



Course Outline

Code: HLT102

Title: Introduction to Prosthetic & Orthotic Practice

School of: Health & Sport Sciences
Teaching Session: Semester 2
Year: 2020
Course Coordinator: Adam Holden Email: Aholden@usc.edu.au
Course Moderator: Brian Delaney bdelaney@usc.edu.au

Please go to the USC website for up to date information on the teaching sessions and campuses where this course is usually offered.

1. What is this course about?

1.1 Description

This introductory course will build your awareness of prosthetic and orthotic practice through topics ranging from terminology, scope of practice, and material science concepts related to prosthetic and orthotic design. Practical exposure to the technical skills is done through a series of projects that will familiarise you to the tools and methods used in practice that will be used in future coursework. This course will start to develop your sense of professionalism and understanding of the scope of practice of a prosthetist/orthotist.

2. What level is this course?

100 level Introductory - Discipline knowledge and skills at foundational level, broad application of knowledge and skills in familiar contexts and with support. Normally associated with the first full-time year of an undergraduate program

3. What is the unit value of this course?

12 units

4. How does this course contribute to my learning?

Specific Learning Outcomes	Assessment Tasks	Graduate Qualities or Professional Standards mapping
On successful completion of this course you should be able to:	You will be assessed on the learning outcome in task/s:	Completing these tasks successfully will contribute to you becoming:
Identify safety procedures and use of personal protective equipment (PPE) within the discipline workplace.	Task 1 Task 2	Knowledgeable. Empowered.
Demonstrate technical skills through the safe use and care of hand and power tools in simulated projects.	Task 1 Task 2 Task 2	Empowered.
Discuss, using evidence and examples, the fundamental principles and components of prosthetics and orthotics.	Task 2 Task 3	Knowledgeable.

Explain the main properties of materials, both basic engineering principles (stress, strain, deformation, etc.) and properties of common materials used in prosthetics and orthotics and their impact on clinical care.	Task 2 Task 3	Knowledgeable. Empowered.
Critically reflect on the AOPA professional scope of practice and competency standards and how you may apply this scope to develop your understanding of the profession and its role in healthcare.	Task 2 Task 3	Empowered.

5. Am I eligible to enrol in this course?

Refer to the [USC Glossary of terms](#) for definitions of “pre-requisites, co-requisites and anti-requisites”.

5.1 Enrolment restrictions

This course is only available to students enrolled in SC367 (Prosthetics & Orthotics).

5.2 Pre-requisites

Nil

5.3 Co-requisites

Nil

5.4 Anti-requisites

Nil

5.5 Specific assumed prior knowledge and skills (where applicable)

Nil

6. How am I going to be assessed?

6.1 Grading scale

Standard – High Distinction (HD), Distinction (DN), Credit (CR), Pass (PS), Fail (FL)

6.2 Details of early feedback on progress

In week 2, you will complete a mock OSCE of Task 1 and receive feedback

6.3 Assessment tasks

Task No.	Assessment Tasks	Individual or Group	Weighting %	What is the duration / length?	When should I submit?	Where should I submit it?
1	Risk Assessment Practical	Individual	30%	20 minutes	Week 3 & 7	Blackboard and in-class
2	Skills Competency Portfolio	Individual	40%	1500 words, plus pictures	Week 11	PebblePad
3	Lab Report	Individual	30%	1000 words	Week 13	Blackboard (SafeAssign)
			100%			

Assessment Task 1: Risk Assessment Practical

Goal:	Building upon maintain a safe work environment in the workshop, the Risk Assessment Practical helps to prepare you prior to using the workshop by having you complete a series of tasks that demonstrate your knowledge and ability to assess risk and tool use common in P&O.
Product:	Practical
Format:	The Risk Assessment Practical consists of a written portion on Blackboard (multiple choice, short-answer) and a practical component in-lab that require you to identify concepts and perform basic tasks related to Risk Assessment and Safety in various areas/tools of the P&O Workshop. If you are unable to fulfil basic requirements for each station related to certain areas of the workshop and/or tools, you will not be able to independently use those areas without direct supervision until the requirement is satisfied.
Criteria:	<ol style="list-style-type: none"> I. Demonstration of safe usage of tools and techniques II. Identification of hazards and safe use standards III. Description of hazards and risks IV. Explanation of corrective measures

