Administration

ISYS2120 Data and Information Management

Prof Alan Fekete
University of Sydney

Acknowledgement of Country

Before we begin the unit, I would like to acknowledge the Traditional Owners of Australia and recognise their continuing connection to land, water and culture.

It is upon the ancestral lands of the Gadigal people of the Eora Nation that the University of Sydney is built. I pay respects to their Elders, past, present and future.

I further acknowledge the Traditional Owners of the country on which you are located, and pay respects to their Elders, past, present and future.

As we share our own knowledge, teaching, learning and research practices within this university may we also pay respect to the knowledge embedded forever within the Aboriginal Custodianship of Country.

Role of the unit

- “A huge amount of data is generated by people and organisations, as they go about daily activity online. In principle, this data should allow improved service quality and efficiency, for example through data-driven decisions. This makes the data potentially valuable, and so it must be managed, to enable easy use, to protect its accuracy, and to ensure proper use. This unit introduces the techniques and systems that support managing data; in particular, we look at the capabilities of relational database management systems, which are most often used in enterprises for holding and accessing the organisation's data.

  This unit of study will teach the core concepts and syntax of the SQL query language to access data held in relations, and it will cover the process of choosing a good representation in relations, for the data in a domain A focus for this unit is issues around the security and privacy of data, particularly ways to capture and enforce integrity constraints on the valid states of the data. Other topics covered will include application development with a backend database, an introduction to some aspects of database management system internals which are especially important for users and application developers, and an overview of enterprise data including data warehousing, data analytics, and data integration.” [from Canvas site]
- Required as core for BAdvComp, BE(Hons) (Software)

ISYS2120 Learning outcomes (start)

- **LO1**. understand the concept of a DBMS, differences from other ways to store and share data, DBMS role in organisations, and the types of work done with a DBMS
- **LO2**. understand the relational data model: connect relational data to real world facts, and vice versa; know limitations and benefits of the relational model approach
- **LO3**. work with data stored in a relational database management system: understand table definitions including integrity constraints, extract information through SQL queries, modify information through SQL queries
- **LO4**. design a suitable schema which says how information about a particular domain will be stored in a relational DBMS: create a conceptual data model for a domain, produce relational schema (including integrity constraints) from a conceptual model, apply normalisation theory to evaluate or improve a relational schema

ISYS2120 Learning outcomes (rest)

- **LO5**. understand how application software can use data stored in a relational DBMS, and understand the basic architectural alternatives for data management applications
- **LO6**. understand goals, threats, and protection techniques, for ensuring data security and privacy, including use of SQL views, access control, integrity constraints, stored procedures
- **LO7**. understand some concepts of dbms implementation that impact on application quality and performance, including query processing, index structures, transactions
- **LO8**. connect general database concepts to both theoretical abstract formulations, and details of specific software platforms.
- **LO9**. work effectively in a team with members whose skills and interests differ

ISYS2120 times and places I

- 2 hrs/week of lecture, every Monday 9-11am
  - Some students have timetable showing this in person, in ABS room 2090
    - If you prefer, you can watch the recording instead (see below)
  - Others have timetable showing “online lecture” – this means you should watch the recording later via Canvas “Recorded Lectures” tab (typically, it will be available by Monday afternoon)
    - If there is space in ABS2090, you can instead come in person at 9 am Mondays
  - Explanation of main ideas, especially conceptual; sometimes discussion of general feedback on assignments
    - Also, answering questions from discussion board and/or asked during lecture
  - Slides will be posted in advance, and should be read by the Friday before (for producing hand-written summaries)

ISYS2120 times and places

- 1 or 2 hrs/week of Lab (start in week 2): time/place depends on your timetable (always in person, on campus)
  - Mix of activities; mostly working on problems that prepare you for assignments (some hands-on practice)
  - 2 hrs duration in weeks 2,3,4,8,9; 1 hour (the first hour of the timetabled slot) in weeks 5,6,7,10,11,12,13
  - Special case: Monday labs miss week 10 (public holiday); instead have 2 hours in week 11 doing both weeks activities!
  - Aim to go to the lab you are scheduled for
    - If necessary, you can ask to attend another lab session *if there is space and the tutor agrees*, but ask the tutor before taking a seat
  - Do not miss lab, except for illness, emergencies, etc
  - Especially crucial are in-lab assessments in weeks 4 and 9
- 20 minutes in weeks 5,6,7,10,11,12,13, for your group to consult with tutor and get feedback [this meeting may be in person or on zoom, and the time will be scheduled between group and tutor, when group is formed in week 4

ISYS2120 people

Unit coordinator, and also lecturer Prof Alan Fekete (alan.fekete@sydney.edu.au)

