



OCHS12019 *Human Factors*

Term 2 - 2024

Profile information current as at 29/07/2024 03:45 pm

All details in this unit profile for OCHS12019 have been officially approved by CQU University and represent a learning partnership between the University and you (our student). The information will not be changed unless absolutely necessary and any change will be clearly indicated by an approved correction included in the profile.

General Information

Overview

This unit introduces you to the discipline of human factors and how a knowledge of human strengths and limitations, both cognitive and physical, can lead to better safety outcomes. This unit addresses end-user design issues and human variability in occupational contexts. You will explore human factors principles and learn to assess human interaction concerns using a variety of human factors methods. You will also develop skills to make human factors design recommendations to enhance human performance.

Details

Career Level: *Undergraduate*

Unit Level: *Level 2*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

Pre-requisites or Co-requisites

Pre-requisite study of 24 credit points.

Important note: Students enrolled in a subsequent unit who failed their pre-requisite unit, should drop the subsequent unit before the census date or within 10 working days of Fail grade notification. Students who do not drop the unit in this timeframe cannot later drop the unit without academic and financial liability. See details in the [Assessment Policy and Procedure \(Higher Education Coursework\)](#).

Offerings For Term 2 - 2024

- Online

Attendance Requirements

All on-campus students are expected to attend scheduled classes - in some units, these classes are identified as a mandatory (pass/fail) component and attendance is compulsory. International students, on a student visa, must maintain a full time study load and meet both attendance and academic progress requirements in each study period (satisfactory attendance for International students is defined as maintaining at least an 80% attendance record).

Website

[This unit has a website, within the Moodle system, which is available two weeks before the start of term. It is important that you visit your Moodle site throughout the term. Please visit Moodle for more information.](#)

Class and Assessment Overview

Recommended Student Time Commitment

Each 6-credit Undergraduate unit at CQUniversity requires an overall time commitment of an average of 12.5 hours of study per week, making a total of 150 hours for the unit.

Class Timetable

[Regional Campuses](#)

Bundaberg, Cairns, Emerald, Gladstone, Mackay, Rockhampton, Townsville

[Metropolitan Campuses](#)

Adelaide, Brisbane, Melbourne, Perth, Sydney

Assessment Overview

1. **Portfolio**

Weighting: 25%

2. **Written Assessment**

Weighting: 25%

3. **Group Work**

Weighting: 50%

Assessment Grading

This is a graded unit: your overall grade will be calculated from the marks or grades for each assessment task, based on the relative weightings shown in the table above. You must obtain an overall mark for the unit of at least 50%, or an overall grade of 'pass' in order to pass the unit. If any 'pass/fail' tasks are shown in the table above they must also be completed successfully ('pass' grade). You must also meet any minimum mark requirements specified for a particular assessment task, as detailed in the 'assessment task' section (note that in some instances, the minimum mark for a task may be greater than 50%). Consult the [University's Grades and Results Policy](#) for more details of interim results and final grades.

CQUniversity Policies

All University policies are available on the [CQUniversity Policy site](#).

You may wish to view these policies:

- Grades and Results Policy
- Assessment Policy and Procedure (Higher Education Coursework)
- Review of Grade Procedure
- Student Academic Integrity Policy and Procedure
- Monitoring Academic Progress (MAP) Policy and Procedure – Domestic Students
- Monitoring Academic Progress (MAP) Policy and Procedure – International Students
- Student Refund and Credit Balance Policy and Procedure
- Student Feedback – Compliments and Complaints Policy and Procedure
- Information and Communications Technology Acceptable Use Policy and Procedure

This list is not an exhaustive list of all University policies. The full list of University policies are available on the [CQUniversity Policy site](#).

Previous Student Feedback

Feedback, Recommendations and Responses

Every unit is reviewed for enhancement each year. At the most recent review, the following staff and student feedback items were identified and recommendations were made.

Feedback from Student Unit and Teaching Evaluation comments

Feedback

Student expectations of what the tutorials should contain needs to be clarified. In this unit the lectures cover the theory behind Human Factors, while the tutorials cover practical skills in the field that are needed and useful for completing assessment tasks.

