



# ORAL12004 Orthodontics, Prosthodontics and Pharmacology

## Term 2 - 2020

Profile information current as at 13/12/2025 05:44 pm

All details in this unit profile for ORAL12004 have been officially approved by CQUniversity 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

In this unit, you will study the current approaches to orthodontics and prosthodontics used by oral health therapists as well as the clinical implications of pharmacology in oral health practice. In the field of pharmacology, you will be able to describe basic pharmacology concepts. This will include the explanation of the clinical use and effects of the major classes of drugs used in dental treatment and drugs taken by children, adolescents and adult patients particularly poly-pharmacy, that may impact adversely on dental treatment and oral health. You will have the opportunity to practice and further develop competency in oral health therapy orthodontics functions and prosthodontics procedures for patients of all ages.

### Details

Career Level: *Undergraduate*

Unit Level: *Level 2*

Credit Points: 6

Student Contribution Band: 9

Fraction of Full-Time Student Load: 0.125

### Pre-requisites or Co-requisites

Pre-requisite: ORAL12001 Oral Disease Prevention and Management, ORAL12002 Oral Health Pre Clinical Practice 1 and ORAL12003 Oral Health Clinical Practice 1. Co-requisite: ORAL12005 Oral Health Pre Clinical Practice 2 and ORAL12006 Oral Health Clinical Practice 2.

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 - 2020

- Rockhampton

### 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. **Online Test**

Weighting: 60%

#### 2. **Written Assessment**

Weighting: 40%

#### 3. **Practical Assessment**

Weighting: Pass/Fail

#### 4. **Practical Assessment**

Weighting: Pass/Fail

### 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 evaluation "Have your say"

##### Feedback

It would be beneficial if more time was dedicated to tutorial activities for Pharmacology

##### Recommendation

It is recommended that a weekly tutorial activity focusing on Pharmacology be included.

#### Feedback from Student evaluation "Have your say"

##### Feedback

Prosthodontics material could be split up and delivered earlier in the term.

##### Recommendation

It is recommended that the prosthodontics lecture material be reviewed to determine whether content can be separated and some content delivered earlier in the term.

## Unit Learning Outcomes

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

1. Describe classes of malocclusion, treatment options and explain the reasons necessitating orthodontic treatment
2. Demonstrate knowledge and skill in impressions for orthodontic purposes, deriving a correct cephalometric tracing, placing and fixing arch wires; and removing brackets, bands arch wire, modules, ligature wire, elastic and separating elastics using appropriate instruments, equipment and techniques
3. Describe the management of patients with fixed and removable oral prosthodontic appliances, including implants
4. Demonstrate knowledge and skills in clinical and laboratory procedures for impressions, study models, mouthguard and medicament trays
5. Integrate knowledge of basic pharmacokinetics and pharmacotherapy of the major classes of drugs used in dental treatment and drugs taken by children, adolescents and adult patients, relative to oral complications and alterations in dental management
6. Communicate information regarding oral health to a range of patients
7. Satisfy the requirements of an evolving dental practitioner utilising appropriate interpersonal / team communication skills, professional attitudes and ethical behaviours.

All unit profiles and learning outcomes in the Bachelor of Oral Health are made available to the Australian Dental Council for on-going accreditation purposes.

## Alignment of Learning Outcomes, Assessment and Graduate Attributes



### Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes						
	1	2	3	4	5	6	7
1 - Online Test - 60%	•		•		•	•	
2 - Written Assessment - 40%	•		•		•		

Assessment Tasks	Learning Outcomes						
	1	2	3	4	5	6	7
3 - Practical Assessment - 0%		•				•	•
4 - Practical Assessment - 0%				•			•

## Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes						
	1	2	3	4	5	6	7
1 - Communication						•	•
2 - Problem Solving		•	•	•	•		
3 - Critical Thinking		•	•	•	•		
4 - Information Literacy		•	•	•	•	•	
5 - Team Work						•	•
6 - Information Technology Competence		•	•	•	•		
7 - Cross Cultural Competence						•	•
8 - Ethical practice		•	•	•	•	•	•
9 - Social Innovation							
10 - Aboriginal and Torres Strait Islander Cultures							

## Alignment of Assessment Tasks to Graduate Attributes

Assessment Tasks	Graduate Attributes									
	1	2	3	4	5	6	7	8	9	10
1 - Online Test - 60%		•	•	•						
2 - Written Assessment - 40%	•	•	•					•		
3 - Practical Assessment - 0%	•	•	•	•	•		•	•		
4 - Practical Assessment - 0%	•	•	•	•	•		•	•		

## Textbooks and Resources

### Textbooks

ORAL12004

#### **Prescribed**

##### **Applied Pharmacology for the Dental Hygienist**

Edition: 8th (2019)