- This is the person who deals with all paperwork and admin issues [except if done through central admin]
  - Illness or misadventure
  - Rules and policies
- Best contacted by email (make sure the subject mentions the UoS code: isys2120)

Teaching Assistance: Haowen Gao

Tutors: depends on your timetable list on Canvas

ISYS2120 resources

- Canvas
  - https://canvas.sydney.edu.au/
  - Login using Unikey and password
  - within this, the unit-specific subsite
  - Link to Unit Outline
    - Official assessment schedule, list of learning outcomes, etc
  - Copies of slides
  - Instructions for labs and assignments
  - Lecture videos
    - We intend to have the room automatically record the lectures
    - Let us know of difficulties, so we can get recordings fixed!
  - *Submit official assignment work here, and other assessments*;
  - Link to Edstem platform for discussion forum and for “lessons” with SQL-related explanations and tasks
  - see your grades; etc

ISYS2120 resources

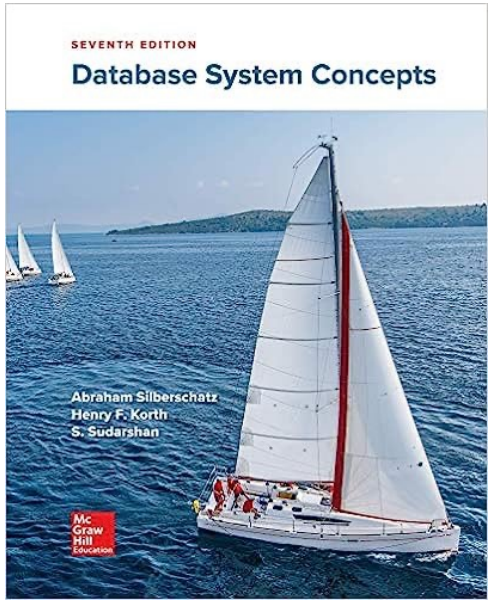
- Edstem site, for discussion 
  - Access from Canvas
  - Make comments and/or ask questions, see answers from other students and from staff
    - Can ask “anonymously” [note: staff can see who posted, but other students can’t]
    - Can ask “privately” (only staff can see) – do this if your post includes any answer code for assessments
  - Official announcements may be reposted here (as well as on Canvas itself)

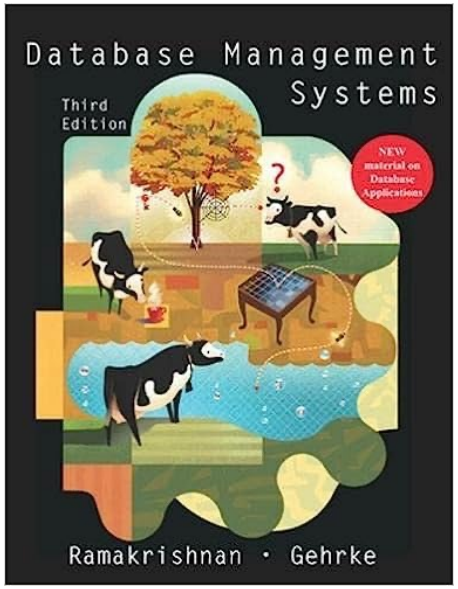
ISYS2120 resources

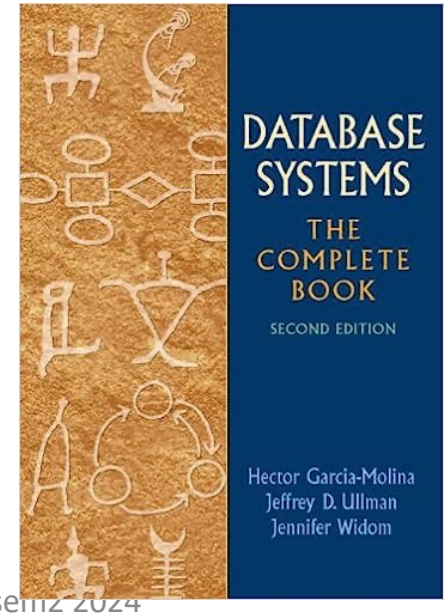
- Edstem lessons 
  - teaching SQL skills
  - Counts to your grade, as “SQL Tasks”
  - Access from Canvas
  - lesson includes slides of explanation
    - (with runnable modifiable code for experiments)
  - lesson also includes slides of challenge
    - these require you to write code
    - includes some automatic testing (some public tests; also perhaps hidden tests)