Recommendation

In the welcome message, remind students that they need to attend/watch all lectures and tutorials as each of these cover different topics.

Feedback from Student Unit and Teaching Evaluation comments

Feedback

Students expressed a desire to divide the team and individual grades for teamwork assignments equally.

Recommendation

During the tutorial on assessment work, elaborate on the reasons behind the division of grades for the team and individual components of a team project. Specifically, note that equal grades for the team and individual efforts tends to lead to reduced team effort and often a poorer final outcome for all students..

Unit Learning Outcomes

On successful completion of this unit, you will be able to:

1. Apply knowledge of the discipline of human factors including physical, cognitive and organisational ergonomics in a variety of contexts
2. Analyse work systems and equipment design in accordance with user needs, capabilities and limitations
3. Demonstrate the use of human factors assessment tools for addressing human interaction problems within various occupational contexts
4. Develop teamwork and project management skills through the application of human factors assessment and problem solving.

Alignment of Learning Outcomes, Assessment and Graduate Attributes



Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes			
	1	2	3	4
1 - Portfolio - 25%				•
2 - Written Assessment - 25%	•	•	•	
3 - Group Work - 50%	•	•	•	•

Textbooks and Resources

Textbooks

OCHS12019

Prescribed

Introduction to Human Factors

Edition: First (2017) (2017)

Authors: Stone, Nancy J., Chaparro, Alex, Keebler, Joseph R., Chaparro, Barbara S., and McConnell, Daniel S.

CRC Press

ISBN: 9781315153704

Binding: eBook

OCHS12019

Supplementary

Introduction to Human Factors and Ergonomics

Edition: Fourth (2017)

Authors: Bridger, Robert

CRC Press

ISBN: 9781498796118

Binding: eBook

Additional Textbook Information

The eBooks for both books are freely available in the eReading List on Moodle.

IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- Video conferencing (Zoom) or Teams

Referencing Style

All submissions for this unit must use the referencing style: [Harvard \(author-date\)](#)

For further information, see the Assessment Tasks.

Teaching Contacts

Elise Crawford Unit Coordinator

e.crawford@cqu.edu.au

Schedule

Week 1 - 08 Jul 2024

Module/Topic	Chapter	Events and Submissions/Topic
Introduction to Human Factors	Chapter 1: Introduction to Human Factors (Bridger 2018)	<ul style="list-style-type: none">• Belbin Team Roles - Review and identify the team roles you feel reflect you most.• Introduce yourself in the Arrivals Lounge (add to your professional network)• Nominate Your Team Role Strengths in the assigned query (? - located in the Assessment tile in Moodle)

Week 2 - 15 Jul 2024

Module/Topic	Chapter	Events and Submissions/Topic
Human Factors Research	Chapter 2: Research methods (Stone et al. 2017)	<p>Assessment Tip: Watch the tutorials on HTA and REBA and Identify a task suitable for Assessment Item 2.</p> <p>Form teams of 4 in the Team Selection list (?) located in the Assessment Tile in Moodle.</p>

Week 3 - 22 Jul 2024

Module/Topic	Chapter	Events and Submissions/Topic
Physical Ergonomics: Work physiology	Chapter 7: Work capacity, stress, fatigue, and recovery (Bridger 2018)	<p>Assessment Tip: Watch the tutorial on Human Factors Principles for Poster Design.</p> <p>Individual Team Role Portfolio Due: Week 3 Monday (22 July 2024) 11:59 pm AEST</p>

Week 4 - 29 Jul 2024

Module/Topic	Chapter	Events and Submissions/Topic
Physical Ergonomics: The body as a mechanical system	Chapter 2: The body as a mechanical system (Bridger 2018) Chapter 3: Anthropometry (Bridger 2018)	<p>Census Date: Tuesday is your last chance to withdraw from the unit without incurring an academic and financial penalty. If you are in a team and need to withdraw from this unit, please let the lecturer and someone in your team know.</p> <p>Assessment Tip: If you are not yet in a team by Tuesday night you will be placed in a team.</p>

