### Undergraduate Teaching	
1. Pedagogical Approach: How do you adapt your teaching methods for diverse learning styles in data science?	Motivate people Mix it up Diagrams, speaking, getting them to speak to each other, ask questions, Flipped classroom Interactive class work Diagrams, videos Reading material Problem based learning
2. Curriculum Development: Can you describe your experience in developing or revising data science curriculum?	CS – SQL HIM – entire data science program, postgraduate and undergraduate subjects, several redesigns! SQL, R, Access / Excel, Systems analysis, Tableau, Health informatics domain specific topics (EHR) Digital Health Informatics – Big data, Internet of Things, EPidemiology
3. Technology Integration: How do you incorporate current data science tools and software in your teaching?	Utilizes networks for updates. Incorporates latest datasets. Provides database access. Teaches API and SQL use. Aims to use ChatGPT for coding.
How will you use chatgpt in teaching	Lesson plans, images, self education, quizzes (chatgpt to kaboodle tool!)
How will you get students to use chatgpt	Flipped classrooms, making use of live chatgpt Work with chatgpt to do HARD things; prepare X, extend Y, change code to do Z, make real world application
How to deal with ChatGPT and assessment	Ask chatgpt to “extend knowledge”, extended knowledge will be on the test! ‘explain this code’ sessions Individualized datasets Set the bar high, outside chatgpt capabilities Infographics, quizzes, portfolios (with proof of work), peer-assessment Collaborative work Contextualized assignments: “given this framework and this data…” Research brainstorming with chatgpt, include self Create assignments beyond ChatGPT's scope, custom massive datasets My personal experience – learn anything, lifelong learning “If you have a question, ask ChatGPT first”
4. Student Engagement: What strategies do you use to engage students who are struggling with data science concepts?	Relationships build on existing knowledge. Motivate attendance, effort Maintain open-door policy, positive feedback Track students, learn names.

5. Assessment Techniques: How do you assess student learning in data science courses?	Ensure engagement, prevent cheating. Assign individualized tasks. Encourage collaboration, unique outputs, random teams. Require students to execute code Live assessments
6. Teaching Philosophy: Could you elaborate on your teaching philosophy for data science?	Motivate the students Learn by doing – problem solving, authentic assessment, technical proficiency Relationship building. You have to like the students, and they have to respect you Self starting – continuous learning
7. Adapting to Change: How do you stay updated with the rapidly evolving field of data science?	Blogs and podcasts, twitter, mastadon papers personal projects / industry collaboration Active research Teach! Remain open to feedback Relationships – mentorship and mentoring
8. Classroom Challenges: Describe a challenging situation you faced while teaching and how you resolved it.	Student that wanted to pass without working. Leaned heavily on his disability. Took my class 3 times.
9. Collaborative Learning: How do you foster collaborative learning in your data science classes?	Collaborate with ChatGPT Group work – big projects Discussion forums Peer review Cross disciplinary assignments Small group in class work
10. Innovative Teaching: Can you provide an example of an innovative teaching method you've used in data science?	Real life massive datasets – multimillion health records Co-assignment with other capstone subject Role plays Interactive monitors, get student groups to put their ongoing work up on the screens, The more action the better Create an innovative public health related tech product, sell it to us
### Postgraduate Student Supervision	
11. Mentoring Approach: What is your approach to mentoring postgraduate students in data science?	realistic problems either real life data real problems (via real relationships) is due to see where the student is at and try to develop their interest those those three things will sort of drive them with the hardest part of our postgraduate work. Continue on especially the thesis post graduate thing.

12. Thesis Supervision: Describe your experience in supervising data science theses or dissertations.	Thesis by publication Matthias Shaun Purkiss Honors thesis
13. Conflict Resolution: How would you handle disagreements or conflicts with a postgraduate student?	Bring in the team. Like children. Consistent rules. Assertive (because these students can be are very powerful) and empathy About the relationship 1. Understand the Nature of the Disagreement 2. Prepare for the Discussion 3. Initiate a Constructive Dialogue 4. Propose Solutions 5. Implement Agreed Actions 6. Follow-up 7. Reflect and Learn Feedback Loop: Seek feedback from the student post-resolution. In data analysis, feedback is vital for model improvement; the same goes for interpersonal conflicts.
14. Career Guidance: How do you assist postgraduate students in preparing for data science careers?	Make sure they have the right skillset: Communication Data manipulation Analysis / visualization Industry exposure – real life projects, placements? Case studies, research opportunities Professional branding – linked in, github
15. Research Collaboration: Share an example of a successful research collaboration with a postgraduate student.	Shaun purkiss
16. Ethical Guidance: How do you teach ethical considerations in data science research?	Frameworks – privacy, bias, algorithm transparency Guest lecturers – ethics in practice Anonymization techniques
17. Student Independence: How do you encourage independence in your postgraduate students?	Provide tools, give exciting tasks Clear achievable goals and milestones Opportunities to teach and lead Mutual support
18. Feedback Process: Describe your process for providing constructive feedback to students.	Authentic Focus on the positives, positive language, ‘I want’ statements Provide clear criteria. Model what I want Relationship NB Ongoing feedback, incremental feedback Audio / visual feedback

