UOW COLLEGE AUSTRALIA

PATHWAYS TO UNIVERSITY OF WOLLONGONG

Diploma of Medical and Health Sciences

Course Code: 3136 Diploma of Medical and Health Sciences Fast Track (Domestic)

Year of issue: 2026

Course Outline

Contents

1 Course Description 1

2 Graduate Qualities 2

3 Course Learning Outcomes 2

4 Course Learning Outcomes Mapped to Graduate Qualities 3

5 Course Structure and Subjects 4

6 Subjects Mapped to Course Learning Outcomes 4

7 Progression Guidelines 6

8 Assessment 6

9 Quality Assurance 9

10 Subject Descriptions 10

11 Version Control Table 14

Diploma of Medical and Health Sciences Fast Track Course Outline

1 Course Description

The UOW College Australia (UOWCA) Diploma of Medical and Health Sciences Fast Track offers a comprehensive foundation in chemical and biological sciences where students gain an understanding of applied sciences, including the anatomical, molecular and physiological processes of human health and function. Students are provided with a range of learning experiences and opportunities in science discipline-based subjects which provide students with the experience of working in University of Wollongong (UOW) science laboratories.

The Diploma of Medical and Health Sciences Fast Track provides students with pathways for entry into the second year of the Bachelor of Medical and Health Sciences, the Bachelor of Nutrition Science, and the Bachelor of Exercise Science at UOW, with specified credit of up to 48 credit points for subjects in the compulsory core components of these degrees.

Diploma qualifications are located at level 5 of the Australian Qualifications Framework. The purpose of the Diploma qualification type is to qualify individuals who apply integrated technical and theoretical concepts in a broad range of contexts to undertake advanced skilled or paraprofessional work and as a pathway for further learning.

2 Graduate Qualities

The Diploma of Medical and Health Sciences Fast Track course is designed to assist students in developing the UOW College Australia Graduate Qualities. It helps students become:

1. **Informed:** Have a basic knowledge of an area of study and understand its issues. Know how to apply this knowledge.

2. **Independent Learners:** Begin to engage with new ideas and ways of thinking and critically analyse issues. Seek to extend knowledge through ongoing enquiry and active learning. Find and evaluate information, using a variety of sources and technologies. Acknowledge the work and ideas of others.

3. **Problem Solvers:** Demonstrate introductory levels of creative, logical and critical thinking skills to respond effectively to problems. Be flexible and thorough.

4. **Effective Communicators**: Articulate and convey ideas effectively using a range of media. Work collaboratively and engage with people in different settings.

5. **Responsible:** Understand how decisions can affect others and make ethically informed choices. Appreciate and respect diversity and act with integrity. Take responsibility for one's own learning and completion of assessment tasks.

3 Course Learning Outcomes

Graduates will be able to:

1. Demonstrate language and literacy skills in order to read, write, present and listen effectively at a tertiary level.
2. Demonstrate numeracy skills in order to interpret, understand and analyse information at a tertiary level.
3. Identify and discuss fundamental knowledge related to a range of medical and health sciences disciplines relevant to future university studies.
4. Professionally communicate health and science concepts in a range of health-related contexts.
5. Demonstrate effective teamwork skills in investigating and evaluating issues in health sciences.

4 Course Learning Outcomes Mapped to Graduate Qualities

The table below shows how the graduate qualities are integrated into the course learning outcome.

Course Learning Outcomes/Graduate Qualities	1. Informed	2. Independent Learners	3. Problem Solvers	4. Effective Communicators	5. Responsible
1. Demonstrate language and literacy skills in order to read, write, present and listen effectively at a tertiary level.		✓		✓	
2. Demonstrate numeracy skills in order to interpret, understand and analyse information at a tertiary level.	✓		✓		
3. Identify and discuss fundamental knowledge related to a range of medical and health sciences disciplines relevant to future university studies.	✓	✓		✓	
4. Professionally communicate health and science concepts in a range of health-related contexts.	✓			✓	✓
5. Demonstrate effective teamwork skills in investigating and evaluating issues in health sciences.			✓	✓	✓