Week 5 - 05 Aug 2024

Module/Topic	Chapter	Events and Submissions/Topic
Cognitive Ergonomics: Senses, perception, attention, and memory	Chapter 10: Visual environment (Bridger 2018) Chapter 6: Attention, memory and multitasking (Stone et al. 2017)	<p>Assessment Tip: Gather the contact details of everyone in your team and plan the development of your team contract.</p> <p>MSD Risk Poster Due: Week 5 Monday (5 Aug 2024) 10:00 am AEST</p>

Vacation Week - 12 Aug 2024

Module/Topic	Chapter	Events and Submissions/Topic
		<p>Assessment Tip: Keep an eye out for usability problems for the final assignment.</p> <p>Assessment Tip: Use the <i>Peer Review Centre</i> to get feedback from your peers on parts of your assessment pieces. You can learn a lot by reviewing each other's work.</p>

Week 6 - 19 Aug 2024

Module/Topic	Chapter	Events and Submissions/Topic
Human Factors in Design	Chapter 5: Methods of Evaluation (Stone et al. 2017) The What, Why and How of Good Work Design (Karaniakas et al. 2021)	<p>Assessment Tip: Find a Human-Machine Interaction (HMI) problem (usability problem) for consideration as per intended user group.</p> <p>Team Contract Portfolio Due: Week 6 Friday (23 Aug 2024) 10:00 am AEST</p>

Week 7 - 26 Aug 2024

Module/Topic	Chapter	Events and Submissions/Topic
Cognitive Ergonomics: Displays, Workload, Usability	Chapter 12: The mind at work (Bridger 2018) Chapter 13: Displays and controls (Bridger 2018)	Assessment Tip: Empathise with the user: Come to understand the needs, limitations and capabilities of your chosen user population. Assessment Tip: For best results, reflect regularly on the design project and iteratively adjust as necessary.

Week 8 - 02 Sep 2024

Module/Topic	Chapter	Events and Submissions/Topic
Organisational Ergonomics: Environment (physical & psychosocial)	Chapter 10: Environmental Design (Stone et al. 2017)	Assessment Tip: Analyse the problematic HMI to define the problem.

Week 9 - 09 Sep 2024

Module/Topic	Chapter	Events and Submissions/Topic
Organisational Ergonomics: Human Error & Fatigue	Chapter 11: Human Error (Stone et al. 2017)	Assessment Tip: Ideate to come up with several redesign options for consideration.

Week 10 - 16 Sep 2024

Module/Topic	Chapter	Events and Submissions/Topic
Organisational Ergonomics: Selection & training		Assessment Tip: Systematically evaluate the redesign options chosen and develop the proposed redesign solution. Ensure sketches are as detailed as possible.

Week 11 - 23 Sep 2024

Module/Topic	Chapter	Events and Submissions/Topic
Human Factors Analytical Tools (Safety & Investigations)	Chapter 15: HFE in Accident Investigation and Safety Management (Bridger 2018)	Assessment Tip: Finalise the proposal. Remove any repeated sections. Upload the proposal (or parts of it) and 'save' (not submit) to check the Turnitin score. Adjust as necessary. Individual Design Workbook Due: Week 11 Friday (27 Sep 2024) 11:59 pm AEST

Week 12 - 30 Sep 2024

Module/Topic	Chapter	Events and Submissions/Topic
Future Trends in Human Factors	Chapter 12: Future Trends (Stone et al. 2017)	Assessment Tip: Each team member should read through the design proposal to ensure it flows well and is compelling. Imagine an entrepreneur is looking to fund your project. Design Project Due: Week 12 Friday (4 Oct 2024) 11:59 pm AEST

Review/Exam Week - 07 Oct 2024

Module/Topic	Chapter	Events and Submissions/Topic
--------------	---------	------------------------------

Exam Week - 14 Oct 2024

Module/Topic	Chapter	Events and Submissions/Topic
--------------	---------	------------------------------

Term Specific Information

Please note that this unit contains **teamwork**. The ability to work effectively in teams is highly sought after in industry and therefore a graduate attribute for all undergraduate degrees at CQUniversity, Australia. Additionally, teamwork is an accreditation requirement for the successful attainment of the Bachelor of Occupational Health and Safety (BOHS), as per the Australian OHS Education Accreditation Board. The ability to work with others effectively is also essential when designing for people within the field of Human Factors and Ergonomics.

