# **INFO3333**

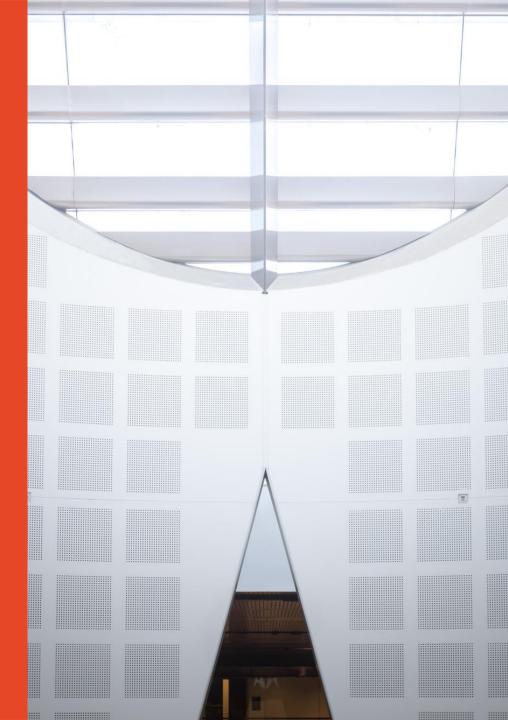
Computing 3
Management

Lecture 1: The IT Services Lifecycle

# **Presented by**

Prof. Alan Fekete Dr. Andrea Stern Joshua Burridge





# **Acknowledgement of Country**

Before we begin the proceedings, I would like to acknowledge and pay respect to the traditional owners of the land on which we meet; the Gadigal people of the Eora Nation. It is upon their ancestral lands that the University of Sydney is built.

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.

IT Services Lifecycle

# **Learning Outcomes for today**

By the end of today's lecture, you should be able to

- Know who to contact for different types of questions about the unit, and how to contact them
- Know what to do in case of emergency
- Locate the important info you will need to succeed
- List the primary components and assessments of INFO3333
- Describe the Colesworth Case Study
- List the stages of the IT Services Lifecycle
- Map these stages on to example applications

- core for BAdvComp and its combined degrees
- Replaces INFO3402 which was required for BE(Software), BCST, BIT and combined degrees, and also was a prerequisite for the CS and IS 3<sup>rd</sup> year projects
- Key purposes:
  - Allow degrees to meet accreditation requirements for study of project management, service management, and governance
  - Prepare students for success in group-based 3000-level projects
- Not a purpose: for you to be ready for employment as a project manager
  - for that, study Project Management degree, or as second (Table S) major



Admin & Structure

IT Services Lifecycle

# Learning outcomes (from CUSP)

Professional Effectiveness and Ethical Conduct (Level 3)

- 1. Reflect on, and assess, own skills and attributes to develop an initial professional development plan and develop leadership skills.
- 2. Explain and exemplify the principles and practices of leadership in an IT project
- 3. Explain and give examples of the role of governance, compliance, and ethics in IT activities in organisational, social, and legal contexts as well as in individual professional conduct

Project and Team Skills (Level 3)

- 4. Use project management tools and techniques to develop a project plan
- 5. Negotiate and evaluate team responsibilities and team processes with respect to the various points
  of view of team members and of clients.

Communication and Inquiry/Research (Level 3)

- 6. Use oral and written communication skills in discussions, presentations, and reports
   Engineering/IT Specialisation (Level 3)
- 7. Evaluate the appropriateness of different project management techniques, including PMBOK and Agile, for IT projects of different types and scale
- 8. Clarify IT system and service requirements to determine needs, formulate library queries, locate digital and other sources, evaluate their reliability, and extract and synthesise relevant content; write short essays which relate principles and concepts to case studies.
- 9. Describe the structure and role of relevant frameworks and standards such as PMBOK, Agile, COBIT, ITIL, ISO/IEC 20000, CMMI
- 10. Explain the principles and processes of IT project management, service management, governance, and how they manage quality and performance

IT Services Lifecycle



**Our Team** 

**Coordinator:** 

- Professor Alan Fekete
  - alan.fekete@sydney.edu.au
- contact for any administrative/bureaucratic matter

## Lecturers:

- Professor Alan Fekete (weeks 1-6 then 13)
- Dr Andrea Stern (weeks 1-2 then 7-13)

## Teaching Assistant:

Joshua Burridge

IT Services Lifecycle



## Information sources

## Canvas site for the unit

- and Ed discussions
- keep engaged (check frequently for announcements, questions/answers, instructions)
- Note "Module" structure
  - Friday lecture, and following Monday labs
- Lecture recordings
  - we intend these to occur, but technology can and often does fail!
  - slides will be posted on Canvas

