



**Trinity College Dublin**  
Coláiste na Tríonóide, Baile Átha Cliath  
The University of Dublin

# Summary of the Dental Science Programme 2017-18

**Prof. Derek Sullivan**  
ReFEEHS September 2017



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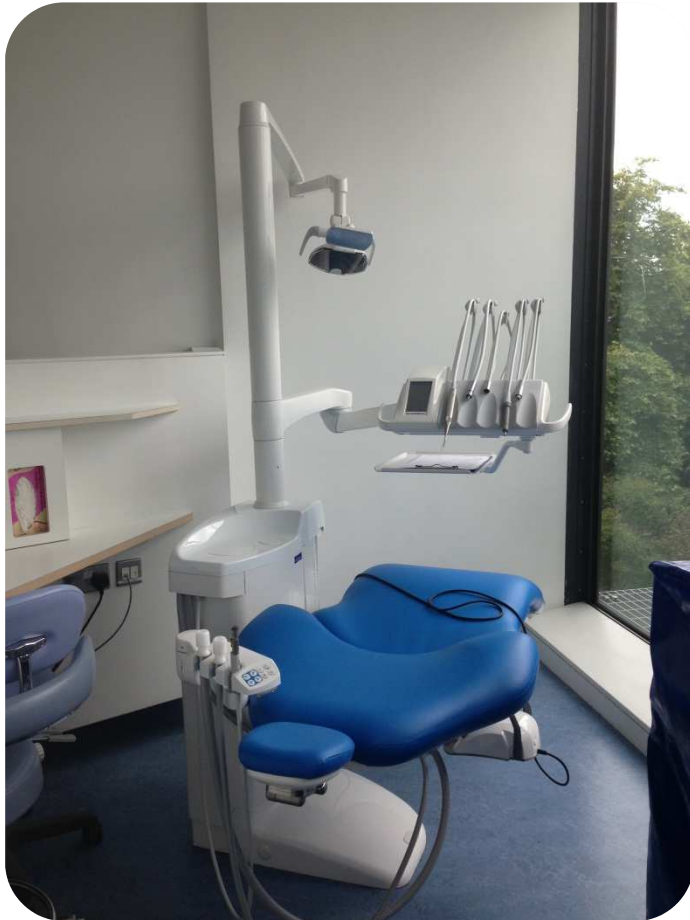
# Context of Dentistry in Ireland

- ❖ Population of Ireland is approx. 4.6 million
- ❖ Approx. 2,800 registered dentists
- ❖ There are two dental schools (Dublin and Cork)
- ❖ Dublin Dental University Hospital and School of Dental Science
- ❖ Provides training for all dental professions
- ❖ Intake 32 EU and 18 NEU
- ❖ 28 FT Academic Staff



# State-of-the-art Facilities

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- 3 Dental Clinics
- One dental chair per student
- No shared sessions
- 100,000 treatments/  
50,000 patients treated per year

# The School & Hospital provides training for all members of the dental team

1. National centre for all dental specialities
2. High degree of integrated teaching between specialities
3. Internationally recognised, research-active staff directly involved in all students teaching
4. Opportunities for students to engage with research and to continue into specialist training



# Dental Science curriculum

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- ❖ **Curriculum is 5,000 hours (40 weeks teaching)**
- ❖ **Spiral in structure with horizontal and vertical integration**
- ❖ **PBL-based teaching, but essentially a hybrid curriculum**
  - PBL
  - Lectures
  - Clinic sessions
  - Portfolios/logbooks
  - Clinical skills lab
  - Laboratory practicals
  - Projects/assignments/dissertation

# Summary of teaching methods

Year	PBL Tutorials	Clinic/Skills Lab	Lectures	Science practicals	Research Projects/ Dissertations	Case Presentations/ Case-based
Year 1	38%	4.5%	37%	25%		
Year 2	26%	50%	16%	7.5%		
Year 3	13%	73%	12%	2%		
Year 4	12%	70%	5%	2%	9%	2%
Year 5		92%	3%		2%	3%



# Experiential Learning







# Year 1 Modules

Module Code	Module Title	ECTS	Owner
DE1001	<b>Personal &amp; Professional Development</b> <i>Unit 1.1: Introduction to Clinical &amp; Academic Dentistry</i>	5	<b>Dr B Duane</b> <i>Dr B Duane</i>
DE1002	<b>Human Biology</b> <i>Unit 2.1: Microbiology, Physiology, Biochemistry Histology</i>	20	<b>Dr J. O'Sullivan</b> <i>Dr J O Sullivan Dr G Moran Dr H Reilly</i>
DE1003	<b>Physical Sciences</b>	15	Dr G Moran
DE1004	<b>Anatomy &amp; Dental Anatomy</b> <i>Unit 4.1: Dental Anatomy Unit 4.2: Anatomy</i>	20	<b>Dr G Moran</b> <i>Dr A Brazil Dr G Moran</i>

