Dental Specialty Fellowship Examinations

Endodontics Exam Syllabus

The exam syllabus is drafted based upon the curriculum published by the GDC as well as the training syllabi drafted by the Specialty Advisory Committee (SAC) which includes elements for the exam as well as elements being covered in the workplace-based assessments.

The curriculum is drafted by the Specialty Advisory Committee (SAC) and the GDC for use from September 2024.

On application to sit the examination, candidates will be asked to self-certify that have sufficient knowledge of the learning outcomes noted in this syllabus to attempt the examination.

1. History Taking and Examination		**Curriculum REF 5.1**	
ES code	*Trainees should be able to:*	**SBA**	**SO**
1.1	Demonstrate and apply knowledge of the biology, anatomy and physiology of intra- and extra-oral structures and tissues in both health and diseased states.	X	X
1.2	Demonstrate understanding of the sequalae of congenital, developmental, and acquired conditions on the dentition and supporting tissues including the mechanisms and immunological response to infection.	X	X
1.3	Demonstrate knowledge of the principles underpinning a comprehensive patient history and examination of intra and extra oral tissues.	X	X
1.4	Evaluate the influence of intra- and peri-oral structures in both healthy and diseased states and compare the impact upon the aesthetics, function, and stability of the dentition and/or prostheses.	X	X
1.5	Evaluate information gained from the history-taking and examination to formulate appropriate treatment plans including the differentiation of urgent from non-urgent care for optimal patient care.	X	X

2. Clinical investigation and Imaging		Curriculum REF 5.2	
ES code	*Trainees should be able to:*	**SBA**	**SO**
2.1	Demonstrate and apply knowledge of the relevant biology, anatomy, and/or physiology to select appropriate clinical, radiological and histological investigations to investigate odontogenic and non-odontogenic orofacial conditions.	X	X
2.2	Apply understanding of the value, relevance, and limitations of clinical, special and radiological investigations used in endodontics including the sensitivity and specificity of tests/imaging including CBCT/MRI/crack detection tests/selective anaesthesia.	X	X
2.3	Interpret the findings of clinical, special and radiographic investigations and discuss the factors which may influence their interpretation.	X	X

3. Diagnosis and Development of treatment Strategies		Curriculum REF 5.3	
ES code	*Trainees should be able to:*	**SBA**	**SO**
3.1	Demonstrate and apply knowledge of the relevant biology, anatomy, physiology, pathology, microbiology, and technical requirements in relation to vital pulp management, non-surgical endodontic treatment and post-treatment endodontic disease.	X	X
3.2	Apply knowledge of the histopathology and microbiology of endodontic and non-endodontic conditions and correlate histopathological state of the pulp and peri-apical tissues with diagnostic information gained during history-taking and examination.	X	X
3.3	Classify and discuss variations or controversies in pulp and peri-radicular diseases, endodontic-periodontal lesions, longitudinal tooth fractures, dental resorption, dental trauma and oro-facial pain.	X	X
3.4	Discuss risk factors and potential complications for the various management strategies and suggest treatment outcomes in relation to healthcare systems and financial constraints.		X
3.5	Assimilate and synthesise information gained from the history, examination, clinical and special tests to arrive at diagnoses, based on knowledge of disease processes involved and presenting features.	X	X
3.6	Perform case selection based on risk assessment of various patient and tooth factors and compare probable outcomes with respect to oral health, medical history, patient compliance, quality of life, treatment complexity and maintenance.		X
3.7	Evaluate and select the most appropriate dental materials, equipment and techniques based on current best available clinical evidence.	X	X

3.8	Apply understanding of the roles of members of the multi-disciplinary team involved in the care of the patient and provide appropriate treatment plans for other clinicians to support the provision of specialist endodontic treatment.	X	X
3.9	Demonstrate knowledge of contemporaneous and comprehensive record keeping.	X	X

4. Health Promotion		**Curriculum REF 5.4**	
ES code	*Trainees should be able to:*	**SBA**	**SO**
4.1	Suggest preventive methods for the management of primary dental diseases and its complications with reference to local, national and international guidelines.	X	X
4.2	Demonstrate an understanding of the impact of oral and systemic disease on general health and the future prognosis of oral structures and survival of endodontically treated teeth.	X	X
4.3	Advise on the impact of primary diseases and oral health status on quality of life and apply motivational strategies for health behaviour change to facilitate supportive self-care and maintenance.	X	X
4.4	Plan and suggest appropriate treatment for common diseases and conditions of the dentition and oro-facial region including for medically compromised and special care patients as part of a muti-disciplinary team.	X	X
4.5	Apply an understanding of how to prevent infection during treatment procedures between patient and staff, and during transport of pathology specimens, materials and prostheses to the laboratory.	X	X

