



The City of Liverpool College

**University
Centre**

Higher Education Programme Handbook 2023-24

Open University Validated Programmes



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|---------------------------|--|
| School: | Health, Social Care, Sport and Public Services |
| Name of Programme: | Foundation Degree in Dental Technology |
| Programme Leader: | Chris Fielding |
| Contact Number: | 0151 252 4833 |
| Contact Email: | Chris.Fielding@liv-coll.ac.uk |

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My College

Please make sure you log-on to the College website www.liv-coll.ac.uk and access 'MY COLLEGE' which will provide you with lots of information about being a student at The City of Liverpool College. You can find information about all the areas listed below.

- Membership cards and personal safety
- Working from home
- Student Help Centre
- Enrichment programmes
- Student Webmail
- Office 365
- Mental Health support
- E-safety
- Learning Resource Centres
- Learning Support
- Finance and welfare advice
- Careers guidance
- Counselling, Health & Wellbeing service
- Student representatives & Student Union
- English and Maths
- Childcare
- Safeguarding and Prevent

Information, HE Policies and Procedures

- Terms and Conditions
- Tuition Fees, Course Cancellation & Refunds Policy
- Admissions Policy
- Compliments, Comments and Complaints Policy
- Student Charter
- Student Protection Plan
- Higher Education Structure & Communication Lines
- Code of Behaviour and Disciplinary Policy
- HE Attendance and At Risk Policy
- Academic Integrity Policy
- Appeals Against Assessment Decisions
- Fitness to Study Policy
- Safeguarding Policy
- Extensions and Mitigating Circumstances

This list is not exhaustive, for the complete list of HE Policies and Procedures, please either visit the [HE Student Handbook](#) section of the College VLE or visit The City of Liverpool College website: <https://www.liv-coll.ac.uk/study-at-the-college/higher-education/he-policies-and-procedures/>

A complete list of The City of Liverpool College Policies and Procedures is also available via: <https://www.liv-coll.ac.uk/the-college/college-policies/>

Welcome from the Principal



Welcome to the City of Liverpool College University Centre!

Becoming a City of Liverpool College student gives you access to specialist facilities and award-winning tutors who bring with them a wealth of knowledge and industry experience. It also opens doors to real employers who want our students in their future workforce. We offer a high quality academic experience and unique opportunities for progression as a result of our strong links with industry and partnerships with other higher education institutions. You can expect a student experience that is grounded in outstanding teaching and learning but tailored to meet your needs as an individual.

It isn't all about work: we're home to a diverse range of individuals that come together as one college community. You will have access to a thriving Student Union and a range of extra-curricular opportunities, with our student engagement team providing support not only for college wide social events but also support for those who want to develop their own business ideas and ambitions.

Thank you for making the City of Liverpool College University Centre your higher education provider of choice. Be assured that you have joined a community where you will be respected, challenged and supported to succeed, and the contribution you make will be recognised and valued.

Best wishes,

Elaine Bowker
Principal and Chief Executive

Welcome from the Dean of CoLC University Centre

I am delighted to welcome you to the City of Liverpool College University Centre!

Our University Centre offers a higher education experience that centres are you! This means small learning groups, access to specialist facilities and great support from your knowledgeable and industry-experienced tutors.

The network of support we offer in all things learning, finance and well-being related will help you to flourish and achieve your full potential. We're looking forward to supporting you during your learning journey this year, and beyond!

Katherine Davey
Dean of University Centre

College Calendar

The College calendar is yet to be confirmed for 2023-24.

| | |
|--|--|
| AUTUMN TERM | Monday 12 September – Friday 16 December 2022 |
| Higher Education Classes Commence | Monday 12 September - Thursday 20 October 2022 |
| College Closed | Friday 7 October 2022 |
| Staff Development Day | Friday 21 October 2022 |
| Half Term | Monday 24 October – Friday 28 October 2022 |
| Classes Recommence | Monday 31 October – Friday 16 December 2022 |
| College Closed | Monday 19 December – Monday 2 January 2023 |
| Staff Development Day | Tuesday 3 January 2023 |
| SPRING TERM | Wednesday 4 January – Thursday 30 March 2023 |
| Classes Commence | Wednesday 4 January – Friday 10 February 2023 |
| Half Term | Monday 13 February – Friday 17 February 2023 |
| Classes Recommence | Monday 20 February – Thursday 30 March 2023 |
| Staff Development Day | Friday 31 March 2023 |
| Spring Break | Monday 3 April – Friday 14 April 2023 |
| College Closed | Thursday 6 April 2023 <i>College Closure</i> |
| | Friday 7 April 2023 <i>Good Friday</i> |
| | Monday 10 April 2023 <i>Easter Monday</i> |
| | Tuesday 11 April 2023 <i>College Closure</i> |
| SUMMER TERM | Monday 17 April – Friday 30 June 2023 |
| Classes Commence | Monday 17 April – Friday 26 May 2023 |
| College Closed | Monday 1 May 2023 <i>May Day</i> |
| Half Term | Monday 29 May – Friday 2 June 2023 |
| College Closed | Monday 29 May 2023 <i>Bank Holiday</i> |
| Classes Recommence | Monday 5 June – Friday 30 June 2023 |
| CoLC Open University Assessment Board | Tuesday 20 June 2023 |
| CoLC Open University Re-sit Assessment Board | Wednesday 6 September 2023 |

Student Charter

The student charter sets out the standards of service HE students can expect from the City of Liverpool College, University Centre and what the City of Liverpool College, University Centre expects from HE students.

The City of Liverpool College, University Centre is committed to providing the following support:

- High standards of teaching, support, advice and guidance.
- Access to activities that will enhance employability and personal development.
- Regular continuing professional development for its staff.
- Opportunities for student feedback and participation in academic development and programme management, including elections of representatives.
- Access to counselling and advice on: health and welfare, finance and careers.
- Access to library and IT facilities.

The City of Liverpool College, University Centre is committed to provide students with the following up to date and accurate information on:

- Course and module content, assessment, delivery and resources. Course and module specifications and handbooks will include assessment requirements with deadlines and timeframes.
- Handbooks and specifications will be displayed on the Virtual Learning Environment.
- Assessment regulations, academic guidance and support, appeals and complaints procedures and relevant policies and procedures including professional requirements will be accessible on the Virtual Learning Environment.
- Course costs, payment options and deadlines information will be available for all higher education programmes.

The City of Liverpool College, University Centre expects our students to:

- Treat staff and their fellow students equally and respectfully.
- Attend induction, participate in timetabled classes, attend meetings and tutorials, engage with self-directed and online learning, etc.
- Obtain agreement of their School, in advance, for any essential absences.
- Take responsibility for managing their own learning: actively engaging in their course; ensuring they spend sufficient regular time in private study and participating fully in group learning activities.
- Submit assessed work by stated deadlines, actively participate in feedback.
- Make prompt payment of charges made by the Institution.
- Support course representatives and participate in the system which will lead to improvements in the quality of learning and teaching.
- Respect the physical environment of the institution, including accommodation and behave respectfully.

The Students' Union undertakes to:

- Support all students to ensure they receive equal treatment and are aware of their rights and responsibilities.
- Support student participation in quality enhancement activities - especially through the election, development and training of course representatives.
- Assist students with academic and welfare problems.
- Represent the interests of students at local and national level.
- Support active student/community engagement.
- Provide a range of athletic and social clubs and societies to enhance personal and professional development.

Introduction to the Foundation Degree in Dental Technology

The Foundation Degree in Dental Technology is a three-year, part-time course that has been developed and built to match the requirements of dental technicians, employers, professional bodies, and also meet the statutory regulator's requirements for recognition of the higher technical skills required by modern dental technicians. These are steps needed to gain the knowledge, understanding and competence students will require to develop as a Dental Care Professional (DCP).

The Foundation Degree recognises the practical skills training provided by a 'workplace mentor' in one of the disciplines of dental technology, and formal credit will be given for the developed competence and integration with other members of the dental team.

This programme is intended to provide students with an opportunity to develop the knowledge, understanding and real work-based competence to effectively operate as a dental technician and also to register with the General Dental Council (GDC) as a dental technician.

The knowledge and skills acquired on the programme link directly to the vocational context and diversify into a range of skills required by the dental manufacturing industries. These include (but are not exclusive to) Removable Prosthodontics, Fixed Prosthodontics and Removable Orthodontics and business and enterprise competence.

