal of computer banks in labs to make them more useful for practicals? e.g. WB218 capacity = 32.

Wall-mounted monitors at least?

Technology

Posit Cloud as Entry Level although we could make an argument for Ian to manage a server installation.

Portfolio options? Mahara?

Costs

Chromebooks on loan for labs maybe?

Risks

Technology obstacles (lower than SPSS)

Finite knowledge within staff

Staff resistance

Staffing and teaching allocation

Recruit next TFs specifically to help build the infrastructure and programme

Timetabling

We need timetabling to help us optimise the week

Induction planning

Pre-arrival comms

Years

Year 1 (Level 4)

Year 1 (Level 4)

Module Weighting - 30 Credits (300 notional hours)

Coursework and attendance only

2 hours lectures each week - with 1 hour prep/reading

2 hours labs each week - with 1 hour prep/reading

2 hours Data Skills Interactive Online Tutorials with activities

Module Content

This module introduces and equips students with the conceptual and practical skills necessary for the effective study of psychology, but also highly valuable transferable and employability skills. This includes computer skills, presenting results of experiments, structuring a technical report, and critiquing scientific research.

The module combines individual and group work, therefore requires the development of time- and project-management skills, as well as cooperation and communication skills.

Additionally, it provides an introduction to research design, data, and statistics in psychology, as well as the processes of analysis and interpretation of Qualitative research.

Students will learn the theoretical aspects of basic statistical concepts and tests, and gain experience using the statistical package R, as well as the IDE Posit (formerly RStudio) and Quarto academic publishing platform for the production of Posters, Blogs, Websites and interactive documents for Lab Reports and Theses.

Module Learning Outcomes

The student should be able to:

- Demonstrate the ability to **work collaboratively and independently** to deliver projects and reflect/evaluate their individual and group performance
- demonstrate a comprehensive understanding of the **principles of research in psychology**, both Qualitative and Quantitative, from reading and summarizing scientific research to planning, writing and presenting reports and presentations.

- understand the importance and relevance of **data analysis, the different types of research design**, experiments, sampling techniques and tests used.
- understand the **philosophical underpinnings** of qualitative and quantitative approaches to research and evaluate their merits in answering questions across the range of psychological domains.
- demonstrate the skills to **analyse and interpret data** using qualitative and quantitative frameworks and methods.
- demonstrate statistical proficiency in the ability to use R to perform appropriate statistical analysis and visualisation of quantitative data.
- be able to visualise and present/communicate research findings to a range of audiences

Assessment

Assessment Element	Length	%	F or S	Group/Individual
Visualisation/Dashboard	NA	0	Formative	Group
Lab Reports x 3	1500	30%	Summative	Individual
Annotated Bibliography	1000	20%	Summative	Individual
Portfolio of weekly activities	2 hours per week	20%	Summative	Mixed
Data Skills Interactive Tutorials	2 hours per week	20%	Summative	Individual
RPS	10 hours	Required	Pass Fail	Individual

Visualisation - The task will be to assemble a poster/dashboard of the cohort data, with some explanatory content (subtly employing the format of a lab report/academic poster) that communicates something about the year group. Each group can develop a single additional question to allow them to tailor the content that all students will answer, but will use the cohort-wide data collected in Welcome week. Qual and Quant data - posing the challenge of what to present and how to present it. Mesearch.
This is an intro to R, Posit & Quarto, and the goal is to introduce group working early, to allow for feedback and reflection, and to get students to produce something novel, relevant and real, of which they can be proud. Can be a team-coding exercise, incorporating some novel student-generated questions and ethical considerations.
Train tables and plots so that this contributes to academic writing skills.

Lab Reports x 3 - 1 per theme at block 2, block 4 and block 6. Standard goal of training academic writing APA style. Heavily templated Quarto document, putting the focus on CONTENT, not formatting. Training the use of Zotero or .bib reference management.
Cohort wide data collected by staff on a question central to the block in both Qual and Quant Methods:

- either multiple variables from which a student can choose. e.g. 5 predictors of well-being and 2 measures of well-being collected and each student chooses 2 predictors and an outcome for a regression model, or compare means (1, 2, 2+) or Qualitative from TA/DA/IPA/GT.