Time Commitment: It is expected that you will be communicable with your mates all term. To be successful, you need to form teams early and remain in contact with your team throughout the term. We also acknowledge, that teamwork assignments take more time, as you need to factor in communication, coordination and meeting times. So please consider your personal and study commitments this term, so that you factor in the commitment to your team.

Learning in Teams: Do not expect teamwork assignments to be like teams you have been involved in at work or in team sports. Learning in teams is different. It focuses on supporting the development of the underpinning skills that support teamwork in various situations including industry. Skills like time management, forward planning, effective communication, emotional intelligence, ability to listen to others, leadership, respect, and support, to name a few.

Forming Teams: Teams of four (4) students are to be formed for Assessment Item 3. Before self selecting into a team, you should identify your team role strengths (information provided on Moodle). Log your strengths in Moodle for your classmates to see. The goal is to form a team that has at least one member from each of the three broad categories (social, action and thinker) where possible.

You are required to self select into a team space, using the Team choice link provided to you in Moodle. You can simply add your name to a team space, or coordinate team formation with your fellow classmates and then self-select at a coordinated time. No more than 4 members can sign up for any one team. If you are not in a team by census date, you will be placed in a team by the Unit Coordinator.

Support: A video has been developed to help you with the teamwork tasks and expectations for this unit. The video is located within the OCHS12019 Introduction Tile on Moodle. Please watch this before the term commences, or as soon as possible. If you have any queries, please do not hesitate to contact me at: e.crawford@cqu.edu.au

Required Readings: All readings can be found in the eReading List via Moodle. There is no expectation that you need to purchase the textbooks.

Lectures and Tutorials: Please attend or watch all lectures **and** tutorials as they cover different material. The lectures cover underpinning theory while the tutorials help to develop skills in 'how to' use analytical tools, especially those needed to be used for assessment purposes.

Assessment Tasks

1 Team Contract Portfolio

Assessment Type

Portfolio

Task Description

Purpose

The purpose of this portfolio is to give you an opportunity to build teamwork and project management skills that will not only make you more effective in industry, but also support subsequent assessment work. This assessment item has an individual and team submission.

Instructions

To be an effective team, it is important to first understand who you are, your own strengths and limitations and then to come to know who your team is, that is the collective strengths and limitations. From this information you can devise a plan to work together drawing on team strengths while compensating for noted limitations. To do this, the following tasks are as follows:

Task One: Individual team role profile (20% of your grade)

1. Examine the nine team roles (types of team role behaviour /personalities) established by [Dr Meredith Belbin](#) and identify three roles you feel you align with most. Then determine where your team role strengths fit within the broader three personality categories, namely: Social, Thinking, and Action. Now go to the **Your Team Role Strengths query (?)** in the Assessment Tile in Moodle and register your Team Role Strengths. Teams that are comprised of all three personality categories may perform better. Something to keep in mind when forming teams.
2. Take note of the *Strengths, Allowable Weaknesses, and Don't be Surprised to Find* comments about the team roles you identify with. Also consider other attributes you may have that will help to diversify or contribute to your team profile. Such things include culture, language, distance, unique experiences, skills, etc. From this

information develop a personal team role profile in less than **250 words** using at least one reference to support your discussion.

Submission Instructions

Submit your Individual Team Role Profile in the Assessment 1a area.