Teaching and Learning methods include formal lectures and seminars which underpin the creative and technical practical workshop-style sessions with relevant historical and cultural reference.

Practical modules take place in the laboratory environment with tutor support and guidance, and extra independent learning sessions timetabled to allow access to specialist equipment and resources. Specialist skills such as CAD/CAM are developed.

Within the course, there is opportunity for students to attain a level of professional practice. Strong links to the GDC and other dental programmes facilitate industry-related briefs and real scenarios that provide an opportunity for students to acquire professional work ethics, time planning skills and working within a dental laboratory. Learning is supported through a series of external manufacturers and suppliers who give hands-on training in any new technologies as they are introduced.

The Foundation Degree in Dental Technology is validated by The Open University.

Course Team Structure

Teaching staff in 2022-23 are detailed below. For 2023-24, staff details will be confirmed at the start of the academic year.

| Staff Name | Contact Number | Email | Position |
|----------------|----------------|-------------------------------|--------------------------|
| Chris Fielding | 0151 252 4833 | Chris.Fielding@liv-coll.ac.uk | Program Leader, Tutor |
| Lynn Borthwick | 0151 252 3343 | Lynn.Borthwick@liv-coll.ac.uk | Tutor |
| Joanne Gerrard | 1051 252 4833 | Joanne.Gerrard@liv-coll.ac.uk | Support Technician |

Personal Tutor

Tutorials are an important component of your course. If you are on a full-time programme you will be allocated a Personal Tutor. Your Personal Tutor will have an overview of your progress in college and will support you throughout your course.

Your Personal Tutor will meet with you to carry out individual progress reviews, set targets and provide you with support, advice and guidance.

Talk to your Personal Tutor at any time if you have any difficulties. Many important aspects of university life, such as help with study skills and making applications to employers, are dealt with in the tutorial. The Personal Tutor is your main point of contact.

Other key contacts

| Team | Contact Details |
|------------------------------------|--|
| Higher Education Team | HEOffice@liv-coll.ac.uk |
| Higher Education Achievement Coach | HEcoach@liv-coll.ac.uk |

External Examiner

An External Examiner is appointed for every programme validated by the Open University, to ensure the quality assurance of the programme's academic standards.

The main responsibilities of an External Examiner are:

- To approve the form and content of all assessments contributing to an award, to make sure that the aims and learning outcomes of the programme are being tested fairly and to the required standards.
- To monitor any amendments to assessment tasks to accommodate disabilities so that they are fair and there is parity in the level of assessments.
- To sample students' work (usually anonymously) to make sure the assessment criteria have been interpreted correctly and that there is uniformity of assessment across the cohort.
- To attend all board of examiners meetings.

The External Examiner for the Foundation Degree in Dental Technology:

Christopher Parker – Associate Lecturer in Dental Technology and General Dental Council (GDC) DCP FtP Panel Member and DCP Assessor.

Facilities and Services

Emergency Numbers

Should your family need to contact you in case of an emergency, please ask them to call the office of the centre you attend. Alternatively, call the College Information line on **0151 252 3000**.

| Centre | Postcode | Phone Number |
|--------------------------------------|----------|---------------|
| The Learning Exchange, Roscoe Street | L1 9DW | 0151 252 3772 |
| The Arts Centre, Myrtle Street | L7 7JA | 0151 252 4368 |
| Vauxhall Road | L3 6BN | 0151 252 4846 |
| Clarence Street | L3 5TP | 0151 252 3220 |
| Duke Street | L1 5BG | 0151 252 3914 |

IT Service Desk

If you experience any IT issues or require help with your log-in details, contact: helpdesk@liv-coll.ac.uk

Learning Resource Centres (LRCs)

Learning Resource Centres (LRCs) are quiet spaces within the College campus where you can catch up with your studies. They offer a selection of up-to-date resources related to your course, including textbooks, journals and e-resources, and there is always a team of friendly, knowledgeable staff on hand to help you find what you need.

The LRCs house over a hundred computers across all centres, each equipped with Internet access and Office 365, where computer time can be booked in advance – even from home! There is also access to Wi-Fi and an ample supply of charging ports for devices such as phones and laptops.

LRCs are accessible throughout the academic year, including during half terms and holidays.

Opening hours during term time are as follows:

Monday: 08:30am – 19:00pm
Tuesday – Thursday: 08:30am – 17:00pm
Friday: 08:30am – 16:30pm

Specialist Facilities

The department has access to modern industry standard teaching laboratories which include analogue and digital Computer-Aided Design and Manufacturing (CAD/CAM) and 3D Printing. Each student has a work station including ergonomic seating, hand piece, compressed air, dust extraction, daylight spectrum lighting, Bunsen burner and power supply.

The College Virtual Learning Environment (VLE)

With the Virtual Learning Environment (VLE) you have access to vast amount of learning resources, self-directed learning, Study Plus Courses (e.g. for Study Skills, e-Resources and referencing help) and the HE Student Handbook, which contains HE policies and regulations.

You can access the VLE via: <https://www.liv-coll.ac.uk/staff-student-resources/>



Study Plus – Self-directed study skills courses can be accessed via: <https://lrc.liv-stu.co.uk/category/study-plus/>

Attendance and Punctuality

All students must recognise that good attendance and punctuality will maximise achievement and enhance not only their learning experience but also develop their employability skills. Students who arrive late disrupt their own learning and that of others. High expectations of attendance and punctuality will be required by future employers and therefore we need our staff to set and enforce high expectations for attendance and punctuality. We strive to achieve a minimum attendance rate of 90%. Students who fail to achieve this level of attendance are advised that they are at a risk of underperforming or failing the programme and they are supported as “At Risk” students as specified in the [HE Attendance and ‘At Risk’ Policy](#).

Students Must...

- Ensure they attend all sessions on their course and arrive before the start of the sessions properly equipped and prepared.
- Make medical and other appointments, including driving lessons in their own time (unless there is a medical emergency).
- Not take on work commitments that clash with time at college.
- Understand that persistent, non-justified lateness and/or absence means they are in danger of not achieving their award.
- Commit to completing outstanding work as a result of lateness and/or absence, with support as appropriate.
- Use the VLE to access appropriate materials.

Programme Structure

Year 1

| Module Code | Module Title | Credits | Semester |
|-------------|-----------------------------------|---------|----------|
| DT1401 | Dental Anatomy 1 | 15 | 1 |
| DT1402 | Professional Practice 1 | 15 | 2 |
| DT1403 | Introduction to Dental Technology | 30 | 1-2 |

Year 2

| Module Code | Module Title | Credits | Semester |
|-------------|--------------------------------|---------|----------|
| DT2404 | Dental Materials | 30 | 1-2 |
| DT2405 | Work Based Practice A | 30 | 1-2 |
| DT2506 | Dental Technology Techniques 1 | 30 | 1-2 |

Year 3

| Module Code | Module Title | Credits | Semester |
|-------------|------------------------------|---------|----------|
| DT3507 | Professional Practice 2 | 15 | 1 |
| DT3508 | Dental Anatomy 2 | 15 | 2 |
| DT3509 | Work Based Practice B | 30 | 1-2 |
| DT3510 | Dental Technology Techniques | 30 | 1-2 |

Induction arrangements

All students will receive a welcome pack on enrolment with full details about their timetable, accessing the College systems and arrangements for induction to their course.

Tips for successful completion of the course

- Take notes during the lessons
- Ensure your attendance at all times is above 90% (aim for 100%).
- Make use of the VLE.
- Read around each subject.
- Develop your relationship with your workplace mentor.
- Take every opportunity to try something new in your workplace, it's a career not a job!
- Build up your own personal dental instrument toolkit.
- Ask for advice before you act if unsure.
- Ensure you comply with the GDC's 'Student Fitness to Practice' regulations: https://www.gdc-uk.org/docs/default-source/guidance-for-students/student-professionalism-and-fitness-to-practise-guidance-for-students.pdf?sfvrsn=5ddbc404_2

Opportunities for Personal Development Planning

Each of the modules you study are designed to encourage personal development, such as organisational skills, communication skills and professional attributes. You have opportunities throughout the course to develop your individual interests or specialism.

