Course Outline

PSYC 1028

Psychology of Human Centred Design

School of Psychology

Faculty of Science

T3, 2022

1. **Staff**

COURSE COORDINATOR AND LECTURER		
Name	**Email**	**Contact & Availability**
Prof. Joel Pearson	jpearson@unsw.edu.au	By email/By appointment.
COURSE ASSISTANT & TUTOR		
TBA See Moodle.		

2. Course information

Units of credit: 6

Pre-requisite(s): N/A

Teaching times and locations: Online

http://timetable.unsw.edu.au/2021/PSYC1028.html#S1

2.1 Course summary

This subject focuses students on understanding how psychology and cognitive science underpin the creative practices, processes and methods that lead to innovation. Students will be introduced to the concepts of human centred design, blended with fundamental principles of psychology and cognitive science. The subject begins with identifying conditions required for the emergence of ideas, inspiration and change through examining historical cases of innovation. Over the course of the subject, students will engage with a transdisciplinary range of frameworks and methods for entrepreneurial innovation, creative thinking, ideation and prototyping by imagining a new solution to an identified problem. The course is taught by USNW science academics and many industry professionals, to bring real world experience to the course.

2.2 Course aims

This course is founded in human behaviour and cognitive science. It aims to provide students with a basic understanding of cognitive science, motivational theories, behavioural economics, neural processes and social influences; this fundamental knowledge will be used to dive deeper into the innovation frameworks used by industry to create new products, services and technology. The course will also provide students with a basic understanding of Design thinking methods and processes from industry experts. It aims to foster values such as risk-taking and inquisitiveness in research, develop high level analytical and creative practices, and encourage an explorative attitude towards the design and innovation process that bridges fundamental research and applied industry work.

2.3 Course learning outcomes (CLO)

At the successful completion of this course you (the student) should be able to:

1. Demonstrate knowledge and understanding of the major psychological concepts, principles of behavioural economics and cognitive science that underpin human centred design
2. Apply research methods and scientific thinking to identify, analyse and define problems

3. Apply scientific thinking and processes of human centred design to evaluate solutions for an identified problem
4. Propose and prototype innovative solutions to an identified problem
5. Develop effective communication skills in Psychology including the ability to: critically evaluate research and methodologies and write in a variety of formats

2.4 Relationship between course and program learning outcomes and assessments

Course Learning Outcome (CLO)	LO Statement	Program Learning Outcome (PLO)	Related Tasks & Assessment
CLO 1	Demonstrate knowledge and understanding of the major psychological concepts, principles of behavioural economics and cognitive science that underpin human centred design	[PLO 1,2]	[1, 2, 3]
CLO 2	Apply research methods and scientific thinking to identify, analyse and define problems	[PLO 2,3,4,5,6]	[2, 3]
CLO 3	Apply scientific thinking and processes of human centred design to evaluate solutions for an identified problem	[PLO 2,3,4,6]	[1, 2, 3]
CLO 4	Propose and prototype innovative solutions to an identified problem	[PLO 3,6]	[2, 3]
CLO 5	Develop effective communication skills in Psychology including the ability to: critically evaluate research and methodologies and write in a variety of formats	[PLO 3,5]	[1, 2, 3]

CLO	Program Learning Outcomes						Assessment
	1. Knowledge	2. Research Methods	3. Critical Thinking Skills	4. Values and Ethics	5. Communication, Interpersonal and Teamwork	6. Application	
1	Lectures, forums, quizzes	Lectures, forums, quizzes, Workbook A, Workbook B					Quizzes, Workbook A, Workbook B
2		Lectures, forums, Workbook A, Workbook B	Lectures, forums, Workbook A, Workbook B	Lectures, forums, Workbook A, Workbook B	Workbook A, Workbook B	Workbook A, Workbook B	Workbook A, Workbook B
3		Workbook A, Workbook B	Lectures, forums,	Lectures, forums,		Lectures, forums,	Quizzes, Workbook A, Workbook B

			Workbook A, Workbook B	Workbook A, Workbook B		Workbook A, Workbook B	
4			Workbook B			Workbook B	Workbook A, Workbook B
5			Workbook A, Workbook B, quizzes		Workbook A, Workbook B, Forums		Quizzes, Workbook A, Workbook B