Task Two: Develop a Team Contract (80% of your grade)

1. Check the **Your Team Role Strengths Query (?)** in the Assessment Block to see the team role strengths of other students.
2. Go to the **Self Select Team** space and join a team. The goal is to form a team that has at least one member from each of the three broad categories (social, action and thinker) where possible. You can form teams by simply self-selecting into a team space, or by coordinating your efforts with other students. Teams not formed by Tuesday of week 4 (Census date) will be finalised by the Unit Coordinator. If you decide to withdraw from the unit prior to census date, please also remove your name from the team you have nominated into.
3. Once your team is formed, develop the **Team Contract (in less than 1000 words)**. The contract should contain:
 1. Team profile (not four separate individual profiles, but a single collated team profile)
 2. Communications plan
 3. Schedule of milestones (for completing Assessment Item 3)
 4. Rules of process (includes an issues resolution plan)

The use of tables and flowcharts are encouraged. All team members are to **agree and sign** the contract prior to submission.

Submission Instructions

One team member is to submit the Team Contract in the Assessment 1b area.

The graduate attributes being developed include:

- Communication (discussions, meetings, in verbal, written and visual forms),
- Problem solving (as you develop rules of process and the issues resolution plan to pre-empt problems before they occur),
- Critical thinking (through exploration of one's own teamwork strengths and gaps, and thinking on those within your team),
- Information literacy (academic writing, and research),
- Information Technology Competence (as you work from distance as a team),
- Ethical practice (as you work together as a team with honesty, respect, and collegiality), and
- Social Innovation (as you work through the requirements of assessment item 3 to develop your schedule of tasks).

Assessment Due Date

Week 6 Friday (23 Aug 2024) 10:00 am AEST

Team Contract

Return Date to Students

Week 8 Friday (6 Sept 2024)

Feedback and marks are returned within 2 weeks of the due date.

Weighting

25%

Assessment Criteria

Represents 25% of your overall grade:

Out of a possible score of 100 marks, the Team Role Portfolio is as follows:

- Individual Team Role Profile (20 Marks)
 - Individual team roles - registered on Moodle & consideration of unique attributes (5 marks)
 - Critical reflection on team role strengths (5 marks)
 - Critical reflection on allowable weaknesses (5 marks)
 - Critical reflection on what not to be surprised to find (5 marks)
 - Marks include written expression and references.
- Team Contract (80 marks)
 - Team profile (20 marks)
 - Communications plan (20 marks)
 - Schedule of milestones (20 marks)
 - Rules of process including an issues resolution plan (20 marks)

Referencing Style

- [Harvard \(author-date\)](#)

Submission

Online Group

Submission Instructions

The Individual Team Role Profile is to be submitted by each student by Wednesday of Week 3. The Team Contract is to be submitted by one team member by Friday of Week 6.

Learning Outcomes Assessed

- Develop teamwork and project management skills through the application of human factors assessment and problem solving.

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence
- Ethical practice
- Social Innovation

2 MSD Risk Poster

Assessment Type

Written Assessment

Task Description

Purpose

An important skill of OHS and HF/E professionals is to identify work tasks that present Musculoskeletal Disorder (MSD) risks. This assignment is about developing your understanding of the principles of human factors for assessing a manual handling task at work.

Instructions

You are required to identify a manual handling task at work (or one at home that can be applied to a working environment) that involves a **static two-handed lift**. This must be a real task so that you can take measurements while someone is undertaking the task. The task is to involve lifting an object from A to B without stepping.

You are required to use three human factors analytical tools (HFATs), namely: 1) **Hierarchical Task Analysis**, 2)

Revised NIOSH Lifting Equation and 3) **Rapid Entire Body Assessment**.

The assessments are to be done manually (i.e. no interactive tools allowed), as this is the best way to learn about the risk factors. From the findings of your study, you are to offer redesign recommendations to reduce the MSD risk. Your work is to be presented in *scientific* poster abstract format. The poster is to be suitable for display at a conference to inform delegates of the physical task you have assessed. Your poster should contain the following:

- Introduction (the MSD concern),
- Background (context of work, details of worker),
- Methods (task, worker, analytical tools (materials), approach),
- Analysis (visual representation of the three tools used),
- Results: the risk factors found,
- Discussion: implications for worker, organisation, other,
- Recommendations: redesign of task,
- References: list of scholarly articles, and
- Title and analyst contact details.