You will have opportunities throughout the year to meet with careers advisors and the work placement team and to participate in workshops that support your personal development and career planning. This includes gaining work experience, preparing CVs or applications and developing entrepreneurship.

You may also want to get involved with the Students' Union, who offer a range of opportunities to boost your skills and experience through short courses, volunteering opportunities, and the Student Parliament.

Opportunities Upon Completion of the Programme

Graduates of the Foundation Degree in Dental Technology have moved onto senior roles as managers in dental laboratories or after gaining further experience opened their own dental laboratories.

Other career pathways students have followed include, Maxillofacial technology, technical educators, Prosthetics and Orthotics, Equine Dentistry, and dental materials scientist. Registered Dental Technicians with a specialism in Removable Prosthodontics can do further training to become a Clinical Dental Technician.

Enrichment to your Programme

Throughout the course you will be made aware of additional training and personal development activities, these may include invitations to trade shows, professional body student membership, regulator news and guest speaker.

Students will also receive copies of The Dental Technologist magazine and the Dental Technician magazine when available.

Student membership of the Dental Technologists Association is also made available.

Professional Organisations

For the Foundation Degree in Dental Technology, standards are set by the General Dental Council:

<https://www.gdc-uk.org/professionals/ftp-prof>

Full guidance for students is available here:

<https://www.gdc-uk.org/professionals/students-and-trainees>

The Dental Technologists Association represents dental technicians and students.

<https://www.dta-uk.org/>

Equipment, Materials and Additional Costs

A MINIMUM toolkit to include:

- Wax knife
- Ash 5
- LeCron wax carver
- Plaster Knife
- Spatula
- Selection of acrylic burs.

It is beneficial to develop your personal toolkit to include additional specialist tools will be needed in each year, such as Orthodontic Pliers and Porcelain Brushes.

- Lab coat
- Course file ring binder with subject dividers, note pad, Pens, highlighters, coloured pencils, rubber, ruler, etc.
- Scientific calculator
- Memory stick

Health and Safety

If you see anything in or around the College which is a hazard and may cause somebody harm, please report it immediately to your course tutor.

All students who are doing any practical work **MUST** wear a lab coat or protective apron. Students are expected to wear health and safety equipment (PPE) as instructed by the lecturer taking the class.

It will be appreciated that most items of machinery and equipment are potentially dangerous and must be treated with caution.

These items must be recognised as hazards and students should strictly observe all instructions given to them in respect of safety and other matters. Students must not use any machinery or equipment if they have not been instructed in its use.

Students are reminded under the Health and Safety at Work Act (1974), they are required to behave responsibly at all times and to avoid endangering their own safety and that of others.

The relevant tutor will discuss specific safety instructions applicable to workshops, laboratories and general buildings with you on your first timetabled lesson in that environment.

A brief summary of main requirements follows:

Admittance - Students may not work without a member of staff present and only after prior instruction in the use of equipment. Unauthorised work is not permitted.

Personal Belongings - Coats, hats and bags are a trip, fire and evacuation hazard and are to be stored in the designated area.

Eye Protection - Safety glasses must be worn during cutting and polishing of any material, when melting metals, mixing fluids, using acids, adhesives and solvents and during wire bending procedures. They must be worn when using power tools such as grinding machines and handpieces.

Hair Safety - Loose hair is a hazard when using handpieces rotating laboratory equipment and Bunsen burners. Students may be requested to tie hair back and secure it.

Fashion Jewellery - Large or loose-fitting items of jewellery and/or fashion accessories are hazardous to the wearer and must be removed before working.

Gloves - Suitable protective gloves are provided for various procedures and are worn accordingly.

Laboratory Coats - During practical sessions a lab coat is worn to protect against irritant dusts, hot waxes, splashes and spills. It will also cover those imported fabrics or fashion materials which are not flame proof.

NO LAB COAT = NO PRACTICAL

Footwear - Hazards such as dropping sharp or heavy objects, spilling hot or irritant substances, and slipping, demonstrate that protective and suitable footwear should be worn at all times in the laboratory.

First Aid and Reporting - First Aid boxes and Injury Report books are held within the **Accidents** laboratory. All forms of injury and/or allergic reaction must be reported.

Dust, Fumes and Vapours - Dust and fume extract systems must be used when necessary. Note that bench fitted units are for dry dusts only. When use in numbers these systems create excessive noise and heat. Switch off when not in use to reduce noise, fatigue and improve concentration.

Irritants and Spillage - Replace container tops when not in use. Any spillage of liquids, gels or powders must be dealt with immediately and safely. Protect skin and respiratory system from Mercury, Monomer and Electrolytes. Care is to be taken with boiling water and during boiling-out' procedures.

Bunsen Burners - Turn off when not in use. Unprotected flames are dangerous. Monomer and Polymer must not be used near flames.

Eating and Drinking - Food and drink are not permitted within the laboratories. Drinking water and canteen facilities are in close proximity.

Handpieces & Instruments - Where appropriate regularly oil handpieces and check for smooth operation. Always remove drills and burs when not in use. Handle and store laboratory tools with care. Maintain a clean and tidy working area.

Defects - Report unserviceable equipment, damaged gas, air, water pipes or other potentially dangerous situations at once. Do not attempt repairs to College equipment. REPORT all faulty equipment to the Support Technician.

Personal Radios - These are not permitted during classes as they often obstruct necessary communication within teaching laboratories. Loose wires are also a hazard.

Visitors - Visitors require supervision and safety concerns should be raised where necessary.

Fire and Evacuation

*In the event of fire, know the location and type of nearest extinguisher.

*Turn off equipment.

*Follow exit routes indicated by green signs.

*Remain in the appropriate assembly area unless instructed otherwise.

Workstations - Before leaving the laboratory at the end of a practical session all benches must be scraped and left clean. All Bunsen burners must be turned off. Compressed air line pressure should be reduced to Zero. The surrounding floor area must be scraped and swept.

Conclusion - At all times bring any safety concerns to staff.

For more information follow the link below:

<https://my.liv-stu.co.uk/information-for-students/general-policies/health-safety/>

Covid-19 Measures

The City of Liverpool College is committed to following all government guidance throughout the Covid-19 pandemic and will also be taking our own additional measures to keep students and staff safe. This guidance is always evolving but some measures we will be taking include:

- Guidance for all students and staff on how to stay safe and keep others safe.
- Ensuring those with symptoms of Covid-19 understand that they should not attend college under any circumstances.
- Social distancing measures, where possible, in place across college sites.
- Hygiene protocols and distancing/directional signage around centres which all students and staff will be asked to adhere to. Safety measures will also be in place in teaching spaces, LRCs and social areas to ensure you can access them safely.

Work Experience and Careers Advice and Guidance

The University Centre will ensure that students receive advice and guidance and gain the relevant skills to ensure successful progression into employment or to enhance students' skills to improve long-term career prospects. A range of services and resources are made available to HE students that are based on the following agreed key principles.

Key Principles:

1. **Strong links with employers are established** to inform the HE curriculum development and review in order to ensure relevance, validity, and currency of the programme.
2. **Employer involvement with the provision of careers advice and guidance** is made available to all HE students.
3. **The embedding of employability within the HE curriculum** is implemented through the development of relevant skills, knowledge and work-relevant learning and assessment.
4. **Opportunities for work-based learning** are made available and accessible and/or work placements in addition to real-life projects and assessments.
5. **Work placement, employment and internship opportunities information and support** is made available to students.
6. **Support for development of enterprise and business start-up related skills and knowledge** is made available to all HE students.
7. **The role of professional, statutory, and regulatory bodies** (PSRBs) in embedding academic and professional standards within the curriculum is evidenced within the approval and validation processes of HE programmes.

The Work Experience Team can offer students support, advice and guidance about work experience and work-related activities whilst on their course at The City of Liverpool College, University Centre. The team has links with local employers and businesses and promotes the benefits of taking on a student for work experience within their organisation. By gaining valuable work experience, students can experience the world of work and enhance their personal and employability skills whilst building up their CV.

The Careers Advice and Guidance Team can help students with:

- Career planning
- Preparing CVs, applications and *LinkedIn* profiles
- Finding post-graduate courses
- Applying for graduate schemes
- Job searching tips
- Developing enterprise skills or setting up a business.