School of Psychology Graduate Attributes[1]	Level of Focus 0 = No focus 1 = Minimal 2 = Minor 3 = Major	Activities/Assessment
1. Research, inquiry and analytical thinking abilities	3	You will extend your knowledge of the psychology of innovation through online lectures and optional readings. Knowledge of course content will be assessed in the quizzes and both assignments. The progressive Workbook assignments will enable you to extend your research skills and allow them to develop competence in using databases such as PsycInfo and PSYCarticles. In completing the assignments, you will be required to demonstrate reading beyond the recommended texts and incorporate a body of evidence for relevant principles of cognitive and psychological science. These two assignments will require you to critically assess and analyse existing problems, products, services, and strategically assess opportunities for innovation.
2. Capability and motivation for intellectual development	2	The online delivery of course content requires you to be responsible for keeping up to date with lectures and assessments thereby showing commitment to your own learning experience. Course discussion forums will provide you with the opportunity to discuss/question/evaluate concepts covered in the course. The two assignments will focus your ability to apply principles from scientific research on solving real world problems. Reflective components of the lectures and assignments will promote personal intellectual growth.
3. Ethical, social and professional understanding	3	Lecture content and readings will cover the ethical considerations of designing and building new innovations. You will be required to conduct user research in an ethical, social and professional manner. You will be encouraged to reflect on how the innovation process can be conducted in ethical and socially responsible ways. Additionally, you will be introduced to ways in which innovation can be used both for social good and for social harm.
4. Communication	2	You will be required to demonstrate strong skills in

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[1] The Graduate Attributes of the *Australian Undergraduate Psychology Program* was produced as part of the Carrick Associate Fellowship project, "Sustainable and evidence-based learning and teaching approaches to the undergraduate psychology curriculum", and "Designing a diverse and future-oriented vision for undergraduate psychology in Australia", a Discipline based Initiative funded by the Carrick Institute for Learning and Teaching in Higher Education (see Appendix II), and supported by the Australian Psychological Society, and the University of New South Wales (School of Psychology; Learning and Teaching @UNSW).

		communication whilst testing and collecting user insights. Your ability to communicate clearly and concisely will be assessed via the two workbook assignments.
5. Teamwork, collaborative and management skills	2	You will demonstrate self-management by way of online completion of lecture content and assessments. You will demonstrate teamwork and collaboration by participating in other peers' user research and testing experiments.
6. Information literacy	3	You will demonstrate effective use of information and information technology by accessing course content via Moodle and contributing to the forums. The quizzes will give you an opportunity to reflect on your understanding of the materials and to adjust your learning strategies to optimize your results. The written assignments will require you to locate and critically evaluate relevant research literature and incorporate feedback into part two of the submission.

3. Strategies and approaches to learning

3.1 Learning and teaching activities

A number of different strategies are used to convey psychological theories and illustrate the practical application of these theories in industry. Strategies include formal lectures and the use of case studies, practical examples and research findings to illustrate points of interest.

The lecture content of this course is presented entirely online via the Moodle eLearning website. The lectures will be delivered in video format (closed-captioned). PDF copies of the delivered content will be made available; not in a presented format, rather a format with additional comments so that as stand-alone pieces they are comprehensive. Students should watch the lectures and write separate notes to maximize their understanding and retention of the material. Lectures for the entire course will be available from week 1, allowing students to move through the course at their own pace.

Assignments will be released periodically throughout the course. This staggered release format is designed to encourage "distributed practice" in combination with the self-paced, exploratory lecture format.

The lecture material and optional readings will provide students with the information required to gain an in-depth knowledge of psychology and the innovation processes.

The discussion forum provides students with an opportunity to question and clarify the concepts and ideas mentioned in the lectures. Students are strongly encouraged to engage with this forum by posting questions or comments, and reading, answering, or replying to other student's posts to enhance understanding of the content, critical thinking, and written communication skills.

Periodic quizzes will provide students with an opportunity to demonstrate their understanding of examinable course material. Timely completion of the weekly quizzes will assist students in gaining a proper understanding of each topic so that this knowledge can be built on in future content.

The Workbook assignments will give students an opportunity to consolidate their learning of course material and to demonstrate independent research and analytical skills.

3.2 Expectations of students

All news updates and announcements will be made on the 'Announcements' forum on the Moodle page and/or by email. It is the student's responsibility to check Moodle and their student emails regularly to keep up to date. All students must read the Course Outline. Although this is an online course, it is expected that students dedicate the same amount of time each week to studying for this course as they would for an 'on-campus' course.

