

Syllabus and Specific Learning Objectives

&

GDC Development Outcomes

PG Cert Contemporary Restorative and Aesthetic Dentistry (Level I)



DAY 1

Periodontology Module “Contemporary Periodontics”

Tutorial and contemporary literature

- Course introduction and philosophy
 - Cosmetic, aesthetic or restorative, medico-legal and consent issues
 - Dental care in the UK, changing treatment patterns
- Current concepts in diagnosis and monitoring periodontal disease
- The rapid and comprehensive periodontal examination
- Co-diagnosis and patient motivation/conversion and communication
- Risk assessment and selling value in periodontics
- Perio: systemic interface
- GDP treatment of periodontal disease
 - Non-surgical, systemic antibiotics, local medicaments, photodynamic therapy, laser therapy, perio-flow – what is the evidence?
- Peri-implantitis-diagnosis and treatment options
- Periodontal stability

Hands on practical

- Periodontal restorative treatment planning exercises

Learning objectives

By the end of this session participants should have gained the following:

- An understanding of the current status of restorative and aesthetic dentistry in the UK and changing treatment patterns and future needs, including medio-legal aspects and consent
- An understanding of the BPE (basic periodontal examination), indices and the role of genetic and microbial testing in the diagnosis and monitoring of periodontal disease
- An appreciation of the role and methods of co-diagnosis in patient discussion, motivation and consent
- A system for rapid risk based periodontal examination
- An insight into current opinions on links with systemic health and how to discuss this with patients
- An understanding of evidence based current treatment options and what represents periodontal stability
- An understanding of what periodontal diagnostic and treatment protocols to introduce into your clinical practice
- An over view of peri-implantitis
- Experience of perio : restorative treatment options and planning

GDC Development Outcomes: A, C, D



DAY 2

Periodontal Module “Aesthetic and Surgical Periodontal Procedures”

Tutorial and contemporary literature

- The “Biologic Width Concept” current evidence
- Implications of the biologic width on aesthetic restorative procedures
- Surgical crown lengthening for the ‘gummy smile’, gingival asymmetry and clinical crown height
- Socket and soft tissue preservation techniques in aesthetic and implant dentistry
- Root coverage and soft tissue augmentation for aesthetics
- Aesthetic gingival masks for compromised cases
- The ovate pontic concept in aesthetic and implant dentistry
- Lasers or electro-surgery?

Hands on Practical

- Flap design and suturing techniques
- Surgical crown lengthening exercise
- Practical electro-surgery techniques

Learning objectives

By the end of this session participants should have gained the following:

- An understanding of the latest theories on the biologic width and why some patients experience recession/inflammation
- An understanding of how to access the biologic width and minimise aesthetic complications
- An understanding of surgical crown lengthening procedures for correction of gummy smile, asymmetry and clinical crown height/ferrule
- Practical experience of crown lengthening procedures and stages in clinical practice
- A knowledge of socket preservation and the ovate pontic technique for soft tissue handling in the aesthetic zone
- A knowledge of aesthetic periodontics including root coverage procedures and gingival masks
- An understanding of the role of lasers and electro -surgery in restorative and aesthetic procedures
- Practical experience of electro -surgery techniques in clinical practice

GDC Development Outcomes: C, D



DAY 3

Complex Treatment and Assessment Module

Tutorial and contemporary literature

Rapid and comprehensive risk based patient assessment

“The foundation for successful restorative, aesthetic and functional treatment”

- Periodontal
- Tooth based
- Occlusal/TMJ
- Aesthetic

The role of co-diagnosis in patient communication, care plan conversion and consent

- The role of the intra oral camera
- Models and information leaflets

The role of clinical photography

- The essential views required for restorative, aesthetic and occlusal planning
- Patient communication, conversion, medico-legal aspects and consent
- ‘Point and shoot’ or digital SLR
- Data handling and practice marketing