The Careers Advice and Guidance Team supports students by:

- Offering one-to-one guidance meetings
- Offering advice that is right for each individual
- Offering workshops and HE careers events
- Referring students to other organisations
- Using up-to-date and accurate information.

How you can meet with a member of the Careers Advice and Guidance Team:

- Drop-in or appointments at The Learning Exchange, Roscoe Street, L1 9DW
- Bookable guidance meetings
- At HE workshops or careers events
- By contacting the team via email or telephone (details are listed below).

For more details, please speak to your course team or the work experience team.

| Contact Details | |
|---|--|
| Careers Advice and Guidance | careersadvice@liv-coll.ac.uk or call 0151 252 3607 |
| Work Experience and Industry Placements | nikki.smith@liv-coll.ac.uk |

Student Voice

Student Representatives

Student Voice is very important to the University Centre – it helps us to find out what you want so we can meet your needs. To help us do this, every class or group of students will choose someone to represent them. Your tutor will guide you on this.

It is the Student Representative's job to ensure they represent all students in their class and that their voice is heard. Ask your course tutor or contact SET@liv-coll.ac.uk for further information on the role. The Student Representative helps students to give their opinions, raises problems on their behalf and lets the class know what's happening as a result - as well as informing them about things happening at the University Centre, so that they can get involved.

Student Representatives will be expected to attend their programme Board of Study meeting in the autumn and spring term, to act as a voice for the HE programme cohort, to share their views and to discuss ideas and suggestions.

Training on how to be a good Student Representative will be put on by the Student Engagement Team, supported by the Students' Union. Representatives will also receive a handbook for guidance, full ongoing support, and a certificate at the end of the year. It looks great on a CV so if you like helping others, don't forget to put your name forward.

Representatives will be invited to the Students' Union big annual meeting, Student Representative Conference and to focus groups with managers, to share their experiences of the University Centre. It is important to us that we know about anything which we can change in order to help you succeed. If you don't tell us, we won't be able to help!

For more information on being a Student Representative, ask your tutor.

Student Surveys

In 2022 we scored 90% for overall student satisfaction in the National Student Survey (NSS)!

- Surveys give you the opportunity to voice your experience of your course.
- Your feedback will be used to help shape the future for your fellow students.
- The College and Students' Union will use this information to make real changes to the student experience.
- All College HE students complete the in house NSS, open from October until December.
- Some final year students complete the external National Student Survey, open from January to April. (<https://www.thestudentsurvey.com>)

Additional Learning Support

Helping you reach your potential!

At the City of Liverpool College, University Centre we want you to get the most out of your higher education experience and achieve your goals. Our aim is to provide support around your course, career plans, personal development, as well as help with any personal issues you may have. Tutors and your Programme Leaders are able to deal with a range of concerns and will monitor your progress, but there may be times when additional support is required.

The **HE Achievement Coach** can help you overcome any barriers with your work. They support with students outside the classroom on a one-to-one basis and help with catching up on assignments, planning and organisation of workload, exam revision, motivation and study skills. You can ask your tutor to refer you to the Achievement Coach, or to request an achievement coach appointment please contact HEcoach@liv-coll.ac.uk

If you have a learning difficulty or disability and think you may need support in college, please speak to your tutor or contact DSA@liv-coll.ac.uk. The University Centre offers a range of support to its students to remove any barriers to their learning so that they are able to reach their potential.

We may also be able to offer you some support with your English and maths if these are affecting your learning in the classroom.

Who to contact for support

For support relating to:

- Learning Difficulties/Disabilities
- Sensory Support - Deaf and Visual Impairment
- Autism, ADHD
- Care Support
- Dyslexia
- SpLDs (Specific Learning Differences)
- Mental health conditions
- Ongoing health conditions

Contact details: DSA@liv-coll.ac.uk or call 0151 252 3595.

As a HE student, you may be eligible for Disabled Students' Allowance (DSA). This is a grant to help you meet the extra course cost faced as a direct result of your disability, an ongoing health condition, a mental health condition or a specific learning difficulty. To find out if you are eligible for DSA, visit www.gov.uk/disabled-students-allowance-dsas

Additional Financial Support - Student Finance, Bursaries and Hardship Funding:

Did you know you might be eligible for a bursary to support you while studying? We offer College bursaries to students with a household income of up to £25,000 and in receipt of certain benefits. If you are a care leaver you will also be entitled to the bursary. For more information on financial support available at the College either fill out the form via: <https://www.liv-coll.ac.uk/study-at-the-college/financial-support/> or contact the Finance Team.

Contact details: AskAnn@liv-coll.ac.uk

Language Support:

Language Support for speakers of English as a second language is also available across the College. Please ask to be referred by your course tutors if this support might assist your studies.

Contact details: **Jack Leung** at Jack.Leung@liv-coll.ac.uk / **Judy Hermida** at Judy.Hermida@liv-coll.ac.uk

Students Identifying as Trans:

Contact details: **Kirsty Walker** at Kirsty.Walker@liv-coll.ac.uk

Care Leavers or Care Experienced Students:

Contact details: **Nicola Colligan** at Nicola.Colligan@liv-coll.ac.uk

Counselling, Health and Wellbeing Service

Counselling and Mental Health Service

You can access free mental health support and/or counselling whilst studying at the University Centre. Counselling is an opportunity for you to talk about or explore something in confidence. Counsellors can help you with issues around: relationships, bereavement, depression, anxiety, self-harm, abuse, sexuality, eating disorders, self-esteem, stress, health, transition, crisis etc. The team also offers educational assessment and support for mental health issues that affect you on your course. The support may be in the form of one-to-one sessions or referral to external agencies for ongoing support if you need it.

Counselling Service

Any student at The City of Liverpool College, University Centre can come and talk to any member of our team of counsellors. The service we offer is free and confidential. We can help you to manage any difficulties that you may be experiencing or changes in your life, so that you can focus on your studies, and achieve your goals.

Mental Health Support

For students who feel that their studies may be affected by any mental health problems i.e. depression, anxiety, we offer additional support to overcome any barriers to your studies so that you can successfully complete your course.

Contact the service by phone 0151 252 3777 or via email: talktome@liv-coll.ac.uk

Safeguarding

The College is committed to the wellbeing and development of all students and staff, especially those who are vulnerable. Our aim is to keep all members of our college community safe and protected from harm and wrong doing.

Safeguarding is the responsibility of all students, staff and volunteers at the College and we actively promote appropriate behaviour and respect towards each other at all times. This ethos is embedded in all activities undertaken across the college.

To find out more, see the College's Safeguarding policies at: <https://www.liv-coll.ac.uk/the-college/college-policies/>

Equality and Diversity

Here at the College, we want you to know that you'll be treated with respect and dignity during your time with us. To achieve this, we will work to ensure that you're not treated any less favourably because of your:

- age
- disability
- gender reassignment
- pregnancy and maternity status
- race
- religion or belief
- sex
- sexual orientation.

The college will not tolerate any form of bullying or harassment. Everyone needs to be aware of the [College's Single Equality Scheme](#) which highlights the importance of treating everyone with respect.

Complaints or Concerns

The City of Liverpool College, University Centre takes all concerns raised seriously. If you have a concern, you must first speak to your Programme Leader or Personal Tutor. Most concerns will be resolved by your teaching staff or Head of School, however, should you wish to take your concerns further, you must follow the complaints procedures. The HE Compliments, Comments and Complaints Policy can be found on the VLE , and can also be located on the College website, here: [HE Compliments, Comments and Complaints Policy](#)

The Office of the Independent Adjudicator for Higher Education (OIA) runs an independent scheme to review student complaints. The City of Liverpool College, University Centre is a member of this scheme. If you are unhappy with the outcome you may be able to ask the OIA to review your complaint/appeal/disciplinary case etc. You can find more information about making a complaint to the OIA, what it can and cannot look at and what it can do to put things right here: <https://www.oiahe.org.uk/students>

Details of Awarding Body, Assessment Arrangements and Marking Regulation for Open University Validated Programmes



Open University Policies and Procedures

<http://www.open.ac.uk/>

Assessment Arrangements

The City of Liverpool College, University Centre Regulations for Validated Awards of the Open University document can be found here: [HE Policies and Procedures](#)

These Regulations apply to all new student cohorts on programmes leading to an Open University (OU) validated award with effect from 1st September 2017.

