



## Course Outline

**Code: PUB210**

### **Title: Concepts of Epidemiology**

<b>School:</b>	Health & Sport Sciences
<b>Teaching Session:</b>	Semester 2
<b>Year:</b>	2020
<b>Course Coordinator:</b>	Dr Gabrielle Campbell Email: gcampbell@usc.edu.au
<b>Course Moderator:</b>	Dr Rachel Cole Email: rcole@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 course explores the science of epidemiology which is about understanding the distribution, patterns and determinants of health and wellbeing, and disease in populations. Knowledge gained from epidemiology is used to inform research, policy and practice decisions to protect and promote the health and wellbeing of the public. You will develop your knowledge about epidemiological concepts and study designs, and apply epidemiology skills to current and emerging public health issues.

##### **1.2 Course topics**

Introduction to epidemiological concepts; measuring and interpreting disease occurrence; descriptive and analytical study designs; linking exposure and disease; chance, bias and confounding; interpreting epidemiological literature; association and causation.

#### **2. What level is this course?**

200 level Developing - Applying broad and/or deep knowledge and skills to new contexts. May require pre-requisites and introductory level knowledge/skills. Normally undertaken in the 2nd or 3rd 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?

<b>Specific Learning Outcomes</b> On successful completion of this course you should be able to:	<b>Assessment Tasks</b> You will be assessed on the learning outcome in task/s:	<b>Graduate Qualities or Professional Standards mapping</b> Completing these tasks successfully will contribute to you becoming:
Apply concepts and measures of epidemiology.	Task 1: Online quizzes Task 2: Problem-based questions Task 3: Article critique	Creative and critical thinkers Empowered
Critique and interpret epidemiological studies.	Task 1: Online quizzes Task 2: Problem-based questions Task 3: Article critique	Creative and critical thinkers Ethical
Communicate epidemiological concepts and findings.	Task 2: Problem-based questions Task 3: Article critique	Creative and critical thinkers. 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

Nil

##### 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

Practice quizzes (weeks 2, 4, 6, 10) and a practice problem-based question (week 6) will provide you with formative feedback on your understanding of the content as the course progresses, that will be used to complete subsequent assessment tasks in this course.

### 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	Online quizzes	Individual	Total 20% (4 x online quizzes, 5% each) Formative online quizzes 0%	NA	4pm Friday of Weeks 3, 5, 7, 11 Formative: weeks 2, 4, 6, 10	Online Blackboard
2	Problem-based questions	Individual	Total 40% (1 x formative problem-based questions- 0%; Problem-based questions- 40%)	NA	Formative: Week 6  Summative: Friday Week 9 4pm	Online Blackboard  Summative: Blackboard
3	Article critique	Individual	Total 40%	1,500 words	4pm Friday, Week 13	Blackboard
			100%			

#### Assessment Task 1: Online quizzes (20%)

<b>Goal:</b>	To demonstrate your knowledge of epidemiology concepts and practice the skills introduced across weeks 1-10.
<b>Product:</b>	Online quizzes
<b>Format:</b>	The task consists of four online quizzes, worth 5% each. Each quiz consists of five randomly allocated multiple-choice questions, to help you to consolidate epidemiological concepts and to practice the skills. Further details on how to approach and complete the online quizzes will be available on Blackboard.
<b>Criteria:</b>	You will be assessed on your ability to: <ul style="list-style-type: none"> <li>• Demonstrate understanding of concepts of epidemiology, and</li> <li>• Conduct routine epidemiological calculations.</li> </ul>
<b>Generic skill assessed</b>	<b>Skill assessment level</b>
Information literacy	Developing
Critically thinking	Developing

#### Assessment Task 2: Problem-based questions (40%)

<b>Goal:</b>	To demonstrate your skills in critically appraising and applying epidemiological concepts to public health research, including interpretation of outcomes.
<b>Product:</b>	Problem-based questions
<b>Format:</b>	The task consists of a series of problem-based questions to which you are required to provide short answers, with, where applicable, clearly outlined steps for calculations and appropriate interpretation of findings. Further details on how to approach and complete the problem-based questions will be available on Blackboard.
<b>Criteria:</b>	You will be assessed on your ability to: <ul style="list-style-type: none"> <li>• Identify and calculate appropriate epidemiological measures</li> <li>• Analyse and interpret epidemiological data and study findings, and</li> <li>• Synthesise and present data from epidemiological analysis.</li> </ul>
<b>Generic skill assessed</b>	<b>Skill assessment level</b>

Information literacy	Developing
Problem solving	Developing

### Assessment Task 3: Article critique (40%)

<b>Goal:</b>	To demonstrate your skills in critiquing an epidemiological study published in the peer-reviewed literature.
<b>Product:</b>	Article critique
<b>Format:</b>	Critical assessment, using the knowledge and skills gained throughout the course, of a published peer-reviewed article which will be allocated to you (maximum 1,500 words response). Further details on how to approach and complete the article critique will be available on Blackboard.
<b>Criteria:</b>	You will be assessed on your ability to: <ul style="list-style-type: none"> <li>• Identify epidemiological characteristics of a study</li> <li>• Critically assess and interpret the effects of potential bias, confounding and error, and</li> <li>• Communicate the findings of an article critique.</li> </ul>
<b>Generic skill assessed</b>	<b>Skill assessment level</b>
Communication	Developing
Problem solving	Developing

## 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 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	2-hour Workshop Directed independent learning activities <a href="#">See Blackboard for details</a>

### 7.2 Course content

Week # / Module #	What key concepts/content will I learn?
Week 1	Introduction to epidemiological concepts
Week 2	Measuring disease frequency
Week 3	Measuring disease frequency II Descriptive epidemiology
Week 4	Study designs
Weeks 5 & 6	Linking exposure and disease
Week 7	Chance
Weeks 8 & 9	Bias

Week 10	Confounding
Week 11	Interpreting epidemiological articles
Week 12	Association and causation
Week 13	Course review

Please note that the course content may be subject to variation.

## 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
Webb, Bain & Page	2017	Essential Epidemiology: An introduction for students and health professionals	Cambridge University Press

### 8.2 Specific requirements

Nil.

## 9. Risk management

Health and safety risks for this course have been assessed as low.

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:

- The final mark is in the percentage range 47% to 49.4%
- The course is graded using the Standard Grading scale
- 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](mailto: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](mailto:studentwellbeing@usc.edu.au) or [accessability@usc.edu.au](mailto: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](mailto:studentcentral@usc.edu.au)