5 Course Structure and Subjects

3136: DIPLOMA MEDICAL AND HEALTH SCIENCES FAST TRACK			
SESSION 1			
Subject Code	**Subject Name (*UOW Equivalent Subject Code*)**	**Credit Points**	**Contact Hours a Week**
DMHS100*	Human Structure and Function *(MEDI100)*	6	5
DMHS150	Fundamental Concepts in Nutrition *(MEDI150)*	6	4
DMHS160	Scientific Literacy *(MEDI160)*	6	4
DSCI106#	Foundation Chemistry: Properties of Matter *(CHEM104)*	6	6
Total Session 1		**24**	**19**
SESSION 2			
Subject Code	**Subject Name (*UOW Equivalent Subject Code*)**	**Credit Points**	**Contact Hours a Week**
DMHS112*	Introduction to Anatomy and Physiology II *(MEDI112)*	6	5
DMHS151	Healthy Ageing *(MEDI151)*	6	4
DSCI112	Molecules, Cells & Organisms *(BIOL103)*	6	6
DSCI110#	Foundation Chemistry: Reactions and Structures *(CHEM105)*	6	6
Total Session 2		**24**	**21**

#DSCI106 is a pre-requisite for DSCI110. Students must achieve a minimum result of 50% in DSCI106 before they are eligible to enrol in DSCI110.

*DMHS100 Human Structure and Function is a pre-requisite for DMHS112. Students must achieve a minimum result of 50% in DMHS100 before they are eligible to enrol in DMHS112.

Expected Course Workload

As a guide, the workload for your course is determined by the number of subjects you take each session. Attempting four subjects in a standard session is considered to be a fulltime load i.e. equivalent to working fulltime (35-45hrs a week).

Each subject in this course has designated contact hours where you are required to attend classes including lectures, tutorials, workshops or other structured learning experiences.

To be successful in this course you are also required to undertake independent learning activities outside of your scheduled classes, this includes:

- Preparing for classes: homework, readings and reviewing learning materials.
- Independently researching and/or practicing knowledge and skills.
- Completing all assessment tasks and studying for examinations.
- Attending learning support services.

6 Subjects Mapped to Course Learning Outcomes

Subject/Course Learning Outcomes	1. Demonstrate language and literacy skills in order to read, write, present and listen effectively at a tertiary level.	2. Demonstrate numeracy skills in order to interpret, understand and analyse information at a tertiary level.	3. Identify and discuss fundamental knowledge related to a range of Medical and Health Sciences disciplines relevant to future university studies.	4. Professionally communicate health and science concepts in a range of health-related contexts.	5. Demonstrate effective teamwork skills in investigating and evaluating issues in health sciences.
DMHS100 Human Structure and Function	✓		✓	✓	
DMHS112 Introduction to Anatomy and Physiology II	✓		✓	✓	
DMHS150 Fundamental Concepts in Nutrition	✓		✓	✓	✓
DMHS151 Healthy Ageing	✓		✓	✓	✓
DMHS160 Scientific Literacy	✓		✓	✓	✓
DSCI106 Foundation Chemistry: Properties of Matter		✓	✓	✓	
DSCI110 Foundation Chemistry: Reactions and Structures		✓	✓	✓	
DSCI112 Molecules, Cells & Organisms	✓		✓	✓	✓

7 Progression Guidelines

Course Progression Requirements

1. To qualify for the award of the Diploma of Medical and Health Sciences, students must achieve a minimum result of 50% for each subject.
2. DSCI106 Foundation Chemistry: Properties of Matter is a pre-requisite for DSCI110 Foundation Chemistry: Reactions and Structures. Students are required to achieve a minimum result of 50% in DSCI106 to enrol in DSCI110.
3. DMHS100 Human Structure and Function is a pre-requisite for DMHS112 Introduction to Anatomy and Physiology II. Students are required to achieve a minimum result of 50% in DMHS100 to enrol in DMHS112.
4. The Diploma is designed as a pathway into the second year of the following UOW degrees:
   - Bachelor of Medical and Health Sciences (1830)
   - Bachelor of Nutrition Science (1869)
   - Bachelor of Exercise Science (1868)
5. Students who complete all subjects in the Diploma, with a minimum result of 50% for each, will be eligible for admission to the second year of an eligible degree with up to 48 credit points for subjects in the compulsory core components of the degree. Please refer to the Credit transfer arrangements page for more detailed information - https://www.uowcollege.edu.au/courses-pathways/admissions-information/credit-transfer-arrangements/
6. Students may exit the Diploma course early and enter the relevant degree ('Accelerated Exit') if they meet conditions. Please refer to the UOW Admissions Procedures (Coursework) document for more detailed information.