The Open University is the awarding body and the qualifications awarded are OU qualifications. However, the programmes of study are developed and delivered by The City of Liverpool College, University Centre. The Open University and The City of Liverpool College, University Centre have a formal relationship governed by the QAA's UK Quality Code for Higher Education which sets out expectations for academic standards, academic quality and information about higher education provision.

Before the Assessment

- Students will be issued with an assessment plan which will outline when assignments will be issued and also when they should be submitted.
- Students will be provided with sufficient teaching and learning opportunities to ensure that they have the knowledge and the skills to independently complete the assessment activity.
- Students will be provided with opportunities for informal assessment activities to check their knowledge and understanding before they start on their assessment (such as mind maps, quizzes, presentations, and discussions) to check that they have the knowledge and understanding to independently complete the assessment activity.
- Student attendance at all sessions is crucial, as students will be required to independently complete the assessment activity.
- For certain types of assessment, tutors will decide when students are fully prepared to undertake the assessment activity independently. This may mean that they may be issued the assignment earlier or later than other learners on the course. Students will however be required to complete their assessment within the same time frame to ensure that no learner receives an unfair advantage. This date will be agreed and recorded with the subject tutor.

Preparing for Assessment

Before students start their assessment the tutor will ensure that they fully understand:

- The assessment criteria and the assessment requirements.
- The nature of the evidence which they need to produce.
- The range of evidence needed to achieve each of the learning outcomes.

- How to achieve the different levels of grading, e.g. Pass, Merit, Distinction; Third, Lower Second Class, Upper Second Class, First Class.
- The date the assessment is due to be submitted.
- The importance of time management and meeting deadlines.

Students MUST ensure that they inform the tutor if they are unclear of any of the above before they start the assessment.

Formative Assessment

Formative assessment involves both the Assessor and the student in a conversation about their progress and takes place prior to summative assessment. The main function of formative assessment is to provide students with feedback on progress and to inform development.

Formative feedback aims to:

- Enable the student to make improvements
- Be prompt so it has meaning and context for the student
- Allow for time following the feedback for actions to be complete.

Assessment submission

Assessment evidence and all related coursework items, with the exception of practical work and presentations, are to be submitted electronically via the VLE electronic assessment submission option, Turnitin via one of the following formats in order to meet e-submission criteria: a digital file in any of the industry standard formats (MS Office, PDF).

No student work should be accepted or marked if it is received via email. If a student is having difficulties submitting through Turnitin, they must contact the **HEoffice@colc.ac.uk** immediately to avoid late penalties.

1. Assignment length requirements are usually given in terms of number of words. The word limit given reflects the level of detail required.
2. Unless specified differently and clearly in the module handbook, these Assignment length limits are normally acceptable to be 10% above or below this word limit (so, for example, a 2,000 word assignment should be between 1,800 and 2,200 words). If the assignment uses the words "up to" (as in "up to 2,500 words") that usually means that going above the limit is not allowed. For work that exceeds a specified maximum length, the submission will only be marked from the beginning to 10% above the specified assignment length. Work that falls below the 10% limit would not be expected to have met all assignment learning outcomes and should be marked accordingly.

Unless specified otherwise, the word limit does not include 'administrative' sections of the assignment: the cover or title page, table of contents, table of figures, reference list, list of works cited, bibliography, or any appendices.

Marking spelling, punctuation and grammar

1. It is good practice for Assessors to "mark" spelling and grammar, i.e. correct mistakes on student work and expect the student to either correct them (at the formative feedback stage) or note them (at the summative feedback stage).
2. Mistakes in spelling and grammar should not influence assessment decisions unless:
 - A. The mistakes are so problematic that they undermine the evidence of student understanding, or
 - B. Specific assessment criteria require good communication, spelling and grammar and/or correct use of technical language.
 - C. If student work has consistently poor spelling, grammar or language it should not be accepted for marking, but should be returned to the student to be corrected. The student must be given a deadline by which to correct the work.

Summative Assessment and Final Feedback

1. Summative assessment is a final assessment decision on an assignment task in relation to the assessment criteria of each unit. It is the definitive assessment and recording of the student's achievement. However, students should be aware that summative assessment is subject to confirmation by the Assessment Board, and thus is provisional and can be overridden by the Assessment Board.
2. It is expected that internal moderation of the assessed work will be scheduled and completed within the 15 day marking period and before the feedback and grade is released to students.

Every assessment within the module has a pass mark

For undergraduate level module assessments (FHEQ Levels 4, 5 and 6) this is 40%.

All assessments are marked on the scale 0-100:

| Score | Grade |
|--------|-------------------------|
| 70-100 | Excellent pass |
| 60-69 | Very good pass |
| 50-59 | Good pass |
| 40-49 | Pass |
| 35-39 | Borderline fail* |
| 0-34 | Fail |

***may be compensated**

Every module has a pass mark

Each module has a set of learning outcomes and a single credit weighting, e.g. 10, 15, 20, 30, 40 credits. The achievement of learning outcomes within a module is tested and measured by one or more assessment tasks. Each assessment within a module has a weighting allocated, set in relation to the number of learning outcomes it is assessing. For undergraduate level modules (FHEQ Levels 4, 5 and 6) the pass mark is 40%, based on all assessment marks for the module and their relative weighting.

Grading and Classification Awards

Foundation Degree Grading

- Calculation of a Foundation Degree will be based on the average mark across all modules within Stage 2 (usually Credit Level 5) and Stage 1 (usually Credit Level 4) unless the requirements of a Professional, Statutory and Regulatory Body (PSRB) state otherwise.
- Candidates who are registered for the award of the Foundation Degree, who have accumulated 120 credits but do not proceed further shall be awarded a Certificate of Higher Education (Level 4)
- Candidates who have accumulated 240 credits shall be awarded a Foundation Degree

Top up Honours Degree Grading and Bachelor Honours Degree Grading

Honours degrees are classified as:

| | |
|--------------------|------------------------------------|
| First class | Aggregate mark of 70% or above |
| Upper Second class | Aggregate mark between 60% and 69% |
| Lower Second class | Aggregate mark between 50% and 59% |
| Third class | Aggregate mark between 40% and 49% |

Where students have directly entered a Qualification Level 6 top-up award (e.g. having previously undertaken a Higher National Diploma (HND) or Foundation Degree (FD) award) the calculation for the honours classification will be based **solely on all credits at Credit Level 6**.

To achieve a BA/BSc Hons qualification having completed HND/FD or equivalent Level 4 and 5 qualification and having successfully completed a Level 6, BA/ BSc Top up Degree a learner must:

- Achieve 120 credits at the minimum of a Pass level (40%) of the qualification.
- Up to 20 credits out of the 120 credit qualification value may be compensated for a failed module(s) provided that the failed module score is within the range 35-39 and an aggregate mark of 40% has been achieved for the qualification level of the undergraduate programme.

Bachelor Honours Degree Grading

Classification of bachelor degrees will be based on the average mark across all modules within stage 3 (Level 6, final year) and stage 2, (Level 5, second year) at ratio of 2:1 (66.7%: 33.3%) respectively unless the requirements of the Professional, Statutory Regulatory body (PSRB) set otherwise.

A BA or BSc ordinary degree can be achieved if 60 out of 120 credits at Level 6 are achieved. This is a pass but without the honours. The programme specification should be referred to, in order to identify the modules and learning outcomes that will need to have been completed/met.

For the bachelor degree, the Open University does not apply classifications to any exit awards conferred on students (e.g. a CertHE or DipHE cannot be awarded with either a merit or distinction classification).

Requirements for the Approval of Awards

All awards recommended by the City of Liverpool College University Centre Examination Boards are ratified by The Open University's Module Results Approval and Qualifications Classification Panel (MRAQCP). This panel has the authority of the OU Senate to ratify the recommendations of all Examination Award Boards (EAB) after satisfying itself that the recommendations have been determined with due regard to the approved regulations, that the correct procedures have been followed and that the appropriate academic standards have been upheld.