# Assessments (from CUSP)

- Professional Development Plan, Review (2%; wks 2, 11)
- Weekly Tutorial Quiz (10%, one per week done online during lab)
- Group project [starts in first lab next Monday!]
  - project plan progress submissions (0%, repeated)
  - progress oral presentation (0%; wk 6)
  - oral presentation (5%; wk 10)
  - project report (13%; wk 10)
  - individual analysis, reflection (5%; wk 10)
  - team processes (5%; throughout)
- Service management report
  - draft (0%; wk 11)
  - final (10%; wk 13)
- Exam (50%)
  - School of CS policy: in order to pass the unit, you must obtain at least 40% on exam, and at least 50% overall!

# **Special Consideration (University policy)**

- If your performance on assessments is affected by illness or misadventure
- Follow proper bureaucratic procedures
  - Have professional practitioner sign special USyd form
  - Submit application for special consideration online, upload scans
  - Note you have only a quite short deadline for applying
  - https://sydney.edu.au/students/special-consideration.html
  - Be careful to use "CUSP name" for the task
  - If request is denied, consult coordinator immediately (perhaps you can resubmit with better documentation)
- Also, notify coordinator by email as soon as anything begins to go wrong
- There is a similar process if you need special arrangements eg for religious observance, military service, representative sports

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IT Services Lifecycle

# Late assessment work

Intro

- For quizzes, team processes, oral presentation: late work can't be accepted; if there is approved special consideration etc, the mark will be replaced from other activities
- other tasks: except when there is approved special consideration or extension via academic plan, late work will attract a penalty of 5 percent of the available mark, for each calendar day after the due date. Work that is not submitted within 10 calendar days will receive a mark of zero.

# o Admin & Structure

# **Academic Integrity (University policy)**

- "We take academic dishonesty seriously because of our commitment to our culture of academic integrity. Academic dishonesty threatens the confidence the wider community has in the University's students, staff and alumni.
- Academic dishonesty involves any attempt to gain academic advantage by doing something misleading or unfair. It is also academically dishonest to help a friend or a group of students to gain unfair academic advantage." [from site below]
- https://sydney.edu.au/students/academic-dishonesty.html
- Submitted work is compared against other work (from students, the internet etc)

## **Penalties**

- The penalties for violation of academic integrity are severe and include:
  - 1) a permanent record of academic dishonesty, plagiarism and misconduct in the University database and on your student file
  - 2) mark deduction, ranging from 0 for the assignment to Fail for the unit
  - 3) expulsion from the University and (for international students) cancelling of your student visa

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# **General Housekeeping – Use of Labs**

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













Intro

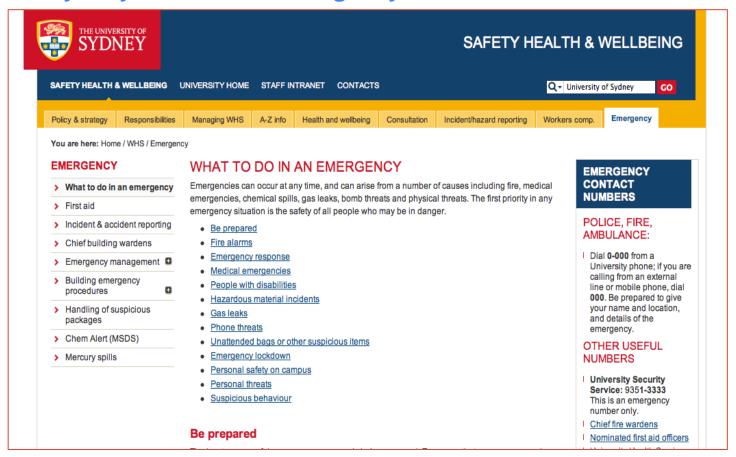
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IT Services Lifecycle

# **EMERGENCIES** – Be prepared



## www.sydney.edu.au/whs/emergency









IT Services Lifecycle

# **EMERGENCIES**

## **Evacuation Procedures**

#### **ALARMS**

- )) BEEP... BEEP... Prepare to evacuate
- 1. Check for any signs of immediate danger.
- 2. Shut Down equipment / processes.
- 3. Collect any nearby personal items.
- )) WHOOP... WHOOP... Evacuate the building
- 1. Follow the **EXIT** exit signs.
- 2. Escort visitors & those who require assistance.
- 3. DO NOT use lifts.
- 4. Proceed to the assembly area.