**380 contact hours - 6h Clinic; 11h skills lab**

# Year 1 assessments

Module Code	Module Title	Assessment Component (and Term)	Content Examined*
DE1A01	Dental Science Y1 Assessment Module 1	Integrated Exam Paper 1 (Michaelmas)	Anatomy, Dental Anatomy and Histology
		Anatomy Practical (Michaelmas)	Anatomy
		Integrated Exam Paper 3 (Hilary)	Anatomy, Dental Anatomy and Histology
		Anatomy Practical (Hilary)	Anatomy
DE1A02	Dental Science Y1 Assessment Module 2	Physics Practical (Michaelmas)	Physics
		Physics Paper (Hilary)	Physics
		Chemistry Practical (Michaelmas)	Chemistry
DE1A03	Dental Science Y1 Assessment Module 3	Integrated Exam Paper 2 (Michaelmas)	Material covered in lectures and problem-based learning tutorials
		Integrated Exam Paper 4 (Trinity)	Material covered in lectures and problem-based learning tutorials SAQS & 1 Scenario question examining material from the whole year, designed to test the student's ability to apply knowledge to specific situations.
		Multi-Station Practical (Trinity)	Anatomy, dental anatomy, tooth morphology, histology, communications and medical and dental history-taking, cross infection control, instrument identification and dental charting.
		PBL Tutorial (Continuous)	
		Total	

# Year 2 Modules

Module Code	Module Name	ECTS	Owner
DE2001	<b>Basic Dental Care</b> <i>Unit 1.1: Basic Dental Care</i> <i>Unit 1.2: Periodontal Therapy</i> <i>Unit 1.3: Occlusion &amp; Function</i> <i>Unit 1.4: Dental Radiology</i> <i>Unit 1.5: Dental Materials Science</i> <i>Unit 1.6: Endodontics</i>	30	<b>Dr P Hardy</b> <i>Dr P Hardy</i> <i>Dr D MacCarthy</i> <i>Dr P Hardy</i> <i>Dr A Bolas</i> <i>Dr G Fleming</i> <i>Dr H Duncan</i>
DE2002	<b>Human Biology II</b>	15	<b>Dr H Reilly</b>
DE2003	<b>Oral Biology &amp; Introduction to Pathology</b> <i>Unit 3.1: Microbiology &amp; Immunology in Oral Disease</i>  <i>Unit 3.2: Clinical Oral Physiology, Saliva Practical</i>  <i>Unit 3.3: Introduction to General Pathology</i>	10	<b>Prof D Sullivan</b> <i>Prof D Sullivan &amp; Dr Moran</i> <i>Dr M O'Sullivan &amp; Prof B O'Connell</i> <i>Dr M Toner &amp; Dr S Galvin</i>
DE2004	<b>Dental Public Health</b> <i>Unit 4.1: Dental Public Health</i> <i>Unit 4.2: Critical Appraisal of the Scientific Literature</i>	5	<b>Dr B Duane</b> <i>Dr B Duane</i> <i>Dr G Fleming</i>

**650 contact hours - 101 h clinic; 217 h skills lab**

# Year 2 Assessments

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In order to obtain credit and rise with the year a student must achieve all of the following:

- ❖ 50% of the annual total mark which includes the two integrated assessments, the laboratory practicals, the radiography continuous assessment and the continuous tutorial assessment.
- ❖ The satisfactory completion of all the competences for the year.
- ❖ The required level of clinical credits (60%)
- ❖ A satisfactory level of attendance.

# Year 2 Assessments

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End of Michaelmas term assessment =	30%
End of Trinity term assessment =	45%
Microbiology Practicals =	5%
Physiology Practicals =	5%
Biochemistry Practicals =	5%
Radiography Assessment =	5%
Continuous tutorial assessment =	5%
<b>Annual Total =</b>	<b>100%</b>