Once the Examination Board has taken place (with OU representation in attendance), The City of Liverpool College University Centre has a responsibility to send documentation to the OUVV via secure electronic transfer, usually within **two working days** of the Examination Board. Documentation is then checked and referred back with any issues or to acknowledge a complete return with the partner institution, usually within **five working days** of receipt. Once documentation is complete and the OUVV have raised award lists, the return is submitted to the University's Module Results Approval and Qualifications Classification Panel (MRAQCP). The MRAQCP respond within **seven working days** of receipt to confirm whether the awards recommended have been ratified and conferred. Once confirmed, the partner institution is informed, and if conferred, results can be released to students as final.

Certificates are produced and dispatched to the City of Liverpool College University Centre usually within **four weeks** of notification of ratification/conferment.

Meeting Deadlines / Late Submissions

Any work that has been submitted after a deadline has passed is classed as **late**, except in cases where an extension has already been agreed via mitigating circumstances procedures or through request for a short extension. There should be no discretionary periods or periods of grace. A student who submits work at 1 minute past a deadline or later will therefore be subject to a penalty for late submission.

All students are provided with an assessment plan at the start of their course that outlines the deadlines for submission of work and how the students are expected to submit (i.e. the format, such as online via Turnitin or presentation).

Late submission includes non-attendance at live assessment events. For example, non-attendance at a scheduled presentation or a missed performance.

Students may be given authorised extensions for legitimate reasons, such as illness at the time of submission, in accordance with the University Centre's *HE Policy on Assessment Extensions and Mitigating Circumstances*. The University Centre's assessment policies are intended to ensure that all students are assessed according to the same conditions and that some are not advantaged by having additional time or opportunity to learn from others.

Where coursework is submitted late and there are no accepted mitigating circumstances it will be penalised in line with the following:

- Submission within 6 working days: a 10% reduction deducted from the overall marked score for each working day late, down to the 40% pass mark and no further.
- Submission that is late by 7 or more working days: submission refused, mark of 0.
- Submission after the deadline will be assumed to be the next working day.
- Students who fail to submit work for assessments or attend examinations shall be deemed to have failed the assessments components concerned and will be marked as 0.
- If an extension is granted by the tutor the new deadline will be agreed and recorded and this new submission date **MUST** be adhered to.

Extensions to assessment deadlines and mitigating circumstances

The University Centre understands that sometime personal circumstances outside of a student's control may have an impact on their ability to meet a deadline or overall performance in a module/unit or assessment. Students who are concerned that their personal circumstances could affect their assessments should tell their Programme Leader or Module Tutor as soon as possible, rather than waiting for their results.

Short Extensions

A short extension is a request for up to five working days of additional time to complete an assessment due to the impact of a student's personal circumstances. If approved, the student will be given a new submissions deadline by which to submit the assessment.

Applications for a short extension can only be made by completing the Short Extension Request Form, which is available to all HE students on the VLE HE Student Handbook page. The form may be requested in an alternative format from HEoffice@liv-coll.ac.uk or the student's Programme Leader.

Applications for a short extension (the *Short Extension Request Form*) must be submitted to the student's module tutor or Programme Leader at the earliest opportunity **before** the coursework deadline.

It is the student's responsibility to submit the application for a short extension to their module tutor or Programme Leader. On receipt of the appropriate form, the Programme Leader and module tutor may agree to extend the deadline up to a **maximum of five working days** (Saturday and Sunday not included).

Mitigating Circumstances

If a student is aware that a short extension of five working days will not be sufficient for them to complete the work due to the severity or likely duration of their circumstances, they should not apply for a short extension but should apply instead for consideration of mitigating circumstances.

A claim for mitigating circumstances cannot usually be considered for an assessment for which the student has already had the submission deadline extended.

Students should complete an application for mitigating circumstances when unexpected, severe and/or longer-term issues mean that they are unable to meet a deadline or attend a live assessment event or where performance in an assessment has been impaired due to the impact of their personal circumstances.

Applications for mitigating circumstances can only be made by completing the ***Mitigating Circumstances Application Form***, which is available to all HE students on the VLE HE Student Handbook page. The form may be requested in an alternative format from HEoffice@liv-coll.ac.uk or the student's Programme Leader.

Students must provide independent written evidence confirming that their circumstances: are unforeseeable and could not have been prevented, will have or had a significant impact on their ability to study or take an assessment, happened at the time of the assessment.

Examples of what may constitute circumstances leading to and application for mitigating circumstances include, but are not limited to:

- Serious illness before or during a live assessment or submission deadline
- Serious accident or serious incident that prevents the student from attending a live event or submitting an assessment on time
- Bereavement or serious family illness

Evidence to document and verify a student’s personal circumstances could include, but is not limited to:

- Death certificate
- A medical certificate covering the period in which the assignment was due to be completed or assessment event took place; where it is possible, students are encouraged to visit a doctor and request a medical certificate at the time of an illness rather than after the event.
- Counsellor’s letter
- Police Crime Reference Number or other independent verification of an incident

Not all of personal circumstances are considered valid reasons to approve mitigating circumstances. Examples of reasons that are not valid for an application for mitigating circumstances include, but are not limited to:

- Sleep in and miss a live assessment or deadline
- Turn up at the wrong time or venue for a live event
- Miss a submission deadline because of poor time management
- A cold or other minor illness
- Lost work on laptops, PCs and USB drives. This is because all work should be saved on the College’s OneDrive, which all students have access to.

| Type of Consideration | When can I apply? | Deadline to Complete Work | Description |
|--------------------------|--|---|---|
| Short Extension | Before the assessment deadline. | Up to five working days | <ul style="list-style-type: none"> • Submitted via <i>Request for Short Extension Form</i> |
| Mitigating Circumstances | Up to five working days after the deadline has passed. | Deferral to the next assessment period. | <ul style="list-style-type: none"> • Submitted via <i>Mitigating Circumstances Application</i> • Requires independent evidence (e.g. medical note, death certificate) |

For more information, please refer to the [HE Policy on Assessment Extensions and Mitigating Circumstances.](#)

Resubmissions

A student who, for the first assessment opportunity, has failed to achieve a Pass for that unit specification shall be expected to undertake a reassessment. Resit provision is subject to all the following conditions:

- A student may resit the failed assessment components of a module only once. Where there are extenuating circumstances, the Board of Examiners has discretion to decide whether a further assessment opportunity shall be permitted, unless explicitly prohibited in the rules for the programme, as approved in the validation process and programme specification.
- A student who does not complete the resit by the date specified shall not progress the programme, except in cases where the process for allowing extenuating circumstances has been followed.
- Resits can only take place after the meeting of the Board of Examiners or following agreement by the Chair and the External Examiner of the Board.

- A student who successfully completes any required resits within a module shall be awarded the credit for the module and the result for the individual assessment component capped at the minimum Pass mark for the module.
- A student shall not be permitted to be reassessed by resit in any module that has received a Pass mark, or in a component that has received a mark of 40% or above.
- The resit will normally be carried out by the same combination of written examination, coursework etc. as in the first attempt.
- For examinations, reassessment shall involve completion of a new task which will need to be approved by the external examiner.

See also the [OU Regulations for Validated Awards](#) for further information and guidance around compensation for marginal failure.

Repeat Units

If, having exhausted all permitted compensation, resit, and retake opportunities, and a student is still unable to pass, the Board of Examiners may, at its discretion, permit one of the following repeat options:

Partial retake as fully registered student:

- The student is not permitted to progress to the next stage of the programme but must retake the failed modules and/or components in full during the following academic year,
- The student has full access to all facilities and support for the modules and/or components being retaken,
- The marks that can be achieved for the modules and/or components being retaken will be capped at the module and/or component Pass marks,
- The student retains the marks for the modules and/or components already passed,
- No further resit opportunities are permitted.

Partial retake for assessment only:

- As above except that access to facilities and support will be limited to certain learning resources for the module(s) and/or component(s) being retaken. Participation will only be allowed for relevant revision sessions and assessments.

Full retake:

- This is only permitted where the student has extenuating circumstances,
- The student does not progress to the next stage of the programme but instead repeats all the modules in the current stage during the following academic year,
- The student has full access to all facilities and support,
- The marks that can be achieved are not capped, and the student is normally entitled to the resit opportunities available. However, a student is not able to carry forward any credit from previous attempts at the stage.

