Module Descriptor

Title	Computer Aided Design for the Dental Team		
Session	2024/25	**Status**	
Code	NURS08XXX	**SCQF Level**	8 (Scottish Credit and Qualifications Framework)
Credit Points	20	**ECTS (European Credit Transfer Scheme)**	10
School	**Health and Life Sciences**		
Module Co-ordinator	Audrey Cund		

Summary of Module

Computer-Aided Design (CAD) plays a crucial role in modern dentistry, enabling dental professionals, including dental nurses, to design and create various dental appliances, prosthesis, and restorations with precision and efficiency.

By integrating CAD principles and techniques into dental practice, the dental nurse can design, plan, and fabricate a wide range of dental restorations and appliances with unparalleled precision and efficiency. This can enhance the quality of care provided to patients and the efficiency and profitability of a dental practice.

This module will develop the student dental nurse's skills in CAD software and intraoral scanning to create digital models, design dental restorations, and export files for fabrication.

It is fundamental that the student also has a detailed understanding of dental anatomy, tooth morphology and occlusion to ensure accuracy in CAD design. This module will develop this knowledge.

Module Delivery Method	**On-Campus**[1] ☐	**Hybrid**[2] ☒	**Online**[3] ☐	**Work -Based Learning**[4] ☐
Campuses for Module Delivery	☐ Ayr ☐ Dumfries	☐ Lanarkshire ☐ London	☐ Online / Distance Learning	

[1] Where contact hours are synchronous/ live and take place fully on campus. Campus-based learning is focused on providing an interactive learning experience supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus contact hours will be clearly articulated to students.

[2] The module includes a combination of synchronous/ live on-campus and online learning events. These will be supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus and online contact hours will be clearly articulated to students.

[3] Where all learning is solely delivered by web-based or internet-based technologies and the participants can engage in all learning activities through these means. All required contact hours will be clearly articulated to students.

[4] Learning activities where the main location for the learning experience is in the workplace. All required contact hours, whether online or on campus, will be clearly articulated to students

			☐ Paisley		☒ Other (specify) NCL Coatbridge campus.	
Terms for Module Delivery	Term 1	☐	Term 2	☒	Term 3	☐
Long-thin Delivery over more than one Term	Term 1 – Term 2	☐	Term 2 – Term 3	☐	Term 3 – Term 1	☐

Learning Outcomes	
L1	Relate dental anatomical and morphological features to CAD design.
L2	Create a digital dental impression using an intraoral scanner.
L3	Design a dental restoration using CAD software.
L4	
L5	

Employability Skills and Personal Development Planning (PDP) Skills	
SCQF Headings	**During completion of this module, there will be an opportunity to achieve core skills in:**
Knowledge and Understanding (K and U)	**SCQF 8** Specialist knowledge relating to dental anatomy and tooth morphology. Understanding of the processes in creating a digital impression using an intra oral scanner. Understanding of the processes in creating a dental restoration or appliance using CAD software.
Practice: Applied Knowledge and Understanding	**SCQF 8** Use a range of professional skills, techniques, and practices to develop a digital impression, restoration or appliance using digital software.
Generic Cognitive skills	**SCQF 8** Relate specialist knowledge of dental anatomy and tooth morphology to support CAD design.
Communication, ICT and Numeracy Skills	**SCQF 8** Use a range of specialist CAD software packages to develop a dental prosthetic component.
Autonomy, Accountability and Working with Others	**SCQF 8** Work, under guidance, with others to acquire an understanding of CAD software to produce a digital dental impression and dental prosthetic component.

Prerequisites	**Module Code**	**Module Title**
	Other All L7 modules (BSc Dental Nursing) must be complete	
Co-requisites	**Module Code**	**Module Title**

Learning and Teaching

In line with current learning and teaching principles, a 20-credit module includes 200 learning hours, normally including a minimum of 36 contact hours and maximum of 48 contact hours.