5. Pain Control and Management		**Curriculum REF 5.5**	
ES code	*Trainees should be able to:*	**SBA**	**SO**
5.1	Demonstrate and apply knowledge of the basic and clinical science of acute and chronic peri-oral pain conditions including the physiology of pain in relation to conditions of the teeth and oro-facial structures.	X	
5.2	Demonstrate and apply knowledge of the pathophysiology, microbiology and mechanisms of oro-facial conditions and peri-apical flare-ups.	X	X
5.3	Demonstrate knowledge of the primary and supplementary techniques for local anaesthesia of the pulp including the pharmacology, therapeutics and mechanisms of failed local anaesthesia.	X	X
5.4	Recognise and discuss procedures for the emergency management and/or referral of acute dental pain, spreading infection and sepsis including the pharmacology and therapeutics of analgesics and antimicrobials.	X	X

5.5	Apply an understanding of the assessment of, and factors that contribute to, the emergence of orofacial pain conditions and predict risks following management, potential outcomes, and impact on oral health and quality of life.	X	X
5.6	Suggest appropriate management for patient anxiety during endodontic treatment and surgery and recognise the need for inter-disciplinary care for dental, non-dental and chronic pain conditions.		X

6. Pulp Therapy		**Curriculum REF 5.6/7/8**	
ES code	*Trainees should be able to:*	**SBA**	**SO**
6.1	Demonstrate an understanding of the indications and procedures for caries management, vital pulp treatments, and regenerative endodontic treatments, including tissue regeneration/engineering.	X	X
6.2	Apply knowledge of the response of the dental-pulp complex to microleakage and restorative materials used in vital pulp treatments and recognise the limitations of diagnostic tests in assessing pulp status.	X	X
6.3	Suggest appropriate recall schedules and discuss features of a successful outcome for vital pulp treatments including management options in situations of treatment failure or uncertainty.	X	X
6.4	Discuss the restoration of teeth to function and aesthetics after pulp therapy treatment, considering patients' wishes, and medical and dental health.		X

7. Non-surgical Endodontic Treatment		**Curriculum REF 5.7**	
ES code	*Trainees should be able to:*	**SBA**	**SO**
7.1	Classify root canal anatomy including common variations and developmental tooth anomalies in relation to non-surgical endodontic treatment.	X	X
7.2	Demonstrate and apply knowledge of the clinical, radiological, and histological features of pulpal and periapical disease including the aetiology and pathophysiology of lesions of endodontic origin.	X	X
7.3	Demonstrate and apply knowledge of the indications, objectives, procedural risks, challenges and expected outcomes for non-surgical endodontic treatment and retreatment including prognostic factors.	X	X
7.4	Provide a rationale for the replacement/repair of existing coronal restorations.	X	X
7.5	Demonstrate and apply knowledge of materials for root canal preparation, irrigation, intracanal medicament, obturation, and temporary/interim restoration.	X	X

7.6	Demonstrate knowledge of approaches to working length determination, root canal preparation, irrigation, disinfection, intracanal medicament placement, and obturation.	X	X
7.7	Apply knowledge of the biomechanical properties of dentine, enamel and cementum and the deleterious effect of root canal treatment on tooth structure and existing restorations.	X	X
7.8	Demonstrate knowledge of the historic and modern criteria used to determine treatment outcome for non-surgical endodontic treatment including outcome monitoring and case failure.	X	X
7.9	Discuss controversies in endodontic practice.		X
7.10	Demonstrate and apply knowledge of the principles underpinning a thorough restorability assessment, including any occlusal, periodontal, aesthetic, prosthodontic, case complexity, tooth and patient factors.		X
7.11	Select and interpret appropriate radiographic imaging for planning and managing non-surgical endodontic treatment and retreatment.	X	X
7.12	Provide alternative options for management including extraction with/without replacement, or no treatment and monitoring, and their associated risks and limitations.	X	X
7.13	Identify the need for supplemental procedures such as root resection, hemi-section, and surgical repair of perforation/external cervical lesion.	X	X
7.14	Select appropriate instruments, techniques, and dental materials, based on clinical and radiological findings of the pulp space and root canal anatomy including for obturation of complex root canal systems.	X	X
7.15	Devise appropriate treatment strategies for cases covering a range of complexity and endodontic complications, including hypochlorite accident, instrument separation, ledging, canal transportation, perforation, and inter-visit/post-treatment flare-ups.	X	X
7.16	Advise on prognosis, analgesics, supportive treatments and monitoring/recall schedules to assess outcome, treatment failure and need for onward referral.	X	X