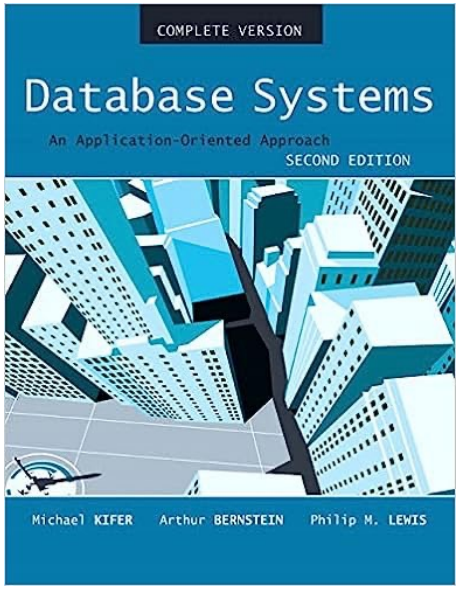
ISYS2120 Reference books

- lots of choice, from SciTech library
- see if one helps, if so, consult it regularly
  - alternate explanations,
  - more detail than lectures
  - but notations and definitions differ









acknowledge: book cover images (c) McGraw Hill, Pearson.

Databases online teaching resources

- There are lots of Database classes online, or at least the recordings of the lectures
- They are often aimed at more higher-year CS focus (eg platform internals)
- For SQL, MOOC examples include
  - (linked to Garcia-Molina textbook) https://www.edx.org/course/databases-5-sql
- Lecture recordings
  - from UC Berkeley CS186 https://www.youtube.com/user/CS186Berkeley/videos
  - From CMU15-445 https://www.youtube.com/playlist?list=PLSE8ODhjZXjbj8BMuIrRcacnQh20hmY9g

General Expectations

- Students attend scheduled classes(*), and devote an *extra* 8 hrs per week (5 independent work, 3 on work for group assignments)
  - (*) carefully watch recordings later, if not scheduled/able to attend lectures in person
  - doing assessments, including weekly hand-written summaries of slides (due Fridays before lecture)
  - preparing and reviewing for classes
  - revising and integrating the ideas
  - practice and self-assess
- Students are responsible learners
  - Participate in classes, constructively
    - Respect for one another (criticize ideas, not people)
    - Humility: none of us knows it all; each of us knows valuable things
  - Check your Uni email daily
  - Check Canvas site at least once a week
  - Check Edstem discussion at least once a week
  - Work on Edstem lessons every week
  - Notify academics whenever there are difficulties
  - Know and adhere to University policies

Workload in ISYS2120

- There is quite a lot of work to do, every week
  - Several different kinds of work each week
- Most weeks build directly on previous weeks
  - In particular, assignments have stages with work every week, and feedback from tutor
- So you need to aim to keep up
  - Allocate the time *every* week
  - If you find you have fallen behind, catch up as soon as you can
  - And speak to unit coordinator, to get help

ISYS2120 Expectations

- Prerequisite:
  - INFO1113 (giving programming skills and concepts, including classes and OO)
    - we will use mainly Python in examples
    - Asst 3 requires programming in Python
      - Extending a code scaffold we provide [which uses classes and OO ideas], to have extra functionality
- Also, you need learning skills, time management etc as typical in second year Uni!
- If you find you are missing any aspect of what is needed for following lectures or labs, please contact the coordinator immediately

ISYS2120 – Mathematics basics

- We will expect some high-school level maths skills eg reading formulas, awareness of order-of-magnitude of values, etc
- Also, you need to be precise with language and definitions
  - Eg is “every product is made by a manufacturer” the same is “any manufacturer makes at least one product”? Eg when there are no rows, is it true that “every row is distinct”? Eg suppose any employee works in 1,2 or 3 locations; is it then ok to say “every employee works in at least one location”?

Ways of learning in isys2120

- Exposition
- Model work
- Practice

- Variations in approach, for different kinds of outcome
  - terminology/facts, concepts, processes, design skills, coding skills

Exposition in isys2120

- We provide content that describes and explains ideas, techniques, etc
  - Eg slide sets, lectures
  - You should read, listen, watch, think about
  - Aim to make sure you make sense of this
  - Use handwritten summaries to indicate any gaps; post on Edstem and/or consult unit coordinator to overcome confusion

Model work in isys2120

- We show you how to do something, step by step
  - Sometimes in lecture, in video recordings, in tutorial introduction
    - Often with warnings about mistakes or poor choices
  - You should follow along, trying each step yourself (“would I have done that?”, “do I see why that was done?” etc)