Assessment Task 2: Skills Competency Portfolio

Goal:	The goal of the portfolio to is assess your development of understanding of tools, techniques, materials and basic P&O concepts and components through main technical competency areas: Sewing, Plastic Finishing, Fastening, and Thermomoulding.
Product:	Portfolio
Format:	The portfolio, completed in PebblePad, will consist of activities such as knowledge-based questions on materials and/or P&O principles, a tutor-based assessment of skill, and discussion of practical artefacts and in relation to the AOPA competencies. The reflection portion will have you reflect on the performance of your skill/experience and that of your peers.
Criteria:	<p>Explanation of principles and concepts in P&O</p> <p>Explanation of material science and materials</p> <p>Identification of proper principles and materials</p> <p>Demonstration of technical competency</p> <p>Reflection on performance in relation to AOPA competencies</p>

Assessment Task 3: Lab Report

Goal:	The lab report will further integrate the knowledge of material science and P&O principles by having you apply methods to evaluate these concepts using real-world applications.
Product:	Lab Report
Format:	<p>This report will discuss the results of and implications of material selection, design, and alignment done using real-world applications in P&O completed during lab. The report will require you to discuss, using principles and methods discussed in class and primary literature, how these elements work together to improve P&O intervention and how you as a future clinician could incorporate these concepts to provide quality intervention based upon reflection of relevant AOPA competency standards.</p> <p>The report will consist of the following areas:</p> <ul style="list-style-type: none"> • Introduction • Methods • Results • Discussion <p>You need to include at least <i>two</i> primary sources to support your discussion from the P&O literature.</p>
Criteria:	<p>Use of literature</p> <p>Application of P&O principles</p> <p>Comprehension of results to conclusion</p>

	Implications to clinical care Professionalism
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7. What are the course activities?

7.1 Directed study hours

The directed study hours listed here are a portion of the workload for this course. A 12 unit course it will have total of 150 learning hours which will include directed study hours (including online if required), self-directed learning and completion of assessable tasks. Directed study hours may vary by location. Student workload is calculated at 12.5 learning hours per one unit.

This course will be delivered via technology-enabled learning and teaching. All lectures/workshops will remain in this mode for Semester 2 2020. When government guidelines allow, and if practical, students that elected on-campus study via the class selection process will be advised via Blackboard if/when on-campus sessions can resume

Location:	Directed study hours for location:
USC Sunshine Coast	Lectorial: 2 hours per week Workshop: 3 hours per week

8. What resources do I need to undertake this course?

Please note that course information, including specific information of recommended readings, learning activities, resources, weekly readings, etc. are available on the course Blackboard site. Please log in as soon as possible.

8.1 Prescribed text(s)

Please note that you need to have regular access to the resource(s) listed below as they are required:

Author	Year	Title	Publisher
Lusardi, MM; Jorge, M; Nielsen CC	2019	Orthotics and prosthetics in rehabilitation 4 th edn	Saunders

Required and recommended readings

Author	Year	Title	Publisher
Lewis, R; Hsu, JD; Michael JW; Fisk, JR	2008	AAOS atlas of orthoses and assistive devices	Elsevier Mosby
Krajbich, JI; Pinzur, MS; Potter, BK; Stevens, PM	2016	Atlas of amputations and limb deficiencies: surgical, prosthetic, and rehabilitation principles	American Academy of Orthopaedic Surgeons

8.2 Specific requirements

You will be required to purchase some tools and Personal Protective Equipment to use during the workshop. The list will be provided to you at the beginning of the semester. These tools will be used throughout the program and can be used in clinical practice after graduation.

9. Risk management

Risk assessments have been performed for all laboratory classes and a moderate level of health and safety risk exists, such as working with chemicals and hazardous substances. You will be required to undertake laboratory induction training.

It is your responsibility as a student to review course material, search online, discuss with lecturers and peers, and understand the health and safety risks associated with your specific course of study. It is also your responsibility to familiarise yourself with the University's general health and safety principles by reviewing the [online Health Safety and Wellbeing training module for students](#), and following the instructions of the University staff.