**A pass mark of 50% applies to all assessments except competences and credits**



# Year 3 Modules

DE3000	Course Administration Year 3	ECTS	Dental Studies
DE3001	<b>Fixed &amp; Removable Prosthodontics</b> <i>Unit 1.1: Fixed Prosthodontics &amp; Removable Prosthodontics</i> <i>Unit 1.2: Occlusion &amp; Function</i> <i>Unit 1.3: Edentulous State</i> <i>Unit 1.4: Dental Materials Science</i>	25	<b>Dr B Grufferty</b> <i>Dr P Hardy</i> <i>Dr B Grufferty</i> <i>Dr M O'Sullivan</i> <i>Dr B Grufferty</i> <i>Dr G Fleming</i>
DE3002	<b>Comprehensive Patient Care</b> <i>Unit 2.1: Integrated Patient Care</i> <i>Unit 2.2: Periodontal Therapy</i> <i>Unit 2.3: Special Care Dentistry</i> <i>Unit 2.4: Evidence Based Dentistry</i> <i>Unit 2.5: Radiology</i> <i>Unit 2.6: Smoking Cessation</i> <i>Unit 2.7: Communication Skills</i>	15	<b>Dr P Hardy</b> <i>Dr P Hardy</i> <i>Dr D MacCarthy</i> <i>Prof B Daly</i> <i>Prof B O'Connell</i> <i>Dr A Bolas</i> <i>Ms Y Howell</i> <i>Dr Brett Duane</i>
DE3003	<b>Clinical Medical Sciences</b> <i>Unit 3.1: Clinical Medical Sciences</i> <i>Unit 3.2: Pharmacology</i> <i>Unit 3.3: General Pathology</i>	20	<b>Dr S Galvin</b> <i>Dr S Galvin</i> <i>Dr M Lucitt</i> <i>Dr M Toner</i>

**778 contact hours - 351 clinic; 204 skills lab**

# Requirements for 3<sup>rd</sup> Year

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**In order to obtain credit and rise with the year a student must achieve all of the following:**

- 1. An overall pass mark (50%) for the cumulative total of the written and Special Care Dentistry components of assessment in the year as listed below.**
- 2. The pass mark for each of the two sections of the Trinity Term OSCE. The pass mark for each section will be standard set (must pass)**
- 3. An overall pass mark (50%) for the Occlusion & Function/Prosthodontics multi-station practical examinations (must pass)**
- 4. Satisfactory completion of all the competences**
- 5. The required level of clinical credits (60%)**
- 6. A satisfactory level of attendance**

# Assessment Year 3

## WRITTEN ASSESSMENTS

End of Michaelmas assessment	= 35% of annual total
End of Trinity term assessment	= 55% of annual total
Special Care Dentistry	= 5% of annual total
Continuous tutorial assessment	= 5% of annual total
<b>Annual total</b>	<b>= 100%</b>

## CLINICAL ASSESSMENTS:

Michaelmas Term Restorative Dentistry Multi-station practical  
Hilary Term Restorative Dentistry Multi-station practical  
Trinity Term OSCE (two sections must be passed).

# Year 4 modules

Module Code	Module Name	ECTS	Owner
DE4001	<b>Child Dental Health</b> <i>Unit 1.1: Paediatric Dentistry</i> <i>Unit 1.2: Orthodontics</i>	10	<b>Dr A O'Connell</b> <i>Dr A O'Connell</i> <i>Dr T McSwiney</i>
DE4002	<b>Advanced Restorative Dentistry I</b>	20	<b>Dr M O'Sullivan</b>
DE4003	<b>Comprehensive Patient Care</b> <i>Unit 3.1: Integrated Patient Care</i> <i>Unit 3.2: Periodontal Therapy</i> <i>Unit 3.3: Rotary Endodontics</i> <i>Unit 3.4: Dental Radiology</i> <i>Unit 3.5: Case Presentations</i>	10	<b>Dr P Hardy</b> <i>Dr P Hardy</i> <i>Dr D MacCarthy</i> <i>Dr H Duncan</i> <i>Dr A Bolas</i> <i>Dr P Hardy</i>
DE4004	<b>Dental Public Health</b> <i>Unit 4.1: Dental Public Health Research Projects</i> <i>Unit 4.2: Dental Public Health Update</i> <i>Unit 4.3: Evidence Based Dentistry</i> <i>Unit 4.4: Communications</i>	5	<b>Dr B Duane</b> <i>Dr B Duane</i> <i>Dr B Duane</i> <i>Dr B Duane</i> <i>Dr B Duane</i>
DE4005	<b>Oral Med, Oral Surgery &amp; Oral &amp; Dental Pathology I</b> <i>Unit 5.1: Oral Pathology</i> <i>Unit 5.2: Oral Surgery</i> <i>Unit 5.3: Oral Medicine</i>	15	<b>Dr C Healy</b> <i>Dr M Toner/E O'Regan</i> <i>Prof L Stassen</i> <i>Dr C Healy</i>