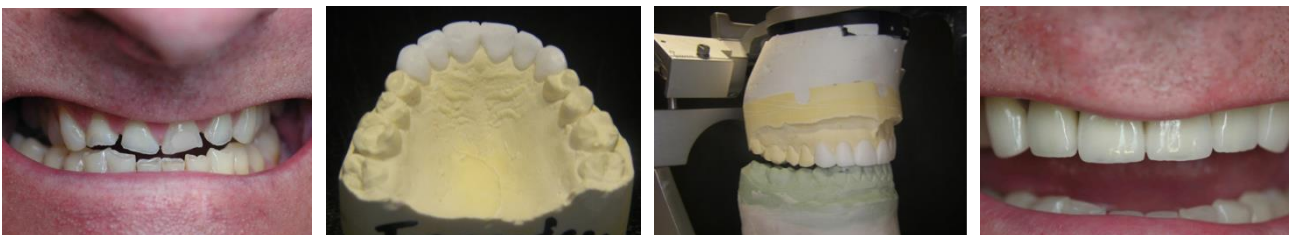
Hands on practical

- Hands on clinical photography practical
- Rapid and comprehensive risk based assessment practical

By the end of the session participants should have gained the following:

- An understanding of the role of comprehensive but rapid risk based patient assessment as the basis for successful clinical dentistry
- A system for rapid risk based patient communication
- The role of risk based patient assessment in increasing patient co-diagnosis and reducing complications
- An understanding of the importance of intra-oral cameras and clinical photography in contemporary dental practice
- An appreciation of point and shoot cameras versus digital SLR
- Knowledge of the important views required and their importance in aesthetic occlusal and restorative based treatment
- Practical experience of risk based treatment planning
- Practical experience of clinical photographic techniques

GDC Development Outcomes: A, C, D



DAY 4

Aesthetic Foundations Module

Tutorial and contemporary literature

Rules and tools in smile design/aesthetic planning

- The aesthetic assessment sheet/check list
- Facially related tooth position, the basis of aesthetic planning
- Clinical stages in the aesthetic case
- Colour and shade selection in dentistry
- Customising characterisation
- Value, translucency, surface texture, dentine shades
- Successful laboratory communication
- Selecting appropriate tooth value, shape and form
- Gingival porcelains
- Identifying the high risk aesthetic case

Hands on practical

Aesthetic examination practical

Shade taking exercise

- True shade
- Smile lite
- Laboratory prescription exercise

By the end of the session participants should have gained the following:

- Knowledge of how to undertake a risk based rapid, detailed aesthetic assessment and patient communication
- An understanding of the clinical stages (including consent) in the aesthetic: restorative case to increase aesthetic predictability
- Appreciate the role and limitations of cosmetic imaging
- Understand the role of colour, shade, value, translucency, surface texture, dentine shades and tooth form in shade matching and aesthetic dentistry
- Appreciate the role of customising characterisation and tooth form in successful shade matching and aesthetic dentistry
- Understand how to communicate colour, shade, value, translucency, surface texture, dentine shades and tooth form to the laboratory in clinical practice
- Understand the role of gingival porcelains in compromised aesthetic cases
- Practical experience of aesthetic assessment in clinical practice
- Practical experience of laboratory communication for shade, value, translucency, surface texture and dentine shading in aesthetic dentistry to improve clinical outcomes
- Practical experience of current shade taking devices
- Knowledge of how to identify and manage the high risk aesthetic case

GDC Development Outcomes: A, B, C, D



DAY 5

Aesthetic Foundation Module

Tutorial and contemporary literature

Treatment planning options in aesthetic and restorative dentistry

- Whitening, orthodontics, composite bonding, veneers or crowns?
- Minimally invasive (MI) treatment options
- Current concepts in whitening
 - Home, non-vital, power
 - Medico-legal and consent aspects
 - Techniques and maximising success
- The aesthetic and functional diagnostic wax up (the key to success)
- Porcelain veneers
 - From no prep to full coverage
 - Clinical preparation guidelines, temporisation and cementation in clinical practice
 - Use of 'prep through' guides and silicone indexes to biologically control preparation in clinical practice
 - Avoiding failure, patient selection, longevity and consent