- Or there could be multiple studies to choose from from within a block - to allow for intro to different methods
- Students must do at least one of each Qual or Quant out of the 3 reports.

! Zotero online library resource per block

https://www.zotero.org/groups/4972953/ps52007d_research_methods/library - Zotero Library of some AWESOME research that would be bundled and ready to go.

Annotated bibliography on a topic of your choosing - To match the skills tested in the Extended Essay and to train critical thinking & lit search/review skills - find 3 papers on a topic of your choosing. Present a correct APA format reference list, summarise the papers each answering key questions (design, results, likes and dislikes), and wrap in an introduction/conclusion that incorporates a reflective “what do I think about this research and what does it mean to me”

Portfolio of weekly activities - Each week readings, preparation, reflection or activities are assigned, and a portfolio of responses, or log is kept. We can allow for non-completion of x% but they are a combination of competency checks or practical activities. These can include reports on group work, reading log, contribution to forums, use of hypothesis to annotate a web page, learning log, data skills.

Reading and Resource List

We propose a custom made textbook remixed from Open Educational Resources to support key study skills throughout your degree - also shared CCBYSANC4.0

Year 1 schedule

Year 1 Term 1

We ek	Schedule			
0	Wel comeWeek	Data Frenzy on wellbeing?		
• *1 **	**Le cture:**	The year ahead and answering questions with data	• *DataSk ills:**	Intro to Posit Cloud & R and develop a group question
	Lab:	Visualisation and descriptives (Team Coding)		
2a	**Le cture:**	What is Science? Is Psychology a Science? Patterns and relationships	• *DataSk ills:**	Descriptive Stats and the Psych package
	Lab:	Process your group question and submit poster		
3a	**Le cture:**	Open Science and the Replication Crisis Critical Thinking and being Scientific	• *DataSk ills:**	APA referencing and Lit Searching & Zotero
	Lab:	Block A Experiment		
4a	**Le cture:**	Critical Thinking and Thinking Scientifically	• *DataSk ills:**	Critical Analysis & Research Summary exercise
	Lab:	Literature review & Critical Analysis		
5b	**Le cture:**	The research toolkit - Qual & Quant -	• *DataSk ills:**	Compare two papers Q&Q
	Lab:	Reporting Research		
RW		Field Trip		
6b	**Le cture:**	Observational Research	• *DataSk ills:**	Lab Report Structure
	Lab:	Block B Experiment		
7b	**Le cture:**	Ethnography & Case Study	• *DataSk ills:**	--

We ek	Schedule		
	Lab:	--	• *Assign ment:** Lab Report 1 - Q or Q
8c	**Le cture:**	Sampling & Probability	• *DataSk ills:** --
	Lab:	--	
9c	**Le cture:**	Statistical Models	• *DataSk ills:** --
	Lab:	Block C Experiment	• *Assign ment:** Bibliography: Peer & Formative assessment
• *1 0c **	**Le cture:**	Correlational Research	• *DataSk ills:** Blog or Vlog
	Lab:	Bibliography Presentations	• *Assign ment:** Summary Blog/Vlog

Year 1 Term 2

We ek	S chedule		
11	**Lec ture:**	Employability	• *DataSk ills:** Employability
	• *Lab:**	Careers / Pathways	
	• **Lec ture:** *12a**	Qual data collection	• *DataSk ills:** Transcript coding
	• *Lab:**	Interviewing skills	
	• **Lec ture:** *13a**	Qual analysis & writeup	• *DataSk ills:** Coding swap
	• *Lab:**	Block A Experiment	
	• **Lec ture:** *14a**	Mixing methods	• *DataSk ills:** --
	• *Lab:**	--	• *Assign ment:** Lab Report 2 QorQ
	• **Lec ture:** *15b**	Multiple Regression	• *DataSk ills:** --
	• *Lab:**	--	
RW			
	• **Lec ture:** *16b**	Experimental Designs	• *DataSk ills:** --
	• *Lab:**	Block B Experiment	
	• **Lec ture:** *17b**	Comparing Means (1,2)	• *DataSk ills:** --
	• *Lab:**	--	• *Assign ment:** Lab Report 3 QorQ
	• **Lec ture:** *18c**	One way ANOVA	• *DataSk ills:** --