10. What administrative information is relevant to this course?

10.1 Assessment: Academic Integrity

Academic integrity is the ethical standard of university participation. It ensures that students graduate as a result of proving they are competent in their discipline. This is integral in maintaining the value of academic qualifications. Each industry has expectations and standards of the skills and knowledge within that discipline and these are reflected in assessment.

Academic integrity means that you do not engage in any activity that is considered to be academic fraud; including plagiarism, collusion or outsourcing any part of any assessment item to any other person. You are expected to be honest and ethical by completing all work yourself and indicating in your work which ideas and information were developed by you and which were taken from others. You cannot provide your assessment work to others. You are also expected to provide evidence of wide and critical reading, usually by using appropriate academic references.

In order to minimise incidents of academic fraud, this course may require that some of its assessment tasks, when submitted to Blackboard, are electronically checked through SafeAssign. This software allows for text comparisons to be made between your submitted assessment item and all other work that SafeAssign has access to.

10.2 Assessment: Additional requirements

Eligibility for Supplementary Assessment

Your eligibility for supplementary assessment in a course is dependent of the following conditions applying:

- a) The final mark is in the percentage range 47% to 49.4%
- b) The course is graded using the Standard Grading scale
- c) You have not failed an assessment task in the course due to academic misconduct

10.3 Assessment: Submission penalties

Late submission of assessment tasks will be penalised at the following maximum rate:

- 5% (of the assessment task's identified value) per day for the first two days from the date identified as the due date for the assessment task.
- 10% (of the assessment task's identified value) for the third day
- 20% (of the assessment task's identified value) for the fourth day and subsequent days up to and including seven days from the date identified as the due date for the assessment task.
- A result of zero is awarded for an assessment task submitted after seven days from the date identified as the due date for the assessment task.

Weekdays and weekends are included in the calculation of days late.

To request an extension, you must contact your Course Coordinator and supply the required documentation to negotiate an outcome.

10.4 Study help

In the first instance, you should contact your tutor, then the Course Coordinator. Additional assistance is provided to all students through Academic Skills Advisers. To book an appointment or find a drop-in session go to [Student Hub](#).

Contact Student Central for further assistance: +61 7 5430 2890 or studentcentral@usc.edu.au

10.5 Wellbeing Services

Student Wellbeing Support Staff are available to assist on a wide range of personal, academic, social and psychological matters to foster positive mental health and wellbeing for your success. Student Wellbeing is comprised of professionally qualified staff in counselling, health and disability Services.

Ability Advisers ensure equal access to all aspects of university life. If your studies are affected by a disability, mental health issue, learning disorder, injury or illness, or you are a primary carer for someone with a disability, [AccessAbility Services](#) can provide assistance, advocacy and reasonable academic adjustments.

To book an appointment with either service go to [Student Hub](#), email studentwellbeing@usc.edu.au or accessability@usc.edu.au or call 07 5430 1226

10.6 Links to relevant University policy and procedures

For more information on Academic Learning & Teaching categories including:

- Assessment: Courses and Coursework Programs
- Review of Assessment and Final Grades
- Supplementary Assessment
- Administration of Central Examinations
- Deferred Examinations
- Student Academic Misconduct
- Students with a Disability

Visit the USC website:

<http://www.usc.edu.au/explore/policies-and-procedures#academic-learning-and-teaching>

10.7 General Enquiries

In person:

- **USC Sunshine Coast** - Student Central, Ground Floor, Building C, 90 Sippy Downs Drive, Sippy Downs
- **USC Moreton Bay** – Service Centre, Ground Floor, Foundation Building, Gympie Road, Petrie
- **USC SouthBank** - Student Central, Building A4 (SW1), 52 Merivale Street, South Brisbane
- **USC Gympie** - Student Central, 71 Cartwright Road, Gympie
- **USC Fraser Coast** - Student Central, Student Central, Building A, 161 Old Maryborough Rd, Hervey Bay
- **USC Caboolture** - Student Central, Level 1 Building J, Cnr Manley and Tallon Street, Caboolture

Tel: +61 7 5430 2890

Email: studentcentral@usc.edu.au