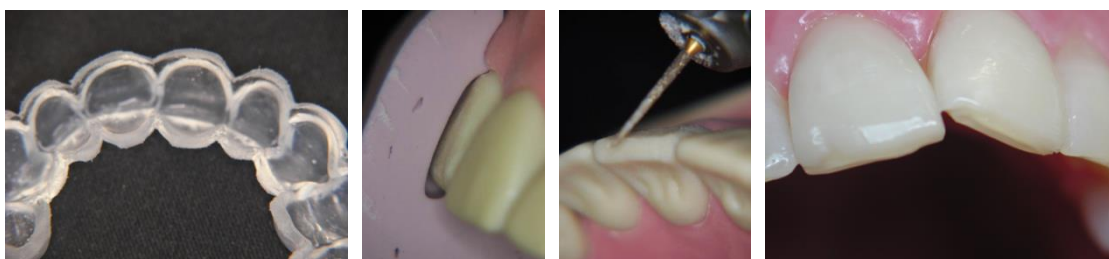
Hands on practical

- Veneer preparations
- 'Prep through' and silicone indexes

By the end of the session participants should have gained the following:

- Knowledge of the treatment options in restorative: aesthetic dentistry including whitening, orthodontics, composite bonding or indirect restorations including MI options and biologic cost
- An understanding of home, non-vital and power whitening
- Appreciate medico-legal aspects, consent and maximising success in whitening
- Understand the role of the diagnostic wax up as the key to functional and aesthetic success
- An understanding of how to use 'prep through' and silicone indices to minimise tooth removal in clinical practice
- An understanding of how to temporise veneers and undertake predictable veneer bonding in clinical practice
- An appreciation of the risk factors for veneer failure, patient selection and consent issues in clinical practice

GDC Development Outcomes: A, C, D



DAY 6

Anterior and Posterior Aesthetics Module

Bioclear Method Level 1 – Techniques for modern anterior composite dentistry

Tutorial and contemporary literature

- Bioclear Method background and method
- Minimally invasive dental techniques
- David Clark Matrix selection and adaptation
- Heating and injection molding of composite materials
- Biofilm removal
- Clark 2-step Polish technique
- Clark Class III cavity design with radius/infinity margin
- Injection molding for Class III restorations
- Black triangle closure/treatment
- Reshaping undersized teeth
- Treatment of peg laterals

Hands on practical

- Cavity design including the infinity edge margin in clinical practice
- Anatomic David Clark matrix selection and adaption in clinical practice
- Injection moulding composite technique in clinical practice
- Rock Star 2 step polish
- Anterior deep class III caries in clinical practice
- Treatment of Black Triangles in clinical practice
- Diastema closure and reshaping of undersized peg lateral teeth

By the end of the session participants should have gained the following

- An understanding of the Bioclear method including anterior cavity design using the infinity margin, injection moulding, and the 2-step Bioclear polish technique in clinical practice
- Be able to restore deep anterior cavities using the David Clark matrices and Bioclear method in clinical practice
- Be able to treat black triangle disease using the David Clark matrices and Bioclear method in clinical practice
- Be able to close diastemas using the David Clark matrices and Bioclear method in clinical practice
- Be able to reshape undersized teeth using the David Clark matrices and Bioclear method in clinical practice

GDC Development Outcomes: A, C, D



DAY 7

Anterior and Posterior Aesthetics Module

Bioclear Method Level 2 – Introduction to Posterior Composites

Tutorial and contemporary literature

- Modern science of durable posterior composite
- Prevention of white lines and visible margins in composites
- David Clark Matrix selection and adaptation
- Heating and injection molding of composite materials
- Biofilm removal
- Clark 2-step Polish technique
- Clark Class II cavity design
- Injection molding for interproximal Class II restorations
- Modernize G. V. Black cavity design to Clark Modern Composite Restoration

Hands on practical

- New science of strong posterior restorations and teeth
- Marginal design and prevention of white lines or visible margins in composites
- Minimally invasive Clark Class II restoration with injection molding
- Anatomic Clark matrix selection and adaption
- Calla Lily preparation – a tooth reinforcing preparation
- Achieving rock solid contacts with rounded, floss friendly embrasures.
- Rock Star 2 step polish

By the end of the sessions participants should have gained the following;