We ek	S chedule			
		• *Lab:**	--	
	• **Lec ture:** *19c**	Two way ANOVA	• *DataSkills:**	--
		• *Lab:**	Block C Experiment	
	• **Lec ture:** *20c**	Non-Parametrics	• *DataSkills:**	--
		• *Lab:**	--	• *Assignment:** Bibliography final submission

Year 2 (level 5)

Year 2 (level 5)

Module aims

Experimental designs in psychology typically employ statistical analyses such as analysis of variance, factor analysis and regression. The aim of this module is to make these topics more accessible through the use of practical examples and data collection on a self-directed group research project.

Module Content

The module's overall aim is to offer a supportive and intellectually rigorous environment allowing students to develop highly valuable, transferrable research and collaboration skills in the context of undertaking a group research project.

This module teaches fundamental empirical research techniques within the framework of Open Science and reproducibility, promoting best practice in study design, Open Materials and Data, and methodological practice. This module fully immerses students in the Goldsmiths 'community of practice,' providing structured research support and opportunities to reflect on learning, modelling the key milestones of the final year dissertation.

The module seeks to promote the application of a scientific, intellectually virtuous, research-based approach to any and all future endeavours, and integrates metacognitive and reflective practices to deliver this transformative learning towards academic and personal development.

Over the course of two terms students will follow a programme of lectures introducing a critical approach to psychological research, as well as how such skills can be transferred beyond psychology; across academic disciplines and into the everyday world, with extensive use of case studies and problem-based learning.

Structured weekly labs will enable students to work collaboratively to identify an area of research, critically evaluate current research in the area, and develop a modest research project building on these insights.

Students will work together, alongside lab tutors and researchers in the department, to design and deliver the research project, including obtaining ethical approval, data collection and analysis, then interpreting and writing up the results, and sharing the materials and data in line with Open Science best practices in the Psychological, Behavioural and Data Sciences.

Module Learning Outcomes

1. Show a critical understanding of research design and methodology
2. Design, conduct, analyse, interpret and disseminate a psychological research project
3. Understand the conceptual and historical issues concerned with psychology as a science and area of practical application
4. Demonstrate valuable time-management and collaborative project-management skills and proficiencies
5. Reflect on their own learning, skill development and metacognition, preparing them for the final year dissertation
6. be able to use R to analyse: regression, correlations, reliability and validity, effect sizes, one-way within and between subjects designs (and post-hocs), two-way within, between and mixed designs; and factor analysis
7. Be able to present reproducible, APA format literate-programmed research reports.

Assessment

Assessment Element	Length	%	F or S	LO Tested
RPS				

Reading and Resource List

We have a custom made textbook to support key study skills throughout your degree:

Year 2 schedule

Year 2 Term 1

> Query
>
> Independent/group projects? Select from current module across methods? Same tempo? Sim data rather than collect data? Or select a live study and analyse a sample of real data ? Year ahead, so plenty of time.
> RPS?

Week	Schedule			
1	**Lecture:**	The year ahead and expectation setting	**DataSkills:**	ANOVA refresher (designs and variables)
	Lab:	--	**Assignment:**	Reflection about the year ahead and self-management
2a	**Lecture:**	Ethics	**DataSkills:**	ANCOVA
	Lab:	Lab Immersive		
3a	**Lecture:**	Open Science and the Replication Crisis	**DataSkills:**	Factorial ANOVA
	Lab:	Experiment A Block		
4a	**Lecture:**	Critical Thinking and Intellectual virtues	**DataSkills:**	Repeated Measures ANOVA
	Lab:	--		
5b	**Lecture:**	Mixed Methods and participa-tory/emancipatory research	**DataSkills:**	Mixed ANOVA
	Lab:	--		
RW				
6b	**Lecture:**	--	**DataSkills:**	--
	Lab:	Experiment B Block		
7b	**Lecture:**	--	**DataSkills:**	--
	Lab:	--	**Assignment:**	ASSESSMENT
8c	**Lecture:**	--	**DataSkills:**	--
	Lab:	--		
9c	**Lecture:**	Experiment C Block	**DataSkills:**	--
	Lab:	--		

Week	Schedule			
10c	**Lecture:**	--	**DataSkills:**	--
	Lab:	--	**Assignment:**	?