Given that the course content and some assessable components are delivered online, it is the responsibility of the student to ensure that they have access to a computer with a stable internet connection and a browser capable of handling the features of the Moodle eLearning website and any of its content. There will be no special consideration granted due to internet connection or computer issues arising from the use of a non-UNSW computer. If an internet disconnection takes place during an assessment/exam, there will be no way of changing a mark (these will be allocated for whatever progress was saved). To help students establish whether or not their computer/internet access is suitable for the online exam/s, a test quiz is available. This quiz will not contribute to final marks and will be able to be completed multiple times in order to test computer/internet connection prior to assessments/exams.

The Moodle forum should be the first line of contact with the Course Coordinator (meeting requests, personal or Disability Support matters can be sent by email in the first instance). Due to the online nature of the course, under no circumstances are specific quiz questions/answers to be discussed online or via email, such matters can only be discussed during face-to-face appointments with the Course Coordinator.

Students registered with Disability Services must contact the course coordinator immediately if they intend to request any special arrangements for later in the course, or if any special arrangements need to be made regarding access to the course material. Letters of support must be emailed to the course coordinator as soon as they are made available.

It is expected that students are aware of UNSW Assessment policy and understand how to apply for special consideration if they are unable to complete an assignment/exam due to illness and/or misadventure.

It is expected that students have read through the School of Psychology Student Guide.

4. Course schedule and structure

[This course consists of 18 hours of class contact hours. You are expected to take around an additional 18 hours of non-class contact hours to complete assessments, readings and exam preparation.]

The lecture content primarily runs in two streams A and B. A focuses on the psychology of innovation, while B is more focused on learnings from practitioners working in industry.

Week	Topic [Module]	Activity [Learning opportunity]	Related CLO
Week 1	**1A:** Introduction to the course: Psychology of human centred design **1B:** History of great innovations and innovators	Refer to Moodle	1,3
Week 2	**2A:** The mind of the innovator	Refer to Moodle	1,2

Week	Topics		Learning Outcomes
	2B: Introduction to innovation frameworks		
Week 3	**3A:** The psychology of user/human needs	Refer to Moodle	1,2,5
	3B: Ethnographic research skills		
Week 4	**4A:** The psychology of investigating users and testing solutions	Refer to Moodle	1,2,3,5
	4B: Analysing research data, extracting findings and insights		
Week 5	**5A:** The psychology of creativity	Refer to Moodle	1,2,3,5
	5B: Ideation techniques and methodologies		
Week 6	*No classes this week*		
Week 7	**7A:** Accessibility, inclusivity and co-design	Refer to Moodle	2,3,4,5
	7B: Prototyping prep and methodologies		
Week 8	**8A:** Testing solutions **8B:** Iteration	Refer to Moodle	3,4,5
Week 9	**9A:** The mind of the founder	Refer to Moodle	1,3,4,5
	9B: Storytime with an entrepreneur		
Week 10	**10A:** Innovation Culture and Wellbeing	Refer to Moodle	1,5

5. Assessment

Assessment task **All assessments in this course have been designed and implemented in accordance with UNSW Assessment Policy.**	Weight	Learning outcome assessed	Graduate attributes assessed	Date of		Feedback		
				Release	Submission	Who	When	How
Periodic quizzes (immediate feedback)	20%	1, 2 & 5	1, 2 & 3	12:00 am Monday, Weeks 3, 5, & 10	11:59pm Sunday, Weeks 3, 5, & 10 (one week to complete)	Online	Weeks 4, 6, & 10	Online
Workbook A	35%	1, 2 & 5	1, 2, 3, 4, 5 & 6	Monday Week 2	11:59 pm Sunday,	Online	Week 9	Online

					Week 6			
Workbook B	45%	2, 3, 4 & 5	1, 2, 3, 4, 5 & 6	Monday Week 6	11:59 pm Friday day, Week 10	Online	Week 14	Online

Periodic quizzes (20% of your final mark): These quizzes will be based on lecture material covered in weeks 2 through 10. Each quiz will consist of 20 multiple-choice questions which you must answer in 15 minutes (approximately 45 seconds should be spent on each question). In accordance with UNSW Assessment Policy the quizzes will be completed online and require a stable internet connection. Quizzes may not be attempted twice, and must be attempted during the window they are open. Feedback for each quiz will be released once a) the submission window has closed, and b) all students have taken the quiz.