   Note: Where a student has opted for Early Exit – Incomplete Award, they will not be eligible for the Diploma award until they successfully complete the outstanding equivalent subjects in their UOW degree. Once a student has completed the equivalent subjects at UOW, the student can submit an application for credit transfer directly to UOW College for the Diploma qualification to be awarded.

8 Entry Requirements

Entry requirements for this course can be viewed online at:

https://coursefinder.uow.edu.au/information/index.html?course=diploma-medical-health-ft-uow-college

9 Assessment

Students are required to complete a number and variety of assessment tasks related to their streams of study.

Each subject has a subject outline that is issued to students. Subject outlines contain a broad overview of subject objectives, an assessment schedule, a list of learning resources and a weekly topic outline. Subject outlines also contain an explanation of assessment components.

All assessment tasks with a weighting of 10% or greater contain clear marking criteria and an answer/marking guide.

All aspects of assessment are governed by Policy, Procedures and Guidelines, which can be viewed at: https://www.uowcollege.edu.au/support-resources/policies-procedures/

10 Quality Assurance

The College applies formal quality assurance processes to its design of courses and assessments. These processes include:

- Standardisation of course content and delivery in accordance with Subject Outlines.
- Mandatory inclusion of clear and appropriate marking criteria in assessment tasks.
- Moderation of marking of student assessment tasks to ensure that the assessment criteria have been applied consistently, and to address differences in judgement between individual markers.
- A regular schedule of audits on student assessment tasks using randomly selected samples of student work; and
- The use of feedback from students and teachers to inform continuous improvement of curriculum, delivery, policies and procedures.

11 Subject Descriptions

DMHS100 Human Structure and Function

This subject explores basic concepts of both structure (anatomy) and function (physiology) of the human body. The subject covers basic principles of anatomy and physiology in the areas of skeletal, joint, muscular, nervous, cardiovascular and respiratory systems. Teaching and learning will take place in lectures, laboratory (both actual and virtual) and tutorial settings using state of the art resources and online support.

DMHS112 Introduction to Anatomy and Physiology II

This subject provides a fundamental scientific basis for students undertaking study areas such as medical and health science, medicine, physical education, exercise science and rehabilitation, and radiation physics. In this subject, you will be exposed to a broad overview of the anatomy and physiology of the human body from both a “systemic” and “regional” approach. That is, the human body will be divided into its basic systems (e.g. sensory and gastrointestinal) and each system will then be studied as an integrated whole alongside other systems (regional). DMHS112 will introduce and extend knowledge of cell structure and function, the autonomic nervous system and special senses, the urinary, reproductive and gastrointestinal systems, lymphatics, endocrine function, metabolism and the immune system. The lecture series and online practical activities will provide you with a basic understanding of how each system functions from an anatomical and physiological perspective. It is important to understand that no single system functions in isolation. The lecture and practical activities compliment integrated learning of key systems in the human body from a functional and structural perspective.

DMHS150 Fundamental Concepts in Nutrition

This subject incorporates an overview of fundamental concepts in food and nutrition, as they relate to human health. This subject introduces students to the role of nutrition for health, including key components which may constitute a healthy diet, as well as methods to evaluate dietary intakes. Students will discuss the role of factors which may influence intake including interaction of biological, lifestyle and sociocultural aspects of human behaviour; changes in the nature of the food system; role of government and professional groups; and consumer interest.

DMHS151 Healthy Ageing

This subject examines fundamental principles of human movement, considers nutritional demands and exercise responses to encourage a healthy lifestyle and highlights common issues and chronic conditions that can compromise health throughout the lifespan.