Year 2 Term 2

Week	Schedule			
11	**Lecture:**	--	**DataSkills:**	--
	Lab:	--	**Assignment:**	--
12a	**Lecture:**	--	**DataSkills:**	--
	Lab:	--	**Assignment:**	--
13a	**Lecture:**	--	**DataSkills:**	--
	Lab:	Experiment A Block	**Assignment:**	--
14a	**Lecture:**	--	**DataSkills:**	--
	Lab:	--	**Assignment:**	ASSESSMENT
15b	**Lecture:**	--	**DataSkills:**	--
	Lab:	--	**Assignment:**	--
RW	**Lecture:**	--	**DataSkills:**	--
	Lab:	--	**Assignment:**	--
16b	**Lecture:**	--	**DataSkills:**	--
	Lab:	Experiment B Block	**Assignment:**	--
17b	**Lecture:**	--	**DataSkills:**	--
	Lab:	--	**Assignment:**	--
18c	**Lecture:**	--	**DataSkills:**	--
	Lab:	--	**Assignment:**	--
19c	**Lecture:**	--	**DataSkills:**	--
	Lab:	Experiment C Block	**Assignment:**	--
20c	**Lecture:**	--	**DataSkills:**	--
	Lab:	--	**Assignment:**	ASSESSMENT

Dissertation (Y3)

Level 6 - topline summary

Module Content

5 week module to jumpstart the dissertation and to actively help find supervision.

Obviously, this could be useful in terms of saving repetition for supervisors, and for bringing consistency.

Could be useful to MSc students. They could access the entire Goldsmiths Research Skills archive and have that as a foundation to the research side of things/refresher for RM.

Great for Conversion students and PANC/non-BPS/Psych

Get people up and running earlier - starts in summer/WW.

Off the shelf projects? Individual? Qual? Quant?

Module Learning Outcomes

Assessment

Assessment Element	Length	%	F or S	LO Tested

Reading and Resource List

We have a custom made textbook to support key study skills throughout your degree:

Table 2: Y3 Term 1 Laydown

Week	Lecture	Practical
Pre		--
WW	--	----
1	--	--
2	--	--
3	--	--
4	--	--
5	--	--
RW		--

Dissertation Schedule (Y3 & MSc)

Week	Schedule			
1	**Lecture:**	There was a wee cooper who lived in fife and his hat was green	**IndStud:**	There was a wee cooper who lived in fife and his hat was green
	Lab:	There was a wee cooper who lived in fife and his hat was green	**Data:**	There was a wee cooper who lived in fife and his hat was green
2	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
3	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
4	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
5	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
		Reading Week		

Meet Quarto!

```
library(tidyverse)
```

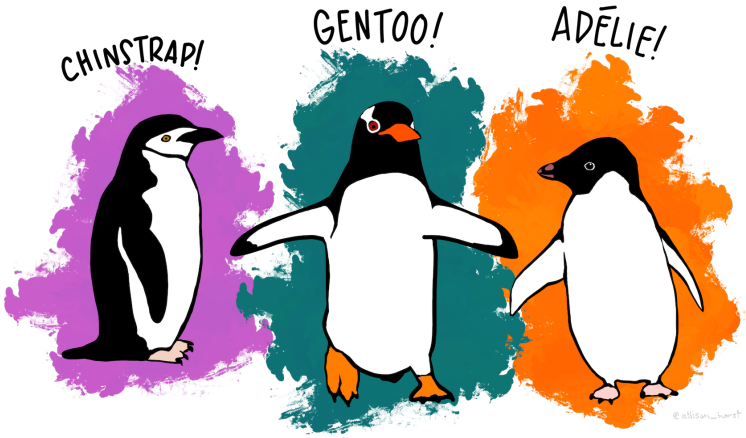
```
-- Attaching packages --------------------------------------- tidyverse 1.3.2 --
v ggplot2 3.4.1     v purrr   1.0.1
v tibble  3.1.8     v dplyr   1.1.0
v tidyr   1.3.0     v stringr 1.5.0
v readr   2.1.3     v forcats 1.0.0
-- Conflicts ------------------------------------------ tidyverse_conflicts() --
x dplyr::filter() masks stats::filter()
x dplyr::lag()    masks stats::lag()
```

```
library(palmerpenguins)
```

Meet Quarto

Quarto enables you to weave together content and executable code into a finished document. To learn more about Quarto see https://quarto.org.