Workbook Part A (35% of final mark): You are required to complete a project in 2 parts: Part A and Part B. In Part A you will submit process work based on material from weeks 1-4, guided by a provided framework and activities. Part A will require you to 1) identify a problem area/hypothesis; 2) design a research plan; 3) conduct semi-structured interviews; 4) synthesise insights from collected data; & 5) reflect on the process. In accordance with UNSW Assessment Policy the assignment must be submitted online via Turnitin. No paper or emailed copies will be accepted. Assessments will receive a deduction of 2% for every day late. Any assignment submitted after feedback is returned will receive a 0 unless prior exemption has been granted.

Workbook Part B (45% of your final mark; due week 11): Workbook Part B requires you to continue from where you left off at the end of Part A, and will include human centred design and research activities based on material from weeks 5-9. Part B will require you to 1) adjust your strategy in response to feedback from Part A; 2) undertake and capture your design and ideation process; 3) collate insights from user testing; 4) suggest iterations and next steps; & 5) reflect on your innovation journey. In accordance with UNSW Assessment Policy the assignment must be submitted online via Turnitin. No paper or emailed copies will be accepted. Assessments will receive a deduction of 2% for every day late. Any assignment submitted after feedback is returned will receive a 0 unless prior exemption has been granted.

Supplementary assessments will be offered and implemented in accordance with UNSW Assessment Implementation Procedure. Alternative examinations will be subject to approval and implemented in accordance with UNSW Assessment Implementation Procedure. PLEASE SEE THE SCHOOL OF PSYCHOLOGY STUDENT GUIDE (LINK CAN BE FOUND UNDER 'ADMINISTRATIVE MATTERS') TO UNDERSTAND THE SPECIAL CONSIDERATION PROCESS FOR LATE ASSIGNMENTS. THIS IS VERY IMPORTANT AS THIS PROCESS MUST BE FOLLOWED TO MAKE IT FAIR FOR ALL STUDENTS.

Further information

UNSW grading system: https://student.unsw.edu.au/grades

UNSW assessment policy: https://student.unsw.edu.au/assessment

5.2 Assessment criteria and standards

Further information and marking criteria will be provided closer to the release date.

5.3 Submission of assessment tasks

Workbook Part A & B: In accordance with UNSW Assessment Policy the workbooks must be submitted online via Turnitin. No paper or emailed copies will be accepted.

Quizzes: In accordance with UNSW Assessment Policy the quizzes will be completed online and require a stable internet connection. Quizzes may not be attempted twice, and must be attempted during the window it is open.

Late penalties: deduction of marks for late submissions will be in accordance with School policy (see: Psychology Student Guide).

Special Consideration: Students who are unable to complete an assessment task by the assigned due date can apply for special consideration. Special consideration applications must be submitted to Student Central within 3 working days of the assessment due date along with a physical copy of the supporting documentation. Students who have experienced significant illness or misadventure during the assessment period may be eligible. Only circumstances deemed to be outside of the student's

control are eligible for special consideration (see - https://student.unsw.edu.au/special-consideration). In the case of take-home assessment tasks, misadventure must occur for at least 3 consecutive days during the assessment period. If approved, students may be given an extended due date to complete take-home assessments, or an alternative assessment may be set.

Alternative assessments: will be subject to approval and implemented in accordance with UNSW Assessment Implementation Procedure.

5.4. Feedback on assessment

Feedback on all pieces of assessment in this course will be provided in accordance with UNSW Assessment Policy.

Assessment	When	Who	Where	How
Quizzes	*Once each quiz's deadline has closed and all students have completed*	Tutor/Prof. Joel Pearson	Online	Moodle
Workbook A	2 weeks after submission due date	Tutor/Prof. Joel Pearson	Online	Turnitin
Workbook B	2 weeks after submission due date	Tutor/Prof. Joel Pearson	Online	Turnitin

6. Academic integrity, referencing and plagiarism

Referencing is a way of acknowledging the sources of information that you use to research your assignments. You need to provide a reference whenever you draw on someone else's words, ideas or research. Not referencing other people's work can constitute plagiarism. Any reference style may be employed in this course, however the style chosen must be consistent.

Further information about referencing styles can be located at https://student.unsw.edu.au/referencing

Academic integrity is fundamental to success at university. Academic integrity can be defined as a commitment to six fundamental values in academic pursuits**:** honesty, trust, fairness, respect, responsibility and courage.[2] At UNSW, this means that your work must be your own, and others' ideas should be appropriately acknowledged. If you don't follow these rules, plagiarism may be detected in your work.