#### **EMERGENCY RESPONSE**

- 1. Warn anyone in immediate danger.
- 2. Fight the fire or contain the emergency, if safe & trained to do so.

If necessary...

- 3. Close the door, if safe to do so.
- 4. Activate the 
  "Break Glass" Alarm





5. Evacuate via your closest safe exit. **EXIT** 



6. Report the emergency to 0-000 & 9351-3333

# **MEDICAL EMERGENCY**

- If a person is seriously ill/injured:
  - call an ambulance 0-000
  - notify the closest Nominated First Aid Officer

If unconscious—send for Automated External Defibrillator (AED) AED locations.

NEAREST to SIT Building (J12)

- Electrical Engineering Building, L2 (ground) near lifts
- Seymour Centre, left of box office
- Carried by all Security Patrol vehicles
- **call Security -** 9351-3333
- Facilitate the arrival of Ambulance Staff (via Security) 4.





**Nearest Medical Facility** 

University Health Service in Level 3, Wentworth Building

First Aid kit – SCS Building (J12) kitchen area adjacent to Lab 110



### **CHIEF WARDEN**

Greg Ryan Level 1W 103 9351 4360 0411 406 322

# FIRST

### FIRST AID OFFICERS



Julia Ashworth Level 2E Reception 9351 3423



Will Calleja Level 1W 103 9036 9706 0422 001 964



Katie Yang Level 2E 237 9351 4918

# Orally REPORT all INCIDENTS & HAZARDS to your SUPERVISOR

OR

Undergraduates: to Katie Yang

9351 4918

Coursework

Postgraduates: to Cecille Faraizi

9351 6060

CS School Manager: Shari Lee

9351 4158

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Support!

- See <a href="http://sydney.edu.au/campus-life/safety-security.html">http://sydney.edu.au/campus-life/safety-security.html</a>
- If you need to report an incident of sexual harassment or assault, or make a complaint about misconduct, or want assistance in any way, call our confidential helpline, 1800 SYD HLP (1800 793 457).
- There are a wide range of support services available for students
  - Please make contact, and get help

## Do you have a disability?

You may not think of yourself as having a 'disability' but the definition under the **Disability Discrimination Act (1992)** is broad and includes temporary or chronic medical conditions, physical or sensory disabilities, psychological conditions and learning disabilities.

The types of disabilities we see include:
Anxiety // Arthritis // Asthma // Autism // ADHD
Bipolar disorder // Broken bones // Cancer
Cerebral palsy // Chronic fatigue syndrome
Crohn's disease // Cystic fibrosis // Depression
Diabetes // Dyslexia // Epilepsy // Hearing
impairment // Learning disability // Mobility
impairment // Multiple sclerosis // Post-traumatic
stress // Schizophrenia // Vision impairment
and much more.

Students needing assistance must register with Disability Services. It is advisable to do this as early as possible. Please contact us or review our website to find out more.



Disability Services Office sydney.edu.au/disability 02-8627-8422



IT Services Lifecycle

# Other support

- Learning support
  - http://sydney.edu.au/study/academic-support/learning-support.html
- International students
  - http://sydney.edu.au/study/academic-support/support-for-internationalstudents.html
- Aboriginal and Torres Strait Islanders
  - http://sydney.edu.au/study/academic-support/aboriginal-and-torres-straitislander-support.html
- Student organization (can represent you in academic appeals etc)
  - http://srcusyd.net.au/ or http://www.supra.net.au/
- You are not required to tell anyone else about this
- If you are willing to inform the unit coordinator, they may be able to work with other support to reduce the impact on this unit

eg provide advice on which tasks are most significant

Admin & Structure

IT Services Lifecycle

# **Complaint mechanisms**

Intro

Student complaints: see <a href="https://sydney.edu.au/students/complaints.html">https://sydney.edu.au/students/complaints.html</a>

- "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."

## **Our reflections**

- INFO3333 was new in 2018
  - some things worked well, others not
  - overall, students were not very satisfied
    - poor organization, esp assessment rubrics and management
    - lack of linkage between different parts of the unit
- For 2019, we have adjusted many aspects to try and improve
  - Different project task and other assessments
  - Revised rubrics
  - Please communicate to coordinator immediately if you experience problems
    - especially, if anything is unclear
  - We will try and resolve issues, and ensure fairness

Intro

# Looking to 2019

- Student numbers have grown a lot
  - Lab space is hard to find
  - Some rooms are not optimal
- We are experimenting with "double" labs
  - 40-50 students in a bigger room, with two tutors present
  - Please be tolerant if there are teething problems
    - but let coordinator know!