Assessment Due Date

Week 5 Monday (5 Aug 2024) 10:00 am AEST

MSD Risk Poster

Return Date to Students

Week 6 Monday (19 Aug 2024)

Feedback and grades will be awarded 2 weeks after the assessment due date.

Weighting

25%

Assessment Criteria

Represents 25% of your overall grade:

Out of a possible 100 marks, the MSD Poster will be assessed on the following:

- Introduction 10 marks
- Background 10 marks
- Methods 10 marks
- Analysis 20 marks
- Results 10 marks
- Discussion 10 marks
- Recommendations 10 marks
- References 10 marks
- Poster design 10 marks

Referencing Style

- [Harvard \(author-date\)](#)

Submission

Online

Submission Instructions

Please use the poster template provided in Moodle (or similar) to populate and submit your poster. Submit in ppt, pptx, or pdf formats only.

Learning Outcomes Assessed

- Apply knowledge of the discipline of human factors including physical, cognitive and organisational ergonomics in a variety of contexts
- Analyse work systems and equipment design in accordance with user needs, capabilities and limitations
- Demonstrate the use of human factors assessment tools for addressing human interaction problems within various occupational contexts

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Social Innovation

3 Design Project

Assessment Type

Group Work

Task Description

Purpose

The purpose of this assessment item is to give you experience in the tools, methods and techniques used when redesigning a problematic human-machine interaction. Remember, redesign provides an opportunity to design out faulty designs that induce human error. This project has three main objectives: to develop 1) teamwork skills, 2) project management skills, and 3) design thinking skills.

Instructions

This assessment item has two (2) Parts. You are required to submit the following items:

1. Individual Design Workbook (each student to submit)
2. Team Concept Proposal (one team member to submit)

PART 1: Individual Design Workbook (20 marks)

As an individual you are to keep a record of the work you did during the design process in the form of a personal workbook. Items to include are to demonstrate your involvement in the team project. and design thinking skills. Your workbook is to contain the following:

- The HMI problem - (or problems) you brought to the team for consideration.
- Solution ideation - your 10+ sketches to solve the HMI problem/s.
- Teamwork - in **300 words** use the STAR technique to identify one situation that arose within the team and what action you took in response. The identify the non-technical skill/s you developed as a result of this situation.

PART 2: Team Concept Proposal (80 marks)

As a team, your task is to find a human-machine interaction (HMI) problem for a particular user group. Poor usability, frustration, and dangerous products are tell-tale signs of HMI problems. You are to take a user-centred approach to assess and resolve the problems found. During the design process you will draw on design thinking techniques and apply various human factors analytical tools to comprehend the problem for your user group. Information gained will help you target redesign solutions. The proposed redesign is to be prototyped in low-fidelity (sketches) and presented within a redesign concept proposal. The proposal should fall within **3000 - 4000 words**. The word range is applied to the body of the proposal, i.e., starts with the Introduction and ends before the Reference list. The concept proposal should contain:

- Title page
- Executive summary - showing a 'before and after' visual representation.
- Table of contents
- Introduction (The problematic machine (product) that is presenting a usability problem for your user group)
- Methods used to comprehend the HMI problem
- Findings
- Problem definition (and success criteria)
- Redesign options (and systematic evaluation)
- Justification and prototype details of chosen concept solution
- References
- Appendices

The proposal should be presented in CQUni Harvard Style:

- Single document
- 1.5 line spacing
- Numbered sections
- Referencing style (as per the Unit Profile)

The team should meet regularly to ensure all members are aware of the project's progress. Regular communication will also allow for frequent negotiations and iterations as necessary in a timely manner. All team members are responsible for their contributions made (i.e. academic integrity and correct referencing style) to avoid team plagiarism. Therefore, check the Turnitin Score of your final document before submission to allow time for the work to be corrected.

Assessment Due Date

Week 12 Friday (4 Oct 2024) 11:59 pm AEST

The Individual Design Workbook is to be submitted by each student by Friday of Week 11. The Design Project Proposal is to be submitted by one team member by Friday of Week 12.