8. Non-surgical Endodontic Retreatment		**Curriculum REF 5.8**	
ES code	*Trainees should be able to:*	**SBA**	**SO**
8.1	Discuss the objectives, indications, procedure, risks and challenges of non-surgical endodontic retreatment.	X	X
8.2	Provide an appropriate rationale for radiological investigations, including cone beam computed tomography, in relation non-surgical endodontic retreatment.	X	X
8.3	Suggest techniques, materials, and approaches for the removal of root canal filling/obstructions and the negotiation and/or repair of procedural errors.	X	X

8.4	Demonstrate and apply knowledge of the principles underpinning a restorability assessment and determine the prognosis to help select and plan patient care.	X	X
8.5	Identify alternative options for management, and their associated risks and limitations.	X	X
8.6	Suggest techniques and appropriate materials for retreating cases of varying complexity that may include anatomical challenges, developmental abnormalities, dental resorption and complicating patient factors.	X	X
8.7	Suggest appropriate techniques to minimise the risk of procedural errors during retreatment and to manage endodontic complications.	X	X
8.8	Suggest appropriate outcome measures, aftercare including analgesics, supportive treatments, and appropriate monitoring/recall schedules to assess outcome, treatment failure and need for onward referral after endodontic retreatment.	X	X

9. Endodontic Surgery		**Curriculum REF 5.9**	
ES code	*Trainees should be able to:*	**SBA**	**SO**
9.1	Apply knowledge of the common causes for root canal treatment failure and related microbiology and pathology.	X	X
9.2	Weigh the indications and contraindications of endodontic surgery.	X	X
9.3	Demonstrate and apply knowledge of the characteristics of materials for endodontic surgery and guided bone/tissue regeneration.	X	X
9.4	Assess the implications of human health and disease, pharmacology, hypersensitivity, social and patient related factors including general health on endodontic surgery.	X	X
9.5	Demonstrate understanding of the relevance of human health and disease, pharmacology, hypersensitivity, social and patient related factors to endodontic surgery.	X	X
9.6	Demonstrate and apply knowledge of the biology of wound creation and healing.	X	X
9.7	Evaluate patient history and formulate diagnoses of the pulpal and periapical status of teeth, identifying the cause/s of failure of endodontic treatment.	X	X
9.8	Formulate appropriate treatment plans based on evaluation of clinical and radiological findings including alternative, non-endodontic management.	X	X
9.9	Demonstrate an understanding of surgical safety checklists to ensure confirmation of patient identity, medical history, surgical site, procedures to be undertaken, informed and valid consent, and access to imaging evidence.	X	X

9.10	Discuss effective nerve block and infiltration local anaesthesia, including the need for adequate haemostatic control.		X
9.11	Identify the need for oral, inhalation or intravenous sedation for case management and suggest appropriate use of analgesics, antibiotics, steroids as part of pre/post-operative management.	X	X
9.12	Select an appropriate mucoperiosteal flap design for adequate access to minimise scarring and gingival recession.	X	X
9.13	Select appropriate biocompatible materials for root-end filling and grafting for guided tissue/bone regeneration.	X	X
9.14	Suggest appropriate management for common complications of endodontic surgery and where appropriate, suggest referral to an oral and maxillofacial surgery department.	X	X
9.15	Demonstrate knowledge of the principles underpinning comprehensive clinical note taking in relation to the surgical operation and traumatic dental injuries.	X	X
9.16	Evaluate soft and hard tissue healing to assess the outcome of surgical treatment, including histopathological results, the need for further reviews, treatment, and/or onward management as appropriate where cases have failed or with uncertain outcomes.	X	X

10. Dental Traumatology		**Curriculum REF 5.10**	
ES code	*Trainees should be able to:*	**SBA**	**SO**
10.1	Demonstrate and apply knowledge of the relevant epidemiology, biology, and anatomy of the orofacial region necessary for the assessment of dental trauma.	X	
10.2	Diagnose and classify facial fractures, soft tissue injuries, dental resorption and traumatic dental injuries in both the primary and permanent dentition.	X	X
10.3	Demonstrate an understanding of the intraoral approaches to managing fractures of the facial skeleton.	X	X
10.4	Plan immediate, medium, and long-term management of cases taking into account the sequalae of traumatic dental injuries.	X	X
10.5	Demonstrate an understanding of the consequences of traumatic dental injuries to the primary and secondary dentition.	X	X
10.6	Demonstrate and apply knowledge of the consequences of dental trauma on the pulp-dentine complex including the biology of wound healing and tooth revascularisation.	X	X
10.7	Demonstrate and apply knowledge of the biomechanics of fracture fixation, limitation of non-physiological tooth movement and splinting.	X	X
10.8	Demonstrate and apply knowledge of the various modes of tissue healing of tooth and root fractures.	X	X