# **Group dynamics**

- Group must organise itself
  - Arrange internal communication and meetings
    - document what is happening
    - use techniques we are teaching you in this unit
  - Set internal deadlines
  - Follow up if deadlines are missed
  - Have fall-back mechanism
  - Have dispute resolution mechanism
- Let unit coordinator know quickly if there are problems (unresolvable disagreements, member who doesn't contribute, etc.)
- All members get the same group mark, for each group assessment task

# **Advice**

- Metacognition
  - Pay attention to the learning outcomes in CUSP
  - 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
- Networking and community-formation
  - Make friends and discuss ideas with them
  - Know your tutor, coordinator
  - Keep them informed, especially if you fall behind
    - Don't wait to get help
- Enjoy the learning!



## **Introductions**

# **Activity**

**Task:** Gather the following information:

- Has the person to your left ridden a bike this week?
- Does the person to your right have any brothers or sisters
- Has the person behind you ever been inside the Opera House?
- Does the person in front of you know how to play a musical instrument?
- The names of the above 4 people

**Time allowed:** 10 mins



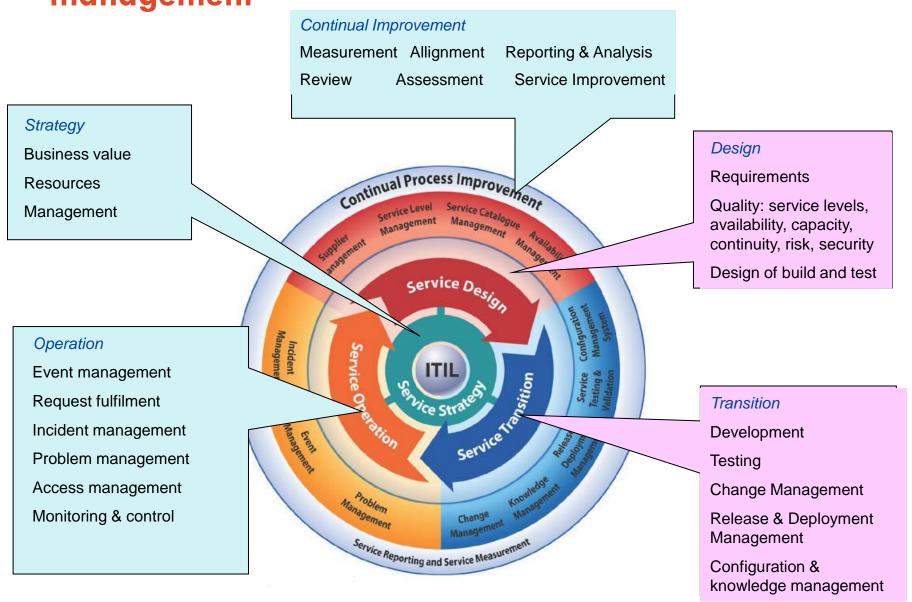


- What is a project?
- What is the result (or output/outcome) of a project?
- Where does it go?
- What happens to it then?

# IT projects and IT services

- a project is a temporary endeavour undertaken to create a unique result
- A service applies the result of that project (and others) to the continuous delivery of outcomes for the service user
  - in the context of the organisation's strategies
  - Subject to continual improvement processes
- Ratio of development to management in IT budget is c. 20/80

Project management as part of IT services lifecycle management

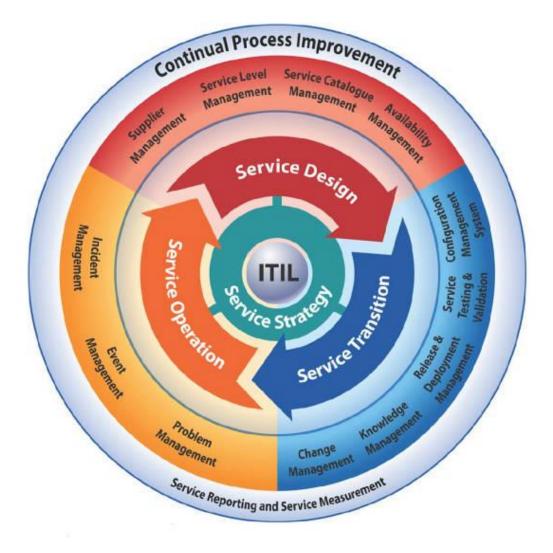


# Managing the IT services lifecycle

- ITIL is the most commonly used set of guidelines for IT service management
- Its purpose is to transform an organisation's IT capabilities into services which meet its business goals and maximise business value.
- IT takes a strategic approach to designing, building, delivering, managing and improving the way IT is used within an organization.
- We shall be applying it to the case study in this unit

