UNIVERSITY OF TECHNOLOGY SYDNEY

School of Mathematical and Physical Sciences

37457 Advanced Bayesian Methods

FINAL EXAMINATION INFORMATION

Spring Semester, 2023

Examination Date and Time

The examination will take place within the time window 1:00pm and 4:00pm Wednesday 15th November 2023. You should be at the examination location by 1:00pm.

Examination Location

The examination location is: Room 430, Level 5, Building 4. Please note the following about this location:

- Room 430 is in the north-east section of Building 4, corresponding to the intersection of Jones Street and Harris Street.
- Room 430 is behind a glass security door. This security door is located just south of the Building 4, Level 5 lifts/elevators area.
- The lecturer's higher degree research students, Nurul and Virginia, will provide assistance with running the examination.
- Nurul will facilitate access to the other side of the security door. Please wait in the area just beyond the security door which has several places to sit.
- Room 430 is very near this waiting area just to the left of the kitchenette but access for setting up by the lecturer and his assistants may not be possible until 1:00pm (if e.g. the room is booked from 12:00 to 1:00pm by another group).
- We are very likely to have the room set up by or before 1:10pm. After that has been achieved we will call you into Room 430.
- Your sitting position in Room 430 will be marked with a label containing your name. (Your graded Assignment 8 may also be put at your sitting position if you did not receive it at a final examination help session.)

Examination Format

The examination has 4 questions of equal value. Each question represents approximately 30 minutes of work. The allowed time for the examination is

10 minutes reading time followed by 2 hours writing time.

Examinable Material

All material covered in the *Graph Theory and Statistics* notes is examinable.

All material covered in the slide presentations and assignments is examinable.

The readings corresponding to *Penalized Splines* (Chapter 2 of the 2018 book by Harezlak, Ruppert & Wand) and leave-one-out cross-validation model selection criteria (the journal article by Vehtari, Gelman & Gabry) are not examinable.

Any further clarification can be obtained from Professor Wand at either or both of the help sessions to be held as follows:

Final Examination Help Session I

2pm–3pm Monday 13th November 2023 Room 006, Level 6, Building 7

Final Examination Help Session II

2pm–3pm Tuesday 14th November 2023 Room 006, Level 6, Building 7

or by e-mailing him (matt.wand@uts.edu.au).

Examination Permitted Items

The following items are permitted to be on your desk during in the final examination:

- pens,
- ruler,
- your copy of the *Graph Theory and Statistics* notes (which may have your markings on them).

Booklets for writing your solutions will be provided.

Examination Forbidden Items

The following items are forbidden to be on your desk during the final examination:

- calculators,
- laptop computers,
- mobile telephones.

If you bring a mobile telephone to the final examination then please keep it with your other belongings, off the desk and switched off.