Authors: Elena Bablenis Haveles

Mosby Elsevier

St Louis , Missouri , USA

ISBN: 978-0-323-17111-3

Binding: Paperback

ORAL12004

#### **Supplementary**

##### **Contemporary Orthodontics**

Edition: 6th (2018)

Authors: William R. Proffitt

Elsevier

St Louis , Missouri , USA

Binding: Hardcover

ORAL12004

#### **Supplementary**

##### **Mosby's Dental Drug Reference**

Edition: 12th (2017)

Authors: Arthur Jeske

Mosby

St, Louis, Missouri , Missouri , USA

ISBN: 9780323481113

Binding: Paperback

ORAL12004

#### **Supplementary**

##### **Therapeutic Guidelines Oral and Dental**

Edition: Version 3 (2019)

Authors: Oral and Dental Expert Group

Therapeutic Guidelines Limited

Melbourne , Victoria , AUSTRALIA

Binding: Paperback

#### **Additional Textbook Information**

If you prefer to study with a paper copy, they are available at the CQUni Bookshop here: <http://bookshop.cqu.edu.au> (search on the Unit code). eBooks are available at the publisher's website.

[View textbooks at the CQUniversity Bookshop](#)

### IT Resources

**You will need access to the following IT resources:**

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- Webcam and headset for on-line sessions

## Referencing Style

All submissions for this unit must use the referencing styles below:

- [Harvard \(author-date\)](#)
- [American Psychological Association 7th Edition \(APA 7th edition\)](#)

For further information, see the Assessment Tasks.

## Teaching Contacts

**Karen Smart** Unit Coordinator  
[k.smart@cqu.edu.au](mailto:k.smart@cqu.edu.au)

## Schedule

### Week 1 - 13 Jul 2020

Module/Topic	Chapter	Events and Submissions/Topic
Introduction to ORAL12004 General principles of pharmacology <ul style="list-style-type: none"><li>• Pharmacodynamics</li><li>• Pharmacokinetics</li><li>• Routes of administration</li><li>• Drug information sources</li></ul>	Haveles, E.B. (2016) Applied Pharmacology for the Dental Hygienist, 7th Ed. Chapter 1-3,9, Mosby Elsevier.	

### Week 2 - 20 Jul 2020

Module/Topic	Chapter	Events and Submissions/Topic
Pharmacology Local Anaesthesia <ul style="list-style-type: none"><li>• Pharmacology of local anaesthetics</li><li>• Pharmacology of vasoconstrictors</li><li>• Clinical action of specific agents</li><li>• Systemic complications</li></ul>	Haveles, E.B. (2016) Applied Pharmacology for the Dental Hygienist, 7th Ed. Chapter 9, Mosby Elsevier.  Malamed, SF. (2012) Hand Book Of Local Anaesthesia 6th Ed., Chapter 3-4, Section 1, Mosby Elsevier.	

### Week 3 - 27 Jul 2020

Module/Topic	Chapter	Events and Submissions/Topic
Drugs used in Dentistry <ul style="list-style-type: none"><li>• Autonomic drugs</li><li>• Non-opioid and opioid drugs</li><li>• Anti-microbials</li></ul>	Haveles, E.B. (2016) Applied Pharmacology for the Dental Hygienist, 7th Ed. Chapter 4-8, Mosby Elsevier.	

### Week 4 - 03 Aug 2020

Module/Topic	Chapter	Events and Submissions/Topic
Management of selected oral conditions Chemotherapeutics and Oral Hygiene Product Revision		

### Week 5 - 10 Aug 2020

Module/Topic	Chapter	Events and Submissions/Topic
Drugs with the potential to alter dental treatment	Haveles, E.B. (2016) Applied Pharmacology for the Dental Hygienist, 7th Ed. Part 3 - <i>Drugs that may alter dental treatment</i> , Mosby Elsevier.	

**Vacation Week - 17 Aug 2020**

Module/Topic	Chapter	Events and Submissions/Topic
vacation week	vacation week	

**Week 6 - 24 Aug 2020**

Module/Topic	Chapter	Events and Submissions/Topic
Prosthodontics appliances <ul style="list-style-type: none"> <li>Standards</li> <li>Types</li> <li>Prosthodontics Issues</li> <li>Maintenance</li> </ul>	Stefnac and Nesbit (2017) Diagnosis and Treatment Planning in Dentistry, 3rd Ed, p 61 - 71; 248-258, St Louis, Mosby.	

**Week 7 - 31 Aug 2020**

Module/Topic	Chapter	Events and Submissions/Topic
Drugs with the potential to alter dental treatment	Haveles, E.B. (2016) Applied Pharmacology for the Dental Hygienist, 7th Ed. Part 3 - <i>Drugs that may alter dental treatment</i> , Mosby Elsevier.	