Practice in isys2120

- You do something yourself
  - With feedback from staff or system
  - Occasionally in lecture, usually in tutorial, then in assessment
  - It is vital that you try for yourself, but if you get stuck, ask for suggestions [not answers]
  - Afterwards, look at feedback you got, sample answers etc
    - Make sure you fix any misunderstanding you found in yourself

ISYS2120 Assessments (2024) - i

Assessment	Week Due	Total Weight (%)
Hand-written summaries (Participation, not result)	Multiple weeks	2
SQL tasks on Ed	Multiple weeks	5
Involvement in group consultation sessions (Participation, not result)	Multiple weeks	3
Early feedback quiz	Week 4 [in lab]	5
SQL Online quiz	Week 9 [in lab]	5

Note: this is an unofficial summary; see unit outline for official structure

ISYS2120 Assessments (2024) - ii

Assessment	Week Due	Total Weight (%)
Assignment 1 (Relational Schema)	4	5
Assignment 2 (Conceptual Design)	7	10 [5 individual, 5 group]
Assignment 3 (Data-backed Application and Security)	11	10 [5 individual, 5 group]
Assignment 4 (Concepts)	12	5
Final Exam (on campus, handwritten)	Exam period	50

Note: this is an unofficial summary; see unit outline for official structure

Assessment goals

- Formative assessment: aims to help you reach the learning objectives
  - You practice skills, think about concepts, etc
  - As you struggle with the issues, you construct understanding in your brain
  - Marks and/or comments and/or sample solutions provide feedback to help you detect places where you need to improve
  - Eg Early feedback quiz, SQL Tasks
- Summative assessment: aims to allow you to demonstrate that you have achieved the learning objectives
  - Eg Final Exam
- Some in-semester assessments serve both formative and summative purposes (eg Assignments, SQL Online Quiz)
- Participation assessments (handwritten summaries, participation in group consultation meetings) are to encourage engagement and keeping up: we expect anyone who tries to get full marks from these!

ISYS2120 Handwritten summaries

- Each week, in their own time, student writes a summary of the main points in the lecture slides posted for the following week
  - especially: identify any major aspects where you are unclear or want to understand better
- **Length: half a page**
- **Must be hand-written**
- Scan or photo the writing, and upload image/pdf to Canvas through submission link; due Friday 11:59pm [ie before the lecture is delivered on that material]
  - Eg summary 2 is due Aug 2 (Friday of week 1), summary 3 is due Aug 9 [special cases: summary 1 is due Aug 4]
- Worth 0.2% each, but total from Handwritten summaries is capped at 2 [ie get full marks if you submit 10 of the 13 summaries]
- Student gets the points as long as summary is uploaded by due date [not marked for accuracy or quality]

ISYS2120 Handwritten summaries

- WHY:
  - producing summary helps students keep up with content especially on the conceptual material and terminology (likely in multichoice and/or short answer parts of final exam)
  - Also, it's important to get plenty of practice hand-writing, so skill develops before its needed in final exam (you want to devote brain then to thinking about what to say, not about how to form the letters quickly)
  - Also, reading summaries helps tutor choose which material to revise or explain, to fill common gaps or fix common misunderstandings
- Advice on process:
  - Read the lecture slides from the following week
  - Look out for points that seem important or confusing
  - Check your understanding by doing online multichoice quiz (not worth any points, but provides good immediate feedback because you can see which questions you got wrong)
  - Hand-write the most important and most confusing
  - Scan and upload

ISYS2120 SQL Tasks

- Done **online in your own time**
- Several tasks (lesson groups) are due every week in first half of semester, due Sunday 11:59pm
  - Each has several lessons, and each lesson has one or more “Challenge slides” where you need to write a query that meets a described information need
- Worth 0.5 points for each SQL Task, but total from SQL Tasks is capped at 5 [ie get full marks if you get all right in 10 tasks]
- Work through the SQL teaching material hosted as “lessons” on Edstem platform, completing the assessed challenges: Individually writing queries in SQL, submitted with “Mark” button and immediately autograded through Edstem
  - System shows information about how the output differs from what is required, if you write something wrong
  - A question can be repeated as desired until the due time

ISYS2120 SQL Tasks

- WHY: Tasks provide practice and immediate feedback, to help students develop skills with SQL (which will be needed in SQL Online Quiz, Asst3 and Final Exam; part of LO3)
- Advice on process:
  - Read the expository slides of the lesson; experiment with running and changing the example SQL code
  - Then, look at challenge: work out what you want the output to be, for the actual data instance used
  - Then, think about steps that will take the data to the appropriate output
  - Then, try to express this in SQL
  - Then, "run" it and see what the output actually is;
    - if your query gave output different from what you expected, try to revise your query AND also, try to improve your understanding of SQL, to better predict what output a query will generate
  - Once the query gives the output you expect, "mark" it; use autograding as a check
    - If you do not pass the test, look at what Ed tells you about difference between your query's output, and correct output
    - If correct output is not what you thought output should be, you need to re-consider what you thought the output should be [maybe you misunderstood the information need, or the actual instance!]
  - Repeat as necessary
  - If stuck/confused, post on Ed discussion (and read other people's posts)
    - Note: if you include your actual SQL, make the post private