10.9	Recognise the limitations of tissue repair following the delayed presentation of/sub-optimal management/failure of dental traumatic injury management and formulate appropriate treatment plans.	X	X
10.10	Demonstrate and apply knowledge of the pathogenesis of internal and external resorption.	X	X
10.11	Suggest appropriate preventative advice for patients at risk of dental traumatic injuries.	X	X
10.12	Demonstrate an understanding of the assessment of patients presenting with dental traumatic injuries.	X	X
10.13	Identify and prioritise immediate and urgent cases, including those requiring onward referral.	X	X
10.14	Identify and interpret special tests and recognise their limitations following dentoalveolar trauma.	X	X
10.15	Select, justify, and interpret relevant 2D and 3D radiological images following dentoalveolar trauma.	X	X
10.16	Interpret clinical and radiological information to formulate treatment plans for the immediate, medium, and long-term management of dental traumatic injuries.	X	X
10.17	Evaluate the clinical restorability of fractured teeth including the need for minor surgical procedures when necessary.	X	X
10.18	Select appropriate and conservative strategies to preserve pulpal health in the secondary dentition.	X	X
10.19	Evaluate the risk of infection and prescribe local, intracanal or systemic antimicrobials where indicated, and the need for tetanus vaccination or re-vaccination.	X	X
10.20	Demonstrate an understanding of the psychological effects of dental traumatic injuries and the need for onward referral for psychological support.	X	X
10.21	Apply national and international guidelines to manage dental traumatic injuries.	X	X
10.22	Discuss the sequalae of dental traumatic injuries including the prognostic factors and treatment outcomes.		X
10.23	Identify suitable options for the replacement of teeth of hopeless prognosis and the inclusion of multi-disciplinary teamworking to facilitate rehabilitation.	X	X

11. Restoration of the Root-filled Tooth		**Curriculum REF 5.11**	
ES code	*Trainees should be able to:*	**SBA**	**SO**
11.1	Demonstrate an apply an understanding of the principles and practice of restoring root treated teeth.	X	X

11.2	Demonstrate and apply an understanding of the adverse effects of endodontic and restorative treatment procedures on tooth structure.	X	X
11.3	Assess teeth for restorability and select for endodontic treatment based on occlusal, periodontal, aesthetic, prosthodontic, case complexity and patient factors.	X	X
11.4	Assess teeth for endodontic treatment including the prosthodontic and periodontal status of teeth relevant to their endodontic management.	X	X
11.5	Weigh options available for definitive restoration upon completion of non-surgical endodontic treatment/retreatment to optimise coronal seal, occlusal stability, and aesthetics.	X	X
11.6	Identify when root canal treatment is indicated for teeth of poor restorability and suggest appropriate restorative management of such teeth.	X	X
11.7	Discuss pre-restoration procedures such as gingivectomy, crown lengthening, and deep margin elevation.		X
11.8	Select appropriate restorations and/or materials for endodontically treated teeth based on restorability requirements.	X	X
11.9	Suggest appropriate aftercare including OHI, diet advice and parafunction habits.	X	X

12. Interdisciplinary Interfaces		**Curriculum REF 5.12**	
ES code	*Trainees should be able to:*	**SBA**	**SO**
12.1	Suggest appropriate patient and endodontic treatment management for medically compromised patients.	X	X
12.2	Demonstrate and apply an understanding of the endodontic-periodontic interface.	X	X
12.3	Demonstrate and apply an understanding of the endodontic-orthodontic interface.	X	X
12.4	Demonstrate and apply an understanding of the endodontic--prosthodontic interface.	X	X
12.5	Demonstrate and apply an understanding of the indication and contraindication of pulp treatment in primary teeth and treatment outcome in relation to the endodontic-pedodontics interface.	X	X
12.6	Suggest appropriate management and multi-disciplinary team involvement for patients with special needs, complex dentoalveolar trauma, multiple idiopathic external cervical resorption and orofacial pain conditions.	X	X
12.7	Demonstrate holistic planning and management skills in dealing with teeth that are unrestorable and/or with uncertain prognosis.	X	X
12.8	Plan follow-up and oversight of long-term management of patients who have received endodontic care.	X	X

12.9	Weigh the advantages and disadvantages of interdisciplinary treatment options including the possible alternatives and potential complications, maintenance, and cost implications.	X	X

Version control

Version	Date	Changes made
1.0	9 November 2025	Document approved for publication.
1.1	16 March 2026	Preface text added including noting source material for the syllabus.
1.2	8 April 2026	Minor formatting and branding updates, no content changes.