**Week 8 - 07 Sep 2020**

Module/Topic	Chapter	Events and Submissions/Topic
History of Orthodontics: Importance influences around the globe Craniofacial and dental arch development Description of occlusion types <ul style="list-style-type: none"> <li>Angle's classification</li> <li>Andrew's Keys to Ideal Occlusion</li> <li>Aetiology and prevalence of malocclusions</li> </ul>		

**Week 9 - 14 Sep 2020**

Module/Topic	Chapter	Events and Submissions/Topic
Clinical records for an orthodontic assessment Intra and extra-oral assessment <ul style="list-style-type: none"> <li>Cephalometric analysis and tracing errors</li> <li>Tomography</li> <li>Tooth/arch analysis</li> </ul> Retention - life long controversy <ul style="list-style-type: none"> <li>Retainer types</li> <li>Third molars and their influence on tooth movement</li> </ul>		

**Week 10 - 21 Sep 2020**

Module/Topic	Chapter	Events and Submissions/Topic
Orthodontic treatment options <ul style="list-style-type: none"> <li>Appliance types/components and their indications</li> <li>Adhesives and impression types</li> <li>Tooth movement model</li> </ul> Root resorption and possible influences Care in orthodontic treatment <ul style="list-style-type: none"> <li>Toothbrushing technique</li> <li>Flossing with braces and retainers</li> <li>Managing demineralisation</li> </ul>		<b>Written Assessment</b> Due: Week 10 Friday (25 Sept 2020) 11:59 pm AEST

**Week 11 - 28 Sep 2020**

Module/Topic	Chapter	Events and Submissions/Topic
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Orthognathic surgery and its role in orthodontics and Sleep apnea - the growing treatment demands  
Dentofacial anomalies

- Frequently observed anomalies and their management
- Role of the orthodontist in the management team

#### Week 12 - 05 Oct 2020

Module/Topic	Chapter	Events and Submissions/Topic
Orthodontics in practice for the OHT		
• Instruments - their use and care		
• Photography		
• Impressions		
• Oral hygiene advice for the orthodontic patient		

#### Exam Week - 19 Oct 2020

Module/Topic	Chapter	Events and Submissions/Topic
		Online Assessment

#### - 26 Oct 2020

Module/Topic	Chapter	Events and Submissions/Topic
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## Term Specific Information

Due to COVID19, the teaching of the prosthodontics laboratory and orthodontics component will occur in an intensive module in February 2021.

## Assessment Tasks

### 1 Online Assessment Quiz

#### Assessment Type

Online Test

#### Task Description

All students must complete this assessment. This assessment is worth 60% of your final grade. A pass grade of 50% is required in order to pass the unit. The duration of this assessment is 135mins.

Your online assessment quiz is to be your own individual work and not a result of collaboration with other students. Any identified cases of potential collusion will result in a breach of academic integrity case being raised.

There are a number of support and technology mechanisms of which you need to be aware.

- If you experience any technical difficulties accessing or during the quiz, please contact TASAC (Moodle assistance option) on 1300 666 620.
- Notify the unit co-ordinator as soon as physically possible (same day) with details of the technical issues. If you are able, take a screenshot of any error message received and include that in your email to the unit co-ordinator.
- If you are unable to undertake the quiz at the set time and date you will need to apply for an extension in Moodle (in the support area on the top of the page and supply supporting documentation as per normal extension requests).

Assessment tasks submitted after the due date where an extension was not requested or where sound reasons were not given by the student for a late request are deducted a penalty of five percent or equivalent of the total available marks for the assessment for each calendar day (full or part) it is overdue. A reduced penalty will normally apply to extension requests submitted and accepted after the due date.

#### Assessment Due Date



Examination period at a time scheduled by the Unit Co-ordinator.

**Return Date to Students****Weighting**

60%

**Minimum mark or grade**

A minimum grade of 50% is required in this assessment item in order to pass the unit.

**Assessment Criteria**

No Assessment Criteria

**Referencing Style**

- [Harvard \(author-date\)](#)
- [American Psychological Association 7th Edition \(APA 7th edition\)](#)

**Submission**

No submission method provided.

**Learning Outcomes Assessed**

- Describe classes of malocclusion, treatment options and explain the reasons necessitating orthodontic treatment
- Describe the management of patients with fixed and removable oral prosthodontic appliances, including implants
- Integrate knowledge of basic pharmacokinetics and pharmacotherapy of the major classes of drugs used in dental treatment and drugs taken by children, adolescents and adult patients, relative to oral complications and alterations in dental management
- Communicate information regarding oral health to a range of patients

**Graduate Attributes**

- Problem Solving
- Critical Thinking
- Information Literacy

## 2 Written Assessment

**Assessment Type**

Written Assessment

**Task Description**

This written assessment is development of a personal clinical reference resource which will assist develop a deeper understanding of the application of pharmacology, medical conditions which impact of the delivery of dental treatment to clients of all ages, drugs used in dentistry, oral chemotherapeutic agents, and prosthodontics.