ISYS2120 Involvement in Group Consultation Sessions

- In weeks 5-7 and 10-13, the lab is only 1 hour long; in those weeks each group from the current assignment also has a 20 minute consultation session with a tutor
  - Time for the meetings is arranged between group and tutor in week 4 lab (when the group is formed), but schedule may be changed by agreement
  - Meetings may be in person or on zoom
  - Most meetings involve group members showing progress on specific aspects of the assignment [indicated in instructions]
  - Tutor provides feedback and suggestions, and can explain difficult issues etc
- Each meeting provides a student with 0.6 point for participating (ie being present and having a reasonable attempt at work to show)
  - Total for involvement capped at 3% [so full marks if you participate for 5 weeks meetings – however, don't stop participating once you reach full marks!]

ISYS2120 Involvement in Group Consultation Sessions

- WHY:
  - Group assignments can have problems with some people free-loading, or with groups who divide the work functionally [in ways that prevent each member getting practice with every aspect]
  - This approach should prevent groups from running out of time to do a good job
- Advice on process:
  - Read assignment instructions carefully, which indicate what to show each week
  - Prepare the material requested
  - Show it to tutor, and take notes on feedback tutor gives
  - Ask questions if unsure what to do next

ISYS2120 Early feedback quiz

- Held in your scheduled lab session in week 4
- Duration 20 minutes
- Worth 5%
- Done on Canvas
- Answer some multiple choice questions on the material covered in weeks 1-3 eg relational model, basic SQL, ER conceptual model and ER diagram notation, connection of ER diagram to relational schema

ISYS2120 Early feedback quiz

- WHY:
  - These skills are crucial for the rest of semester
  - Steady engagement with course is vital
  - This will help us find students who may be struggling or disengaged, and offer support
- Advice on process:
  - Practice with weekly online quizzes (not worth marks)

ISYS2120 SQL Online Quiz

- Held in your scheduled lab session in week 9
- Duration 50 minutes
- Worth 5%
- Done on Edstem (accessed from Canvas)
- Produce SQL queries to provide output that meets given information needs
- Will be automarked, but you will not see the results until after the week
  - Unlike SQL Tasks; you can't use the marking to check your work and help you find where any mistakes are

ISYS2120 SQL Online Quiz

- WHY:
  - This skill is a crucial learning outcome (LO3)
  - In real world, you don't have an external oracle telling you if your query is correct; you need to develop skills to check your work for yourself
    - Some students "fool themselves about their skills" in SQL Tasks
- Advice on process:
  - Practice redoing SQL Tasks, trying to get it correct before using "mark"

ISYS2120 Asst1(Relational Schema)

- Worth 5%
- Due 25 August 2024 at 11:59pm (end of week 4)
- Individual work
  - DB Schema Design
  - start from E-R diagram, hand in report and SQL code to create tables (including integrity constraints)

ISYS2120 Asst1(Relational Schema)

- WHY:
  - Develop the skills for a crucial part of LO4, will likely be tested in final exam
- Advice on process:
  - Read assignment instructions very carefully
  - Do the steps allocated each week for showing to tutor
  - Use lectures week 2 and 3, and labs week 2 and 3, to learn the techniques, get practice and catch misconceptions
  - Get an early draft and submit it, then resubmit as improvements are made

ISYS2120 Asst2 (Conceptual Model)

- Worth 5%
- Due 15 September 2024 at 11:59pm (end of week 7)
- Work in small groups (2-3 students)
  - group forms in lab in week 4
    - members should all be attending same lab session
    - All members get the score from the group, unless non-contributing
  - DB Conceptual Design
  - start from textual description, hand in report with E-R diagram etc

ISYS2120 Asst2 (Conceptual Model)

- WHY:
  - Develop the skills for a crucial part of LO4, will likely be tested in final exam
  - Done in groups because of LO9 and also because “more eyes on work” are valuable for getting feedback
- Advice on process:
  - Read assignment instructions very carefully
  - Do the steps allocated each week for showing to tutor
    - Also show to group members for their feedback etc
  - Use lecture week 5, and lab week 5, to learn the techniques, get practice and catch misconceptions
  - Make sure to come to group meetings prepared, and use the time effectively
  - Watch in case of non-performing group members, and report that promptly
  - Get an early draft and submit it, then resubmit as improvements are made