Further information about academic integrity and **plagiarism** can be located at:

- The *Current Students* site https://student.unsw.edu.au/plagiarism**,** and
- The *ELISE* training site http://subjectguides.library.unsw.edu.au/elise/presenting

The *Conduct and Integrity Unit* provides further resources to assist you to understand your conduct obligations as a student: https://student.unsw.edu.au/conduct.

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[2] International Center for Academic Integrity, 'The Fundamental Values of Academic Integrity', T. Fishman (ed), Clemson University, 2013.

7. Readings and resources

TEXTBOOKS	**There is no prescribed textbook for this course.** ***The following texts are recommended for further reading, especially for those that plan to work in human centred design, UX, service design, or a strategy-related field. Some are free, and earlier editions of some can be found in the library.*** Weinschenk, S. (2011). 100 things every designer needs to know about people. Pearson Education. Norman, D. (2013). The design of everyday things: Revised and expanded edition. Basic books. IDEO.org (2015). The Field Guide to Human-Centered Design. https://www.designkit.org//resources/1 Eagleman, D., & Brandt, A. (2017). The runaway species: How human creativity remakes the world. Catapult. Medina, J. (2011). Brain rules: 12 principles for surviving and thriving at work, home, and school. ReadHowYouWant.com.
COURSE MANUAL	There is no course manual, but there is a general Guide for Psychology Students located at: http://www.psy.unsw.edu.au/current-students/student-guide
REQUIRED READINGS	Optional readings will be posted on Moodle, and are intended to accompany lectures for some weeks. Use these to deepen your knowledge and get a better understanding of practices and psychological principles that underpin human-centred design. You will not be assessed on the content of these readings.
RECOMMENDED INTERNET SITES	Internet sites relevant to topics may be posted on Moodle. In addition, you should be aware of policies regarding your behaviour at the university. Familiarize yourself with the following: Student Code of Conduct, UNSW's policy concerning academic honesty, UNSW Anti-racism policy statement, UNSW Equity and Diversity policy statement, UNSW Equal opportunity in education policy statement, and the UNSW email policy.

8. Administrative matters

What is Turnitin?

Turnitin is a checking database which reviews your work and compares it to an international collection of books, journals, Internet pages and other student's assignments. The database checks referencing and whether you have copied something from another student, resource, or off the Internet.

Sometimes students submit their work into Turnitin when they hand it in, but academics can also use it to check a student's work when they are marking it. You can find out more about Turnitin here: https://teaching.unsw.edu.au/elearning.

Further information and assistance

If you would like further information or assistance with avoiding plagiarism, you can contact the Learning Centre. The Learning Centre at The University of New South Wales has two locations:

- **UNSW Learning Centre**
  Location: Lower Ground Floor, North Wing, Chancellery Building (C22 Kensington Campus – near Student Central)
  Website: www.lc.unsw.edu.au
  Phone: 9385 2060
  Email: learningcentre@unsw.edu.au
  Opening Hours: Monday to Thursday: 9am - 5pm and Friday: 9am - 2.30pm
- **COFA Campus Learning Centre**
  Email: cofalearningcentre@unsw.edu.au
  Phone: 9385 0739

How can the Learning Centre help me?

The Learning Centre assists students with understanding academic integrity and how to not plagiarise. Information is available on their website: http://www.lc.unsw.edu.au/academic-integrity-plagiarism. They also hold workshops and can help students one-on-one.

How can Elise help me?

ELISE (Enabling Library & Information Skills for Everyone) is an online tutorial to help you understand how to find and use information for your assignments or research. It will help you to search databases, identify good quality information and write assignments. It will also help you understand plagiarism and how to avoid it. All undergraduate students have to review the ELISE tutorial in their first semester and complete the quiz, but any student can review it to improve their knowledge: http://subjectguides.library.unsw.edu.au/elise.

9. Additional support for students

- The Current Students Gateway: https://student.unsw.edu.au/

- Academic Skills and Support: https://student.unsw.edu.au/academic-skills

- Student Wellbeing, Health and Safety: https://student.unsw.edu.au/wellbeing

- Disability Support Services: https://student.unsw.edu.au/disability-services

- UNSW IT Service Centre: https://www.it.unsw.edu.au/students/index.html