- An understanding of the Bioclear method including posterior cavity design, injection moulding, and the 3-step Bioclear polish technique in clinical practice
- Be able to select correct anatomical matrix in clinical practice
- Understand the Calla Lily preparation in clinical practice
- Demonstrate excellent contact points in clinical practice

GDC Development Outcomes: A, C, D



DAY 8

Anterior and Posterior Aesthetics Module

Tutorial and contemporary literature

- Selection of contemporary crown and bridge materials in clinical practice
 - E.max and Zirconia
 - Conventional metal ceramic and gold
 - Composite materials
 - Chair-side and laboratory provisional restorations

Hands on practical

- Use of preparation indices
- E.max preparations
- Zirconia preparations
- Metal ceramic preparations
- Full veneer gold preparations

Learning objectives

By the end of the session participants should have gained the following:

- Be able to understand current crown and bridge materials and their indications and limitations in their use
- Be able to undertake successful all ceramic, metal ceramic, gold crown and bridge preparations in clinical practice
- Be able to undertake successful short term and long term provisional restorations in clinical practice
- Be able to select the appropriate material and recognise the inherent risks in currently available materials in clinical practice

GDC Development Outcomes: C, D



DAY 9

Anterior and Posterior Aesthetics Module

Tutorial and contemporary literature

- Direct or in-direct restoration
- Inlay/onlay or crown?
- Successful core techniques for vital/non vital teeth
- Successful post systems
- Contemporary bridge techniques
 - Successful adhesive bridges (metal and zirconia based)
 - Large span bridges
 - Fixed moveable bridges for angulation difficulties
 - Coping bridges for poor prognosis abutments

Minimising failure in fixed prosthodontics and aesthetic dentistry

- Mechanical and biologic factors in failure
- Appropriate abutment selection
- Pulpal protection and the Pashley technique
- The importance of particle abrasion
- Predictable impression techniques and material selection
- Current recommendations in cement choice
- Core/post materials and techniques
- Patient and laboratory factors in failure
- Importance of the ferrule effect

Hands on practical

- Inlay and onlay preparation techniques and temporisation
- Adhesive bridge techniques

Learning objectives

By the end of the session participants should have gained the following:

- Be able to appropriately select an inlay, onlay or crown in clinical practice
- Appreciate current aesthetic and functional core and post materials and techniques for vital and non-vital teeth
- Be able to undertake successful adhesive bridge techniques in clinical practice
- Understand advanced bridge techniques including large span, coping and fixed moveable bridges
- Appreciate how to minimise complications and failure in fixed prosthodontics in clinical practice
- Be able to assess risk in abutment selection in clinical practice
- Be able to select appropriate cements in clinical practice
- Be able to undertake predictable accurate impressions
- Be able to undertake inlay and onlay preparations and predictable temporisation in clinical practice
- Appreciate the importance of and how to achieve the ferrule effect in clinical practice

GDC Development Outcomes: C, D



DAY 10

Occlusion Module (Participants will require a set of study models of their own mouth for this session).

Tutorial and contemporary literature

- Features of the 'ideal occlusion' and the rapid clinical occlusal examination
- Articulators and facebows – why, which system and when to use?
- Mounting models on the articulator
- Occlusal analysis of study models

Hands on Practical

- The facebow record
- Mounting models on the articulator
- Occlusal analysis

Learning Objectives

By the end of the session participants should have gained the following:

- An understanding of the features of the 'ideal occlusion' and how to examine the occlusion in clinical practice
- An understanding of the role of articulators in restorative and aesthetic dentistry
- Knowledge of the features of articulators for restorative and aesthetic dentistry
- An understanding of the facebow transfer and its importance
- Be able to undertake an accurate facebow record in clinical practice
- Be able to mount study models on the articulator in clinical practice
- Be able to undertake an occlusal analysis in clinical practice

GDC Development Outcomes: C



DAY 11

Occlusion and Complex Treatment Module

Tutorial and contemporary literature

- Successful occlusion for the GDP
- Comprehensive risk based rapid examination of the oro-facial muscles and joints
- Diagnosis of occlusal/TMJ disorders
- Current concepts in the treatment of occlusion/TMJ disorders (including bruxism)
- Role of splints in restorative dentistry and occlusion/TMJ disorders (including bruxism)
- Clinical aspects of centric relation
- When to conform to or reorganise the occlusion