ISYS2120 Asst3 (Data-backed Application and Security)

- Worth 10%
- Due 20 October 2024 at 11:59pm (end of week 11)
- Work in small groups (usually 3-5 students)
  - members must all be attending same lab session
  - 5 points for group report (all members get this, unless removed from group for non-contributing)
  - 5 points for individual code
    - Note: each member will have different (but similar) part of the code to write, so everyone gets to develop the skill
- DB Programming
  - extend a given code skeleton, so it acts as a database application for a given database. This requires inclusion of SQL code you write, for queries. Also, write a report on the security aspects and the decisions taken etc

ISYS2120 Asst3 (Data-backed Application and Security)

- WHY:
  - Develop the skills for a crucial part of LO5 and LO6, will likely be tested in final exam
  - Done in groups because of LO9 and also because “many eyes” are valuable for getting feedback
- Advice on process:
  - Read assignment instructions very carefully
  - Do the steps allocated each week for showing to tutor
    - Also show to group members for their feedback etc
  - Use lecture week 8, and lab week 8, to learn the concepts and see how they appear in code in the skeleton, get practice and catch misconceptions
  - Make sure to come to group meetings prepared, and use the time effectively
  - Watch in case of non-performing group members, and report that promptly
  - Get an early draft and submit it, then resubmit as improvements are made

ISYS2120 Asst4 (Concepts)

- Worth 5%
- Due 27 October 2024 at 11:59pm (end of week 12)
- Individual work
  - Answer questions on unit concepts, especially those using theory

ISYS2120 Asst4 (Concepts)

- WHY:
  - Develop the skills for crucial parts of LO4, LO7, and LO8, will likely be tested in final exam
  - Done individually, because each student needs these skills
- Advice on process:
  - Read assignment instructions very carefully
  - Use Ed discussion to get help if you are confused; use a private post if you include any part of your answer

ISYS2120 Exam

- Worth 50% of the unit
- Done in person, on campus, handwritten answers on paper
- 2 hrs, answer a mix of multiple choice, short answer, paragraph-long discussions, etc. Questions will cover the content of lectures and labs and assignments.
- School of Computer Science policy: you must get at least 40% of the marks available on the exam, in order to pass the unit (as well as getting at least 50% overall mark)
- Lecture and lab in week 13 for preparation
  - 2023 Exam questions are posted on Canvas, so you can see examples of the possible style

Special consideration

- If your performance on assessments is affected *by illness or misadventure* [including technology failures]
- Follow proper bureaucratic procedures
  - Have professional practitioner sign special USyd form
    - Or, use “student declaration” as alternative
  - Submit application for special consideration online, upload scans
  - Use the exact correct name of the task (as in unit outline)
  - Note you have only a quite short deadline for applying
  - http://sydney.edu.au/current_students/special_consideration/
- Also, notify coordinator by email *as soon as anything begins to go wrong*
  - If official request is denied, consult coordinator immediately (perhaps you can resubmit with better documentation)
- There is a similar process if you need special arrangements eg for religious observance, military service, representative sports

Late assessments in ISYS2120

- Late work is not accepted for SQL tasks, hand-written summaries, and involvement in group consultation sessions. Where special consideration (or Academic Plan) is granted for these assessments, reweighting of other relevant tasks will be applied.
  - Note: each of these individual assessments is worth very little points, and each category has more chances to earn points than the maximum possible (eg total is capped), so you can safely miss one or two
- Late submissions for assignments will incur a penalty of 5% of the maximum awardable marks for each day, or part-day, past the due date, up to a maximum of 7 days (as after this time, feedback on on-time submissions will be available, resulting in an unfair advantage if submissions after this time were accepted). After 7 days late submissions will not be accepted. Where special consideration is granted for these assessments, extensions of a maximum of 7 days will be permitted. After 7 days, reweighting of other relevant tasks will be applied. [from UoS Outline]
  - *Eg your work would have scored 60% and is 2 hours late (1am next day)*
    - *you get 55%*
  - *Eg your work would have scored 60% and is 28 hours late*
    - *you get 50%*
- Simple extensions are available only for Assignments 1 and 4. Others eg group assignments, do not have simple extension. We advise against using simple extension, as the next assignment will start immediately after the due date.
- Warning: submission sites get very slow near deadlines
- Get something done early and submit it early; you can try to improve it and resubmit if there is time before the deadline

Academic integrity

- Academic Integrity refers to behaving honestly, ethically and responsibly in relation to all elements of your study at the university, including assessments.
- **The core values that the underpin the concept of academic integrity are honesty, trust, fairness, respect and responsibility.**
- Always submit your own work, sit your own tests, and take your own examinations.
- Acknowledge any contributions in your assignment which are not your original thoughts, ideas or words.
- Writing technologies (e.g. ChatGPT, Grammarly, etc) cannot be used to create or modify work for submission, unless expressly permitted by your unit coordinator.
- Academic Honesty Education Module – all commencing students must complete by census date. Continuing students can self-enrol at any time.