Learning Activities During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	**Student Learning Hours** (Note: Learning hours include both contact hours and hours spent on other learning activities)
Lecture / Core Content Delivery	8
Tutorial / Synchronous Support Activity	40
Independent Study	152
Please select	
Please select	
Please select	
TOTAL	200

Indicative Resources

The following materials form essential underpinning for the module content and ultimately for the learning outcomes:

Cortes, A.R.G. (2022) Digital Dentistry: A Step to Step Guide and Case Atlas Oxford: Wiley Blackwell

Hollins, C. Levison's (2017) Textbook for Dental Nurses 12th edn. Oxford: Wiley Blackwell

Riquieri, H. and Riquieri R.Y. (2019). Dental anatomy and morphology. Batavia: Quintessence Publishing

(N.B. Although reading lists should include current publications, students are advised (particularly for material marked with an asterisk*) to wait until the start of session for confirmation of the most up-to-date material)

Attendance and Engagement Requirements

In line with the Student Attendance and Engagement Procedure, Students are academically engaged if they are regularly attending and participating in timetabled on-campus and online teaching sessions, asynchronous online learning activities, course-related learning resources, and complete assessments and submit these on time.

For the purposes of this module, academic engagement equates to the following:

Where a module has Professional, Statutory or Regulatory Body requirements these will be listed here:

The University is committed to providing a supportive learning environment that actively facilitates student success. In this module, there is a high degree of student-led flexibility.

You are academically engaged if you are regularly engaged with scheduled live sessions on-campus and online, including engaging with online learning activities in your own time, course-related learning resources, and with timely completion and submission of assessments.

Whilst we understand that there may be times when conflicting priorities make participation challenging, for you to gain the most from this module it is recommended that you participate in all scheduled live classes and complete your self-directed learning activities in a timely manner. It may be difficult to pass the assessment associated with this module if you are not regularly engaging with the module work and live classes. We may check how things are going and offer support if we observe you have not been attending sessions or completing online activities.

Equality and Diversity
The University's Equality, Diversity and Human Rights Procedure can be accessed at the following link: UWS Equality, Diversity and Human Rights Code. This module is appropriate for all students. To promote inclusive practice, procedures and processes have been subject to Equality Impact Assessment where appropriate. In line with the Equality Act 2010 and UWS Refreshed Equality Outcomes 2021-2025 Public Sector Equality Duty Mainstreaming and Equality Outcomes Report 2021 (uws.ac.uk) (pp. 37-39) the School of Health and Life Sciences encourages the disclosure of support requirements, including disability, at the recruitment stage and throughout the duration of the module. Emphasis is placed on confidentiality of information, the benefits of disclosure and that no detriment to progress will be experienced. The School will endeavour to make reasonable adjustments to teaching and learning approaches and arrangements for assessment, and (when applicable) periods of placement, where a student has disclosed specific requirements.
(N.B. Every effort will be made by the University to accommodate any equality and diversity issues brought to the attention of the School)

Supplemental Information

Divisional Programme Board	**Please select**
Overall Assessment Results	☐ **Pass / Fail** ☒ **Graded**
Module Eligible for Compensation	☐ **Yes** ☒ **No** **If this module is eligible for compensation, there may be cases where compensation is not permitted due to programme accreditation requirements. Please check the associated programme specification for details.**
School Assessment Board	Community and Health
Moderator	Fiona Millar
External Examiner	Format: First initial + Surname. No titles. Please only enter if examiner has been approved for this module.
Accreditation Details	
Module Appears in CPD catalogue	☐ **Yes** ☐ **No**
Changes / Version Number	V1.0

Assessment (also refer to Assessment Outcomes Grids below)
Assessment 1
Portfolio. Pass mark 40%

Assessment 2
Assessment 3
(N.B. (i) Assessment Outcomes Grids for the module (one for each component) can be found below which clearly demonstrate how the learning outcomes of the module will be assessed. (ii) An indicative schedule listing approximate times within the academic calendar when assessment is likely to feature will be provided within the Student Module Handbook.)

Component 1							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
	☒	☒	☒	☐	☐	100	0

Component 2							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
	☐	☐	☐	☐	☐		

Component 3							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
	☐	☐	☐	☐	☐		
Combined total for all components						100%	hours

Change Control

What	**When**	**Who**