DMHS160 Scientific Literacy

Scientific Literacy will introduce students to concepts and skills that are required to successfully undertake science-related undergraduate studies. The development of scientific literacy in students will also provide a foundation that will allow students to make use of scientific knowledge in real-world situations. Students in this subject will develop skills in: - Basic statistical analyses - Data presentation and interpretation - Oral and written communication especially in the context of scientific information - Searching scientific databases and retrieving various types of information from a variety of scientific sources - Evaluating the reliability of a source - Critical analysis of primary literature - Collaborative work - Peer assessment Students will also develop a general understanding of research design and how it impacts scientific conclusions.

DSCI106 Foundation Chemistry: Properties of Matter

The subject provides an introduction to core chemistry knowledge and skills as required for studies of biology and applied sciences. The subject incorporates explicit development of use of chemistry language, symbols and other representations, and the quantitative (numeracy, mathematical) skills required. The concepts include matter, introduction to atoms, ions and molecules, chemical nomenclature and quantities in chemistry; molecular scale concepts, electrons and the chemical bond, molecular shape, intermolecular forces; matter macroscale, the nature and properties of materials resulting from their molecular level character, with specific biological / polymeric / new materials-based examples. Concepts about changing matter follow, considering the energetics and rate of chemical change. The topics are presented in contemporary contexts exploring chemical phenomena and specifically designed for students without senior high school chemistry.

DSCI110 Foundation Chemistry: Reactions and Structures

The subject follows on from essential chemical principles studied in DSCI106 and provides a suite of compound groups and reactions types across inorganic and organic chemistry with application in contemporary contexts suited to the study of Biology and the applied sciences. The subject begins by applying the equilibrium concept in the context of dissolution / precipitation, acid base and redox reactions. The chemistry of transition metal complexes, especially as applied in biochemical and catalytic systems, is studied. The chemistry of non-metals, P, N, and S highlighting biological environmental and industrial contexts is studied. Organic chemistry is introduced via hydrocarbon structures and then functional groups and classes of reactions pertinent to biological systems are studied. The application of structure concepts and reaction types is used to understand the properties of natural and synthetic polymers. The topics are presented in contemporary contexts exploring structures and reactions and specifically designed for students without senior high school chemistry.

DSCI112 Molecules, Cells and Organisms

This subject is the study of molecules, cell and organisms fundamental to biology. This subject provides an introduction to the topic areas of cell biology, biochemistry, biotechnology, genetics, microbiology and immunology. During this subject you will look closely at the links between structure and function in cells and important biological molecules whilst investigating cellular division and mechanisms to control the cell cycle and prevent cancer. You will hear about techniques in genetic engineering and break throughs in biotechnology. You will learn about different microorganisms and their role in human, animal and/or plant health and explore the physiology of the immune system. Through engagement in group research projects you will develop skills in effective research and communication, teamwork, self-reflection and peer assessment whilst developing your digital literacy skills in presenting your research through PowerPoint (or similar tools) and generation of an electronic Portfolio.

12 Version Control Table

Version Control	Date Effective	Approved By	Amendment
1	17/12/2020	UOWCA Academic Board	Initial release – 2021 delivery
2	09/09/2021	UOWCA General Manager	Course title amended to include 'Fast Track'.
3	07/09/2022	UOWCA Academic Board	Updates to subject prerequisites Clarification of entry requirements and delivery sessions
2023_1.0	01/12/2022	UOWCA Education Committee	Minor Course variation – amend subject schedule New release 2023
2024_1.0	01/12/2023	No Change	New release 2024
2024_1.1	25/06/2024	Program Manager Academic	Update to the URL links
2025_1.0	03/01/2025	Program Manager Academic	New release 2025
2025_2	12/08/2025	Program Manager Academic	Update to Accelerated Exit information
2025_3	16/09/2025	Program Manager Academic	Administrative update
2025_4	12/11/2025	Program Manager Academic	Administrative update
2025_5	1/12/2025	Program Manager Academic	Administrative error update
2026_1	23/02/2026	Program Manager Academic	New release 2026