Strategies for maintaining academic integrity


Planning and time management


Know your strengths and what you need to develop


Use citations and referencing


Know when and where to ask for help

What is academic dishonesty?

The following are some behaviours that are academically dishonest:

- **Plagiarism** (this is the most common form)
- **Collusion** or illegitimate co-operation
- **Recycling** (using your own work from previous assessments)
- **Cheating,** including **contract cheating**
  - sharing questions or accessing solutions on online "help sites"
  - receiving coaching from a private tutoring company on how to complete an assignment
  - asking someone else to write your assignment (whether for payment or not)
- **Exam cheating** (using prohibited materials, working with others)
- **Fabrication** or falsification of sources, data or results

What are the consequences?

- The University has strong mechanisms for detection of potential academic dishonesty.
- Suspected breaches are reported to the faculty educational integrity team for investigation.
- The University is deeply committed to ensuring the integrity of its educational programs and treats integrity breaches seriously. As a result, the **academic consequences** for cheating are numerous.
- You may:
  - need to resubmit a task with a mark penalty or
  - receive a 0 for the assessment or even the unit of study
  - be suspended or even excluded from your studies for serious misconduct

Understanding contract cheating

Commercial cheating services are **ILLEGAL** in Australia. Illegal cheating services offer to:

- Sell you essays, assignments, study notes or exams
- Ask you to upload previous work from your course
- Sit exams on your behalf

If you use cheating services, you can face disciplinary action in accordance with USYD's policies. Resulting action can include:

- Failing the unit of study or course
- Suspension or exclusion from your studies
- Losing your professional accreditation
- Being blackmailed by cheating service operators
- For international students, losing your visa

Be aware of illegitimate services

- Be aware of any services that are not affiliated with the University.
- In the online environment, malicious organisations masquerading as 'online help sites and platforms' are preying on students.
  - These organisations may pressure you to pay for online assistance, then turn to **blackmail** when you change your mind.
  - Essays or solutions bought from the internet are usually **poor quality**, badly written and often **wrong**.
  - You won't acquire the skills and knowledge required for your degree, making it difficult to complete further assessments

As a student, you can contact the Office of Academic Integrity at educational.integrity@sydney.edu.au to report something anonymously or seek advice.

THE UNIVERSITY OF SYDNEY

Generative AI in ISYS2120

- Generative AI can create digital content, including text, images, and video
- Common examples are ChatGPT, Notion AI, DALL-E, Bing Chat, etc
- Use of generative AI is split into two realms: learning, and assessment

Generative AI for learning

- You are free to use generative AI to help you learn.
- Use it to explain things, apply knowledge, plan your study, make practice questions, and more
- Be aware of its limitations

Generative AI for assessment

- You are allowed to use Generative AI freely for creating text that you then write out by hand for hand-written summaries (however, this is not encouraged – we need to find out what YOU think as we use this to guide what we explain to class!)
- You are allowed to use Generative AI freely for creating code for the SQL tasks (however, this is not encouraged – you need to gain the skills yourself!)
- For Assignments 1,2,3,4: you are allowed to use Generative AI as long as you also provide an appendix in which you show the prompt you provided, and the output that was given by the system. In this case, you will be marked based on what value you added to the output you got from the system.
- You must NOT use Generative AI in: Early feedback quiz, SQL Online Quiz, Final Exam

To learn more about using generative AI at USYD, visit: **bit.ly/students-ai**

Support services

See links from Canvas (on unit home page, and in Modules tab)

- Learning Hub (for academic writing, for maths)
- Library
- Disability Services
- Counselling and mental health support
- Student organisations
- Special Arrangements and Consideration
- The Office of Educational Integrity

Essential information sources for students

There are two main places you need to know to set yourself up for success on your Sydney Uni journey – Getting Started is the starting point for all commencing students and the Student life, wellbeing and support page is there as your ongoing reference.