Where compensation, resit, and retake opportunities have been exhausted, a Board of Examiners may recommend a student for an exit award. See also the [OU Regulations for Validated Awards](#) for further information and guidance

Assessment Boards

The College is expected by The Open University to hold Assessment Boards for all of its programmes under the awarding body. The main purpose of an Assessment Board is to make recommendations on:

- The grades achieved by students on the individual units
- Extenuating circumstances
- Cases of cheating and plagiarism
- Progression of students on to the next stage of the programme
- The awards to be made to students

- Referrals and deferrals.

Assessment Boards may also monitor academic standards.

It is only when the unit results of students' achievement have been considered by an Assessment Board that certification can be awarded. Prior to this the External Examiner will have sampled work and the report will be received by the Assessment Board.

Timing of Assessment Boards

The main boards are held annually.

Malpractice

'Malpractice' means acts that undermine the integrity and validity of assessment, the certification of qualifications, and/or that may damage the authority of those responsible for delivering the assessment and certification.

Malpractice may arise, or be suspected, in relation to any unit or type of assessment within the qualification.

Plagiarism

Plagiarism is a form of academic misconduct. It is much more than simple copying from another student, or from books, or from the internet. For example, it includes paraphrasing, sub-contracting the work to someone else, and submitting the same piece of work for two different purposes.

Students need to understand what plagiarism is through induction and a handbook. Please make yourself aware of the College's [HE Academic Integrity Policy](#), which can be found here: [HE Policies and Procedures](#)

This policy includes:

- a precise definition of plagiarism and other forms of academic misconduct
- a statement of why plagiarism, and all other forms of academic misconduct, are wrong
- the actions that will be taken by the provider to address the culture of plagiarism
- the techniques that will be used to monitor students' assessed work and detect plagiarism
- the procedures that will be employed to investigate allegations of plagiarism
- a tariff of penalties that will be applied to students found guilty of plagiarism
- details of the appeals system for students to use when appealing against decisions made.

Student Appeals against Assessment Decisions

Please be aware of the College's [HE Academic Appeals Policy](#) for dealing with appeals from students: [HE Policies and Procedures](#) These appeals may relate to an assessment not being conducted fairly. The assessment plan allows time for potential appeals after assessment decisions have been given to students. If there is an appeal by a student, this and its resolution will be documented.

If students are not satisfied with the result of their appeal after following the provider's processes, they can request the Office of the Independent Adjudicator (OIA) to review their complaint. The OIA will not deal with complaints about academic judgement but will look at academic appeals.

Programme Specification

| | |
|--|---|
| Programme/award title(s) | Foundation Degree Dental Technology |
| Teaching Institution | The City of Liverpool College |
| Awarding Institution | The Open University (OU) |
| Date of first OU validation | 1 st September 2017 |
| Date of latest OU (re)validation | 9 th February 2022 |
| Next revalidation | |
| Credit points for the award | 240 |
| UCAS Code | N/A |
| HECoS Code | 100128 |
| LDCS Code (FE Colleges) | 00302277 |
| Programme start date and cycle of starts if appropriate. | September 2022 |
| Underpinning QAA subject benchmark(s) | There is no specific Dental Technology QAA subject benchmark |
| Other external and internal reference points used to inform programme outcomes. For apprenticeships, the standard or framework against which it will be delivered. | <p>GDC Preparing for Practice Learning Outcomes (2015) https://www.gdc-uk.org/docs/default-source/quality-assurance/preparing-for-practice-(revised-2015).pdf</p> <p>Care Quality Commission http://www.cqc.org.uk/</p> <p>Centre for Workforce Intelligence (2014) Securing the future workforce supply – Dental Care Professionals stocktake http://www.cfwi.org.uk/publications/dental-care-professionalsstocktake/@@publication-detail</p> <p>General Dental Council (2016) Student Fitness to Practice. https://www.gdc-uk.org/docs/default-source/guidance-for-students/student-professionalism-and-fitness-to-practise-guidance-for-students0353906a222e457388ebe358d7124643.pdf?sfvrsn=5ddbc404_5</p> |

| | |
|---|--|
| | <p>Adult Dental Health Survey</p> <p>https://digital.nhs.uk/data-and-information/areas-of-interest/public-health/adult-dental-health-survey</p> <p>NHS England (2014) Five Year Forward View</p> <p>http://www.england.nhs.uk/wp-content/uploads/2014/10/5yfv-web.pdf</p> |
| Professional/statutory recognition | General Dental Council |
| For apprenticeships fully or partially integrated Assessment. | N/A |
| Mode(s) of Study (PT, FT, DL, Mix of DL & Face-to-Face) Apprenticeship | PT Face-to-Face with workplace learning. |
| Duration of the programme for each mode of study | 3 Years Part Time |
| Dual accreditation (if applicable) | N/A |
| Date of production/revision of this specification | 9 th February 2022 |

Please note: This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if s/he takes full advantage of the learning opportunities that are provided.

More detailed information on the learning outcomes, content, and teaching, learning and assessment methods of each module can be found in student module guide(s) and the students handbook.

The accuracy of the information contained in this document is reviewed by the University and may be verified by the Quality Assurance Agency for Higher Education.

2.1 Educational aims and objectives

On successful completion of the FD Dental Technology, students will be able to:

- *Apply skills of critical analysis to real world situations within a defined range of contexts.*
- *Provide a dental technology education suited to the needs of students and employers and to enable students to attain the requisite competencies so that they can go on to register as Dental Care Professionals with the GDC.*
- *Demonstrate a high degree of professionalism characterised by initiative, creativity, motivation and self-management as required by the GDC.*
- *Enable students to comply with systems and processes to support safe patient care and work within industry/professional standards, while developing an awareness of and responsibility for safe working practices.*
- *Express ideas effectively and communicate information appropriately and accurately using a range of media including ICT.*
- *Develop working relationships using teamwork and leadership skills, recognising and respecting different perspectives.*
- *Manage their professional development reflecting on progress and taking appropriate action.*
- *Find, evaluate, synthesise and use information from a variety of sources.*
- *Articulate an awareness of the social and community contexts within their disciplinary field.*
- *Promote a challenging academic environment to foster student interest and study in applying the principles of dental technology, biomedical and material sciences.*
- *Demonstrate and evidence professional skills that meet the requirements for registration as a Dental Care Professional in Dental Technology and evaluate the legal and ethical basis of professional practice.*
- *Develop an evidence-based approach to learning, professional practice and decision making.*
- *Critically review a range of simple manufactured dental devices in relation to design principles, practical techniques and clinical suitability.*
- *Work independently in designing and manufacturing selected dental devices to a standard of a 'safe beginner' suitable for clinical presentation.*
- *Foster the development of subject-specific and transferable skills, including self-awareness, personal responsibility, communication and interpersonal skills.*

2.2 Relationship to other programmes and awards

(Where the award is part of a hierarchy of awards/programmes, this section describes the articulation between them, opportunities for progression upon completion of the programme, and arrangements for bridging modules or induction)

N/A

2.3 For Foundation Degrees, please list where the 60 credit work-related learning takes place. For apprenticeships an articulation of how the work based learning and academic content are organised with the award.

Year 2 Work Based Practice A 30 Credits

Year 3 Work Based Practice B 30 Credits

2.4 List of all exit awards

Foundation Degree in Dental Technology – 240 credits (120 at Level 4 and 120 at Level 5).