Complex Treatment and Assessment Module

Tutorial and contemporary literature

- Save or extract?
- Endodontics or implant?
- Preventative strategies for caries, tooth surface loss and periodontal disease

Hands on practical

- Restorative/aesthetic diagnostic and treatment planning exercises

Learning objectives

By the end of the session the participants should have gained the following:

- An understanding of the principles of successful occlusion for the GDP
- Be able to rapidly assess occlusal/TMJ disorders and recognise their importance in clinical practice
- Appreciate current evidence based concepts in the treatment of occlusal/TMJ disorders (including bruxism)
- Understand the role of splints (anterior deprogrammer, flat plane, soft bite guard and restorative) in occlusal/TMJ disorders (including bruxism)
- An appreciation of when to conform to the existing occlusion or reorganise in clinical practice
- Understand the importance of centric relation as the foundation for the reorganised approach in clinical practice
- An appreciation of risk analysis in deciding saveable, questionable or teeth that require extraction in clinical practice
- An appreciation of when to endodontically treat or progress to implant treatment and risk factors for endodontic/implant treatment
- An understanding of current evidence based preventative strategies for caries, tooth surface loss and periodontal disease and be able to implement these into your clinical practice
- An understanding of restorative/aesthetic diagnostic and treatment planning exercises

GDC Development Outcomes: C



DAY 12

Complex Treatment Module

Tutorial and contemporary literature

- Marketing the advanced aesthetic practice
- Structured risk based patient consultation and case presentation

Advanced treatments

- Tooth surface loss
 - Aetiologies
 - Localised tooth surface loss
 - The Dahl appliance
 - Generalised tooth surface loss
 - Diagnosis
 - Composite, indirect onlays and overdentures
 - Assessing risk 'parafunction' or 'erosion'
- Aesthetic partial dentures
 - Role of attachments
 - Predictable attachments for the GDP; copings and locators

Hands on practical

- Restorative/aesthetic diagnostic and treatment planning exercises

Learning objectives

By the end of the session participants should have gained the following:

- An understanding of internal marketing methods and attracting new patients to your practice
- An appreciation of the risk based patient consultation consent/communication and case presentation for new patients
- An understanding of the aetiologies of tooth surface loss and importance in predicting prognosis in clinical practice
- The treatment of localised tooth surface loss and 'The Dahl concept' in clinical practice
- An understanding of the role of direct composite, onlays and overdentures in the treatment of tooth surface loss in clinical practice
- An understanding of the role of aesthetic dentures in partially dentate patients
- An understanding of predictable precision attachments in restorative dentistry
- An understanding of restorative/aesthetic diagnostic and treatment planning exercises

GDC Development Outcomes: A, B, C, D



DAY 13

Complex Treatment Module

Tutorial and contemporary literature

- The orthodontic, aesthetic, restorative, functional interface
- GDP orthodontics; clear aligners, short term, comprehensive specialist and lingual orthodontics
 - What can GDP's treat and what should specialists treat?
- Aesthetic, restorative aspects of Implantology
- Course summary – “putting it all together”

Hands on practical

- Restorative/aesthetic diagnostic and treatment planning exercises

Learning objectives

By the end of the session participants should have gained the following:

- An understanding of the indications and limitations of clear aligners, short term orthodontics, lingual and comprehensive orthodontics in clinical practice
- An appreciation of the aesthetic and functional benefits of orthodontics and aesthetic/functional adjunctive role in restorative aesthetic dentistry
- An understanding of indications/contraindications to implants in clinical practice
- An understanding of the aesthetic aspects of Implantology in clinical practice
- An appreciation of restorative aspects of Implantology in clinical practice
- An understanding of restorative/aesthetic treatment planning exercises
- An appreciation of when to refer in clinical practice

Please note days may vary due to lecturer availability/availability of course materials

GDC Development Outcomes: B, C, D