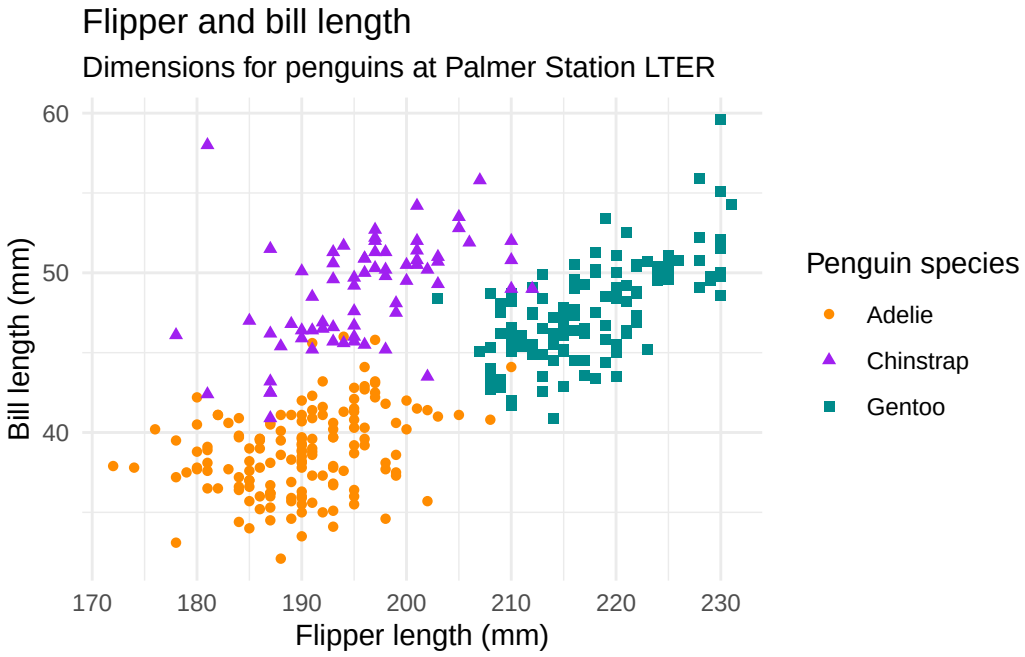
Meet the penguins



The `penguins` data from the **palmerpenguins** package contains size measurements for 344 penguins from three species observed on three islands in the Palmer Archipelago, Antarctica.

The plot below shows the relationship between flipper and bill lengths of these penguins.

```
ggplot(penguins,
       aes(x = flipper_length_mm, y = bill_length_mm)) +
  geom_point(aes(color = species, shape = species)) +
  scale_color_manual(values = c("darkorange","purple","cyan4")) +
  labs(
    title = "Flipper and bill length",
    subtitle = "Dimensions for penguins at Palmer Station LTER",
    x = "Flipper length (mm)", y = "Bill length (mm)",
    color = "Penguin species", shape = "Penguin species"
  ) +
  theme_minimal()
```



Presentation Slides

Blogs

Websites

Books

Interactive tables, charts and maps

Html Widgets

Databases

References

Macandrew, S. B. G., & Edwards, K. (2002). Essays are Not the Only Way: A Case Report on the Benefits of Authentic Assessment. *Psychology Learning & Teaching*, *2*(2), 134–139. https://doi.org/10.2304/plat.2002.2.2.134

Sathy, V., & Moore, Q. (2020). Who benefits from the flipped classroom?: Quasi-experimental findings on student learning, engagement, course perceptions, and interest in statistics. In *Teaching statistics and quantitative methods in the 21st century*. Routledge.

Macandrew, S. B. G., & Edwards, K. (2002). Essays are Not the Only Way: A Case Report on the Benefits of Authentic Assessment. *Psychology Learning & Teaching*, *2*(2), 134–139. https://doi.org/10.2304/plat.2002.2.2.134

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