**Assessment Due Date**

Week 10 Friday (25 Sept 2020) 11:59 pm AEST

**Return Date to Students****Weighting**

40%

**Minimum mark or grade**

You must obtain at least 50% in this assessment task in order to pass the unit overall.

**Assessment Criteria**

This body of work is an individual summative assessment for ORAL12004, Term 2, Second year. The marking criteria will be available on Moodle at the beginning of the term.

This assessment is worth 40% of your final grade. A pass grade of 50% is required in order to pass the unit. It is to be your own individual work and not a result of collaboration with other students. Any identified cases of potential collusion will result in a breach of academic integrity case being raised. Assessment tasks submitted after the due date where an extension was not requested or where sound reasons were not given by the student for a late request are deducted a penalty of five percent or equivalent of the total available marks for the assessment for each calendar day (full or part) it is overdue. A reduced penalty will normally apply to extension requests submitted and accepted after the due date.

**Referencing Style**

- [Harvard \(author-date\)](#)
- [American Psychological Association 7th Edition \(APA 7th edition\)](#)

**Submission**

Online

**Learning Outcomes Assessed**

- Describe classes of malocclusion, treatment options and explain the reasons necessitating orthodontic treatment
- Describe the management of patients with fixed and removable oral prosthodontic appliances, including implants
- Integrate knowledge of basic pharmacokinetics and pharmacotherapy of the major classes of drugs used in dental treatment and drugs taken by children, adolescents and adult patients, relative to oral complications and alterations in dental management

**Graduate Attributes**

- Communication
- Problem Solving
- Critical Thinking
- Ethical practice

### 3 Orthodontic Practical Workbook

**Assessment Type**

Practical Assessment

**Task Description**

The orthodontic workbook includes practical competency tasks in orthodontics in the simulation laboratories and oral health clinic. Students with previous training and qualifications can apply to the unit coordinator for an exemption. Late submissions: marks will be deducted at a penalty of 5% or equivalent of the total available marks for the assessment for each calendar day (full or part) if it is overdue.

**Assessment Due Date**

The due dates for the workbooks will be clearly stated in the orthodontic workbook.

**Return Date to Students****Weighting**

Pass/Fail

**Minimum mark or grade**

50% - You must obtain at least 50% in this assessment task in order to pass the unit overall.

**Assessment Criteria**

The assessment rubrics for the practical competency tasks will be clearly stated in the workbook.

**Referencing Style**

- [Harvard \(author-date\)](#)
- [American Psychological Association 7th Edition \(APA 7th edition\)](#)

**Submission**

Offline

**Learning Outcomes Assessed**

- Demonstrate knowledge and skill in impressions for orthodontic purposes, deriving a correct cephalometric tracing, placing and fixing arch wires; and removing brackets, bands arch wire, modules, ligature wire, elastic and separating elastics using appropriate instruments, equipment and techniques
- Communicate information regarding oral health to a range of patients
- Satisfy the requirements of an evolving dental practitioner utilising appropriate interpersonal / team communication skills, professional attitudes and ethical behaviours.

**Graduate Attributes**

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

## 4 Prosthodontics Practical Workbook

### Assessment Type

Practical Assessment

### Task Description

The prosthodontics workbook includes practical competency tasks in prosthodontics in the laboratory. Students with previous training and qualifications can apply to the unit coordinator for an exemption. Late submissions: Marks will be deducted at a penalty of 5% or equivalent of the total available marks for the assessment for each calendar day(full or part) if it is overdue.

### Assessment Due Date

The due dates for the workbook will be clearly stated in the prosthodontic workbook.

### Return Date to Students

### Weighting

Pass/Fail

### Minimum mark or grade

You must obtain at least 50% in this assessment task in order to pass the unit overall.

### Assessment Criteria

The assessment rubrics for the practical competency tasks will be clearly stated in the workbook.

### Referencing Style

- [Harvard \(author-date\)](#)
- [American Psychological Association 7th Edition \(APA 7th edition\)](#)

### Submission

Offline

### Learning Outcomes Assessed

- Demonstrate knowledge and skills in clinical and laboratory procedures for impressions, study models, mouthguard and medicament trays
- Satisfy the requirements of an evolving dental practitioner utilising appropriate interpersonal / team communication skills, professional attitudes and ethical behaviours.

### Graduate Attributes

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

## 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