19. Publication Support: How do you support students in publishing their research?	Find journals. Help with writing process. Provide accessible datasets Provide them with my experience. It is a process. Write around the figure
20. Networking Opportunities: How do you expose your students to networking opportunities in the data science field?	Placements/research/internships Local meetups? Guest lecturers Conferences (HIMAA) Interdepartmental (small -> advantage/disadvantage) Alumni networks? Hackathons Rural data science leaders network
### Research	
21. Research Interests: What are your current research interests in the field of data science?	LLM enabled approaches embeddings GIS/Big data/Linkage
22. Funding Strategies: Describe your experience in securing research funding.	Partners – relationships Knowledge of datasets / data sources Build on success Persist / refine
23. Collaborative Research: How do you approach collaborative research projects?	Relationships Goals / scope/ roles Formal and informal Communication agile Plan Publication plan
24. Research Impact: What is the most significant impact of your research in data science?	Linkage methodologies COVID data pipelines Use of Targets framework
25. Innovative Methodologies: Can you discuss an innovative research methodology you have used?	DH linkage Data driven linkage framework
26. Industry Partnerships: Describe any industry partnerships you have established for your research.	Mobile phone project Refugee communities SCAAB Energy efficiency project
27. Research Dissemination: How do you ensure your research findings are accessible to	Papers, the Conversation

both academic and non-academic audiences?	
28. Interdisciplinary Research: Can you provide an example of how you have integrated data science with other disciplines in your research?	Public health Health service management Health Information Management Computer science
29. Challenges in Research: What do you consider the biggest challenge in data science research today?	Skills gap – people don't know how to use the tools Domain integration – especially true for experts in other domains, we do not know how to integrate their data How will LLM change the field
30. Research Ethics: How do you address ethical concerns in your research?	Consult. Be aware.
### General Skills and Experience	
31. Professional Development: How do you pursue professional development in the field of data science?	Conferences. Teaching. Twitter / blogs
32. Industry Experience: How does your industry experience enhance your role as a lecturer in data science?	DOH Lived experience. Good examples. It is not just the techniques, but integrating those techniques with the human world. Minimal viable product. Tight feedback loops.
33. Technology Trends: What emerging technologies do you think will significantly impact data science in the next five years?	LLM Faster hardware, better algorithms, better software
34. Teamwork: Describe a situation where you had to work in a multidisciplinary team. What role did you play?	DOH I was the data guy, and the tech expert. At the end of 2.5 years, everyone knew my name. I didn't get pestered much, but when I did, the problem was tricky, and I could solve it. E.g. spin up a docker image to run a headless chrome browser to scrape a DNA dataset daily.
35. Leadership Experience: Can you discuss your experience in a leadership role within an academic or research setting?	Purkiss Mobile Phone Exergaming
36. Communication Skills: How do you effectively communicate complex	Know audience Maximally simple language

data science concepts to a non-specialist audience?	Metaphors Visualisation Tell a story Participation Examples Incremental complexity – with feedback
37. Diversity and Inclusion: What strategies do you employ to promote diversity and inclusion in data science?	Inclusive examples / language Mentorship / outreach Self awareness, implicit bias
38. Professional Network: How do you leverage your professional network to benefit your teaching and research?	Joint projects, guest lectures Promote my skillset Co-teaching
39. Time Management: How do you manage competing demands of teaching, research, and administration?	Triage. Critical tasks first. Time for reflection. Time off for rejuvenation Automate as much as possible Leverage students / relationships – e.g. research projects. Specialize in what I am good at, let others do the same Say NO a lot Recharge batteries – peer support
40. Vision for the Role: What is your vision for the role of a data science lecturer in the evolving landscape of higher education?	Interdisciplinary Innovative – continuous improvement – at the forefront of technology Well connected to academia and industry Public engagement Entrepreneurial encouragement