#### **IT Services Lifecycle**

# The lifecycle of Canvas



#### Intro

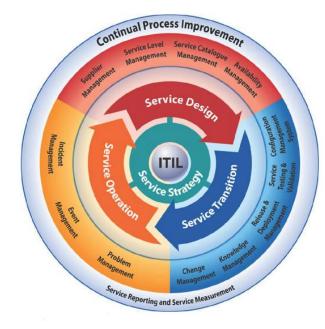
# The lifecycle of Canvas - Strategy & Design

- What is the goal?
- Purpose?
- Need to be filled?
- How will we fill it?
- What design will we choose?
- Why?



# The lifecycle of Canvas - Transition

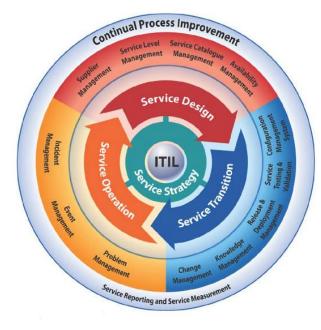
- We've finished, now let's get it into the live environment
- We've tested it and it works!
- Great! Canvas is done, we can go home...



Who has to look after the puppy?

# The lifecycle of Canvas - Operation

- Maintenance
- Reaction to change
- Reaction to things that break



# The lifecycle of Canvas - CSI/CPI

Now let's go back to the beginning

Or the middle

Or the end

Over and over until we get it 'perfect'



# Colesworth case study and your projects

We will look at the primary documents on Canvas, and some key extra points:

- Teams of Project Managers?
- Tutor is both General/Department Manager and Client
- More options than you may be used to
  - Project itself
  - Approach
  - Many decisions inside
- You will be 'creating deliverables' not making a formal plan
- You will still gather them together in a cohesive report for your client
- Development is weekly with progressive submissions



# Writing and team work

## - Writing:

- Whether working as a technical specialist or manager, in a small or large scale organisation, being able to argue clearly in writing is important.
- Arguing clearly means to be able to state a position, justify it and persuade others of its merits

#### – Teamwork:

- in IT work, whether technical or managerial, you will negotiate and evaluate team responsibilities and team processes, incorporating the various points of view of team members, as well as of clients.
- Exercises and processes to follow in this unit, will give you experience of this.

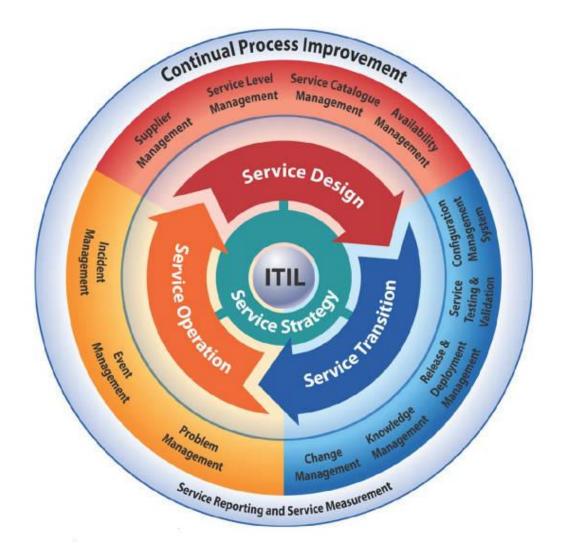
# Professional development planning

- The purpose of professional development planning (PDP) is to clarify your professional ambitions and to plan how to achieve those ambitions as they change over time.
- We do not assess what you write in these reflections; that is your information to use in planning your professional development. We do assess your completing and submitting the activities by the due dates.

#### **Benefits**

- strategies for improving your performance
- a better sense of the life and work you want
- more confidence in the choices you make
- confidence in the skills, qualities and attributes you bring to your career
- being in a better position to compete for jobs and to discuss your skills with employers
- positive attitudes, creative thinking, and problem-solving approaches associated with successful professional life

ITIL: At the heart of the Service lifecycle is the key principle: all services must provide measureable value to business objectives; each stage and the processes in that stage revolves around that.



We will keep returning to this diagram as the semester continues



## You should be able to:

- Know who to contact for different types of questions about the unit, and how to contact them
- Know what to do in case of emergency
- Locate the important info you will need to succeed
- List the primary components and assessments of INFO3333
- Describe the Colesworth Case Study
- List the stages of the IT Services Lifecycle
- Map these stages on to example applications