Getting Started Canvas page

Student life, wellbeing and support page

University Welcome

- For advice and support around student life, visit Peer Support Advisors at the Welcome Hub on Level 3 Wentworth Building, open Monday to Friday, 10am to 5pm. You can also visit them in Fisher Library Helpdesk, Monday to Friday, 10am – 5pm or chat to them online at https://www.sydney.edu.au/students/peer-support-advisors-chat.html .
- See https://www.sydney.edu.au/students/welcome.html

Be mindful of scams and scammers

- See https://www.sydney.edu.au/students/scams.html

Safer Communities Office

- Support and case management for people who have experienced sexual misconduct, domestic/family violence, bullying/harassment or issues relating to modern slavery.
- Contact the team
  - 8:30 am to 5:30 pm Monday to Friday, Sydney local time
  - phone: +61 2 8627 6808
  - email: safer-communities.officer@sydney.edu.au.
  - campus: Level 5, Jane Foss Russell building, City Road, Darlington Campus
- Make a report
  - Visit the website to make a complaint or disclosure of sexual misconduct to the University.

WHS INDUCTION

School of Computer Science

Emergency procedures on campus

- In the unlikely event of an emergency, we may need to evacuate the building.
- If we need to evacuate, we will ask you to take your belongings and follow the green exit signs.
- We will move a safe distance from the building and maintain physical distancing whilst waiting until the emergency is over.
- In some circumstances, we might be asked to remain inside the building for our own safety. We call this a lockdown or shelter-in-place.
- More information is available at www.sydney.edu.au/emergency

Keeping our campus COVID safe

All staff, students and visitors are encouraged to follow health and safety advice:

- If unwell or displaying any cold and flu, respiratory type illnesses or other illnesses, it is recommended you stay home until your symptoms have gone and protect others. If you need to leave home, wear a mask in crowded and/or enclosed settings.
- Keep up to date with vaccinations.
- Practise good personal hygiene with regular hand hygiene.
- Practise cough etiquette (coughing or sneezing into your elbow or tissue).
- Get plenty of fresh air.

– If you become infected with COVID-19 during the semester, or need to stay at home, please notify your unit of study coordinator, as with any unexpected absence.
– If COVID-19 illness impacts assessment, use the usual mechanisms including simple extensions and special consideration to arrange reasonable adjustments.

General Housekeeping – Use of Labs

- Keep work area clean and orderly
- Remove trip hazards around desk area
- No food and drink near machines (whether you are using the machines or not)
- No smoking permitted within University buildings
- Do not unplug or move equipment without permission

Complaint mechanisms

Student complaints: see https://sydney.edu.au/students/complaints.html

- “A complaint is any type of problem or concern about academic or non-academic matters that you raise with the University, and requires staff to work with you towards a resolution. It could be to do with your studies, student life, the University environment or the behaviour of a student or staff member.”
- “Complaints give us an opportunity to identify areas for improvement. We approach any experience of unreasonable treatment, disadvantage or distress seriously and with sensitivity. Our goal is to work with you towards a timely and effective resolution. If you choose to remain anonymous, we may be limited in our ability to assist you. If you make a complaint on behalf of someone else, we will be limited in disclosing information to you due to privacy provisions.”

Respect

- Some of the topics or examples we look at, may be controversial or triggering for some students or staff
  - Eg issues around security and privacy
  - Also, there can be divisions around campus or wider policies and disputes
- It is important that we all respect one another's views, and help one another's well-being
  - Never criticise another member of the class personally, even if you disagree with their view
  - Never assume that others see the world as you do
  - Be thoughtful before posting on Edstem, speaking in lab or lecture, etc
- If anything in the course makes you distressed or even uncomfortable, contact the coordinator and we can find a way to support you

A request from the teaching team

- Several of the assessments this semester are somewhat different from previous years
- There are likely to be logistical mistakes
  - Questions may be hard to access, marking may not work properly, marks may not get into Canvas as intended, etc
- Please report any difficulties, or anything confusing or unexpected, by posting or Ed discussion and also email to alan.fekete@sydney.edu.au
  - Be patient with us; we will work hard to ensure that no-one suffers because of any issues that are outside your control

Advice

- Metacognition
  - Pay attention to the learning outcomes
  - Self-check that you are achieving each one
  - Think how each assessment task relates to these
- Time management
  - Watch the due dates
  - Start work early, submit early and often [history of your work is excellent evidence that you didn't copy!]
  - Do not give in to temptation to copy; submit your own attempts even if they do not get correct results
  - For assignments, note requirement to bring progress (or at least solid attempt) on specific aspects, shown to tutor in group meeting each week.
- Networking and community-formation
  - Make friends and discuss ideas with them
  - Know your tutor, lecturer/coordinator
  - Keep them informed, especially if you fall behind
    - Don't wait to get help
- **Enjoy the learning!**