**892 contact hours – 576 clinic; 29 skills lab**

# Requirements for Year 4

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- 1. An overall pass mark (50%) for the cumulative total of the written and clinical components of assessment in the year.**
- 2. The pass mark in the OSCE in Trinity Term (which will be standard set).**
- 3. Satisfactory completion of the Reflective Portfolio in Restorative Dentistry & Satisfactory completion of the Reflective Portfolio in Oral & Maxillofacial Surgery, Oral Medicine & Oral Pathology and the log book in Orthodontics**
- 4. Satisfactory completion of at least three of the six core restorative clinical procedures and the competences in disciplines other than Restorative Dentistry.**
- 5. The required level (i.e. 60%) of clinical credits.**
- 6. A satisfactory level of attendance.**



# Assessment Year 4

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## WRITTEN ASSESSMENTS

End of Michaelmas term assessment	= 25%
End of Trinity term assessment	= 40%
Public Dental Health projects	= 10%
Continuous tutorial assessment	= 5%
<b>Annual total</b>	<b>=100%</b>

## CLINICAL ASSESSMENTS:

Reflective Portfolio in Restorative Dentistry = 20% of annual total  
Trinity Term OSCE must be passed

# Year 5 modules

Module Code	Module Name	ECTS	Owner
DE5001	<b>Public &amp; Child Dental Health</b> <i>Unit 1.1: Paediatric Dentistry</i> <i>Unit 1.2: Orthodontics</i> <i>Unit 1.3: Dental Public Health (update)</i>	10	<b>Dr A O'Connell</b> <i>Dr A O'Connell</i> <i>Dr T McSwiney</i> <i>Dr B Duane</i>
DE5002	<b>Advanced Restorative Dentistry II</b>	15	<b>Dr P Hardy</b>
DE5003	<b>Comprehensive Patient Care III</b> <i>Unit 3.1: Periodontal Therapy</i> <i>Unit 3.2: Integrated Patient Care Clinics</i>	10	<b>Dr P Hardy</b> <i>Dr D MacCarthy</i> <i>Dr P Hardy</i>
DE5004	<b>Oral Medicine, Oral Surgery &amp; Oral Pathology II</b> <i>Unit 4.1: Oral Surgery</i> <i>Unit 4.2: Oral Radiology</i> <i>Unit 4.3: Sedation &amp; Anaesthesiology</i> <i>Unit 4.4: Oral Medicine</i> <i>Unit 4.5: Oral Pathology</i>	15	<b>Dr C Healy</b>  <i>Prof L Stassen</i> <i>Dr A Bolas</i> <i>Dr M Clarke</i> <i>Dr C Healy</i> <i>Dr M Toner</i>
DE5005	<b>Evidence-Based Dentistry</b> <i>Unit 5.1: Dissertation</i> <i>Unit 5.2: Case Based Learning</i>	10	<b>Professor D Sullivan</b> <i>Professor D Sullivan</i> <i>Dr D MacCarthy</i>

**690 contact hours – 636 h clinic**

# Requirements for Year 5

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**To be admitted to the final examination, students are required by end of Hilary term:**

1. to have satisfactorily completed the designated competence tests
2. to have satisfactorily completed all three Reflective Portfolios (including the Patient Management Competence)
3. to have achieved the required level of clinical credits (i.e. 60%) in all areas,
4. to have satisfactorily completed the dissertation
5. to have satisfactory levels of attendance as required

# Final Examination

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**Four written papers in May**

**Three short answer question papers,**

- one from each Division (10 questions)

**One *integrated* scenario question paper**

- One question from each Division

**The breakdown of the marks for each division is as follows:**

Written assessment	50% (10 SAQs + 1 Scenario question)
Clinical examination	50% OSCE (D3), Seen/Unseen cases (D1), patient, portfolio (D2)

# Experiential Learning

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- ❖ **Almost all clinical training is in hospital environment**
  - ❖ Calibration/standardisation
  - ❖ Quality Control
- ❖ **Clinics mirror general practice**
- ❖ **Local Decontamination Unit**
- ❖ **Plans to develop access to external healthcare facilities**



# Accreditation

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- ❖ **Dental Council of Ireland**
- ❖ **All dentists must be registered**
- ❖ **All programmes must be accredited (e.g. Nursing, Hygiene)**
- ❖ **Accredited every 5 years**
- ❖ **Site visit – international panel (Canada)**
- ❖ **Extensive documentation and meetings with stakeholders**

# Challenges

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**Pressures from University to conform**

**Lack of understanding of requirements of clinical programmes**

**Trinity Education Project**

**Flexibility**

**Capstone**

**Modularisation**



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# Thank You



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