Return Date to Students

Exam Week Friday (18 Oct 2024)

Feedback and grades will be returned within 2 weeks past the due date.

Weighting

50%

Assessment Criteria

Represents 50% of your overall grade.

Out of a possible 100 marks:

3a Individual Design Workbook (20 marks)

- Demonstrates the ability to identify and justify an appropriate human-machine interaction (HMI) problem (5 marks)
- Demonstrates skills in design thinking through ideation (5 marks)
- Demonstrates the ability to critically reflect (includes references) on lessons learned and skills gained during teamwork (10 marks)

3b Team Concept Proposal (80 marks)

- Introduction, user group, chosen problematic machine interaction (HMI) (10 marks)
- Identifies human needs, capabilities and limitations that impact successful interaction with the chosen machine (10 marks)
- Analyses the human-machine interaction problem including the environment of use (10 marks)
- Develops a suitable problem definition statement and success criteria (10 marks)
- Systematically evaluates potential concept solutions (10 marks)
- Justifies the redesign concept that meets the problem definition from a human perspective (10 marks)
- Detailed sketches of the design concept support the development of the proposed redesign (10 marks)

- Throughout, format is consistent with a professional design proposal in CQUni Harvard Referencing Style (10 marks)

Referencing Style

- [Harvard \(author-date\)](#)

Submission

Online Group

Submission Instructions

The Individual Design Workbook (3a) is submitted by each student by Friday of Week 11. The Design Concept Proposal (3b) is to be submitted by one team member by Friday of Week 12.

Learning Outcomes Assessed

- Apply knowledge of the discipline of human factors including physical, cognitive and organisational ergonomics in a variety of contexts
- Analyse work systems and equipment design in accordance with user needs, capabilities and limitations
- Demonstrate the use of human factors assessment tools for addressing human interaction problems within various occupational contexts
- Develop teamwork and project management skills through the application of human factors assessment and problem solving.

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Team Work
- Information Technology Competence
- Cross Cultural Competence
- Ethical practice
- Social Innovation

Academic Integrity Statement

As a CQUniversity student you are expected to act honestly in all aspects of your academic work.

Any assessable work undertaken or submitted for review or assessment must be your own work. Assessable work is any type of work you do to meet the assessment requirements in the unit, including draft work submitted for review and feedback and final work to be assessed.

When you use the ideas, words or data of others in your assessment, you must thoroughly and clearly acknowledge the source of this information by using the correct referencing style for your unit. Using others' work without proper acknowledgement may be considered a form of intellectual dishonesty.

Participating honestly, respectfully, responsibly, and fairly in your university study ensures the CQUniversity qualification you earn will be valued as a true indication of your individual academic achievement and will continue to receive the respect and recognition it deserves.

As a student, you are responsible for reading and following CQUniversity's policies, including the [Student Academic Integrity Policy and Procedure](#). This policy sets out CQUniversity's expectations of you to act with integrity, examples of academic integrity breaches to avoid, the processes used to address alleged breaches of academic integrity, and potential penalties.

What is a breach of academic integrity?

A breach of academic integrity includes but is not limited to plagiarism, self-plagiarism, collusion, cheating, contract cheating, and academic misconduct. The Student Academic Integrity Policy and Procedure defines what these terms mean and gives examples.

Why is academic integrity important?

A breach of academic integrity may result in one or more penalties, including suspension or even expulsion from the University. It can also have negative implications for student visas and future enrolment at CQUniversity or elsewhere. Students who engage in contract cheating also risk being blackmailed by contract cheating services.

Where can I get assistance?

For academic advice and guidance, the [Academic Learning Centre \(ALC\)](#) can support you in becoming confident in completing assessments with integrity and of high standard.

What can you do to act with integrity?



Be Honest

If your assessment task is done by someone else, it would be dishonest of you to claim it as your own



Seek Help

If you are not sure about how to cite or reference in essays, reports etc, then seek help from your lecturer, the library or the Academic Learning Centre (ALC)



Produce Original Work

Originality comes from your ability to read widely, think critically, and apply your gained knowledge to address a question or problem