Certificate of Higher Education – 120 credits at Level 4 on completion of the following modules:

- *Dental Anatomy 1*
- *Professional Practice 1*
- *Introduction to Dental Technology*
- *Dental Materials*
- *Work Based Practice A*

3. Programme structure and learning outcomes

(The structure for any part-time delivery should be presented separately in this section.)

| <u>Programme Structure - LEVEL 4</u> | | | | | |
|---|----------------------|-------------------------|----------------------|---------------------------------|-------------------------|
| Compulsory modules | Credit points | Optional modules | Credit points | Is module compensatable? | Semester runs in |
| Dental Anatomy 1 | 15 | | | No | Y1:1 |
| Professional Practice 1 | 15 | | | No | Y1:2 |
| Introduction to Dental Technology | 30 | | | No | Y1:1-2 |
| Dental Materials | 30 | | | No | Y2:1-2 |
| Work Based Practice A | 30 | | | No | Y2:1-2 |

Intended learning outcomes at Level 4 are listed below:

| <u>Learning Outcomes – LEVEL 4</u> | |
|--|--|
| 3A. Knowledge and understanding | |
| Learning outcomes: | Learning and teaching strategy/ assessment methods |
| A1 Describe the range of normal dental and oral anatomy and physiology and recognise abnormalities of the oral cavity and evaluate their effect on the design, modification and manufacture of dental devices and patient oral health. | Summative written Examination Assignment. Portfolio development. Technical report Independent research |

Learning Outcomes – LEVEL 4

3A. Knowledge and understanding

| | |
|--|--|
| <p>A2 Describe and evaluate the scientific principles underpinning the use of materials and dental biomaterials and show a critical understanding of the reasons for their selection through an evidence based approach of concepts, theories and knowledge relevant to dental technology.</p> <p>A3 Describe and evaluate the principles of good research, how to access research and interpret it for use as part of an evidence based approach to practice.</p> <p>A4 Describe and apply the principles of professional practice applied to the Dental Technician Dental Care Professional.</p> <p>A5 Critically appraise and use appropriate methodologies in dental technology and healthcare practice and research.</p> <p>A6 Critically analyse and apply concepts, theories and contemporary knowledge relevant to the safe delivery of dental technology in a laboratory setting.</p> <p>A7 Know and apply the requirements and develop methods of achieving the required level of professionalism as applied to a registered Dental Care Professional (Dental Technician).</p> | <p>Self-directed learning</p> <p>Tutor-led workshops</p> <p>Taught sessions</p> <p>Practical demonstration and participation</p> <p>Mentoring sessions</p> <p>Reflective practice sessions</p> |
|--|--|

3B. Cognitive skills

| Learning outcomes: | Learning and teaching strategy/ assessment methods |
|--|--|
| <p>B1 Apply a critical and evidence-based approach to learning practice, technical judgment and decision making and utilise critical thinking and problem solving skills.</p> <p>B2 Apply theory and knowledge to reflect on experience and performance accurately assess own capabilities and limitations, demonstrating reflective practice, in the interest of high quality patient care and act within these boundaries.</p> | <p>Summative written Examination</p> <p>Assignment.</p> <p>Portfolio development.</p> <p>Independent research</p> <p>Self-directed learning</p> <p>Tutor-led workshops</p> <p>Taught sessions</p> <p>Practical demonstration and participation</p> <p>Mentoring sessions</p> |

3B. Cognitive skills

Reflective practice sessions

3C. Practical and professional skills

Learning outcomes:

Learning and teaching strategy/ assessment methods

C1 Demonstrate skills at a 'basic safe beginner' level pertinent to the safe practice of dental technology as required by the General Dental Council. Practise safely, effectively and ethically, making the high quality long term care of patients the first concern.

Summative written Examination

C2 Demonstrate responsibility and effective non clinical decision making as an individual and as part of a team.

Assignment.

C3 Recognise the importance of lifelong learning and apply it to practice.

Portfolio development.

C4 Demonstrate complementary skills required to contribute to and influence development and evaluation of evidence based practice in the context of the changing health agenda, patient demands and technological expectations.

Independent research

Self-directed learning

Tutor-led workshops

Taught sessions

Practical demonstration and participation

Mentoring sessions

Reflective practice sessions

3D. Key/transferable skills

Learning outcomes:

Learning and teaching strategy/ assessment methods

D1 Evaluate the role and responsibility of being a registrant and demonstrate professionalism throughout education, training and practice in accordance with GDC guidance.

Summative written Examination

Assignment.

Portfolio development.

Independent research

Self-directed learning

3D. Key/transferable skills

D2 Effectively communicate by spoken, written and electronic methods to a range of healthcare professionals working with other members of the dental team to create an inter-professional environment and, provide an appropriate level of leadership.

D3 Critically assess their own capabilities and limitations in the interest of high quality patient care taking responsibility for personal development planning, recording of evidence, and reflective practice.

D4. Demonstrate respect for patients and colleagues that encompasses, without prejudice, diversity of background and opportunity, language and cultures.

Tutor-led workshops
 Taught sessions
 Practical demonstration and participation
 Mentoring sessions
 Reflective practice sessions

Programme Structure - LEVEL 5

| Compulsory modules | Credit points | Optional modules | Credit points | Is module compensatable? | Semester runs in |
|--------------------------------|---------------|------------------|---------------|--------------------------|------------------|
| Dental Technology Techniques 1 | 30 | | | No | Y2:1-2 |
| Professional Practice 2 | 15 | | | No | Y3:1-2 |
| Dental Anatomy 2 | 15 | | | No | Y3:1-2 |
| Work Based Practice B | 30 | | | No | Y3:1-2 |
| Dental Technology Techniques 2 | 30 | | | No | Y3:1-2 |

Intended learning outcomes at Level 5 are listed below:

Learning Outcomes – LEVEL 5

3A. Knowledge and understanding

| Learning outcomes: | Learning and teaching strategy/ assessment methods |
|--|--|
| <p>A1 Evaluate the range of micro organisms and dental diseases and traumas that effect the oral environment. Evaluate control measures for prevention of infection. Evaluate the development and ageing process, and the associated developmental abnormalities that can occur. Evaluate their effect on the design, modification and manufacture of dental devices and patent oral health.</p> <p>A2 Analyse and evaluate the principles of good research, how to access research and interpret it for use as part of an evidence based approach to practice</p> <p>A3 Critically understand the impact of social, cultural and environmental factors on oral health.</p> <p>A4 Evaluate and apply the principles and responsibilities of professional practice applied to the Dental Technician Dental Care Professional.</p> | <p>Independent research</p> <p>Self-directed learning</p> <p>Tutor-led workshops</p> <p>Taught sessions</p> <p>Practical demonstration and participation</p> <p>Mentoring sessions</p> <p>Reflective practice sessions</p> <p>Summative written Examination</p> <p>Assignment.</p> <p>Portfolio development.</p> |

3B. Cognitive skills

| Learning outcomes: | Learning and teaching strategy/ assessment methods |
|--|--|
| <p>B1 Evaluate own performance and capabilities, apply reflective strategies to enhance professional development through a portfolio to demonstrate effective critical self-appraisal and personal development planning following constructive feedback.</p> <p>B2 Think critically, using higher levels of professional judgments and decision making in dental care environments.</p> <p>B3 Utilise intellectual skills in debate, knowledge, reasoning and problem solving to enable an evaluation of contrasting approaches within the field of dental technology.</p> | <p>Independent research</p> <p>Self-directed learning</p> <p>Tutor-led workshops</p> <p>Taught sessions</p> <p>Practical demonstration and participation</p> <p>Mentoring sessions</p> <p>Reflective practice sessions</p> <p>Portfolio development.</p> |

3C. Practical and professional skills

| Learning outcomes: | Learning and teaching strategy/ assessment methods |
|---|---|
| C1 Work independently and be able to make autonomous decisions when constructing dental appliances of increasing complexity, from prescription, for the design, manufacture and modification of custom made dental devices to a 'safe beginner' level and to meet current industry standards and legislation requirements. C2 Utilise employment behaviours relevant to the practice of dental technology. | Independent research Self-directed learning Tutor-led workshops Taught sessions Practical demonstration and participation Mentoring sessions Reflective practice sessions |

3D. Key/transferable skills

| Learning outcomes: | Learning and teaching strategy/ assessment methods |
|--|---|
| D1 Critically evaluate the role and responsibility of being a registrant and demonstrate professionalism throughout education, training and practice in accordance with GDC guidance. D2 Adapt and be flexible both as an individual and a member of a wider dental team, demonstrating the ability to work within multi-professional & inter-professional dental care groups. D3 Work independently and effectively in teams whilst utilising management and leadership skills and respecting other team members contributions. | Independent research Self-directed learning Tutor-led workshops Taught sessions Practical demonstration and participation Mentoring sessions Reflective practice sessions |

4. Distinctive features of the programme structure

- **Where applicable, this section provides details on distinctive features such as:**
 - where in the structure above a professional/placement year fits in and how it may affect progression
 - any restrictions regarding the availability of elective modules
 - where in the programme structure students must make a choice of pathway/route
- **Additional considerations for apprenticeships:**
 - how the delivery of the academic award fits in with the wider apprenticeship
 - the integration of the 'on the job' and 'off the job' training
 - how the academic award fits within the assessment of the apprenticeship

The students are employed on a full-time basis and completed 60 credits in the workplace Year 2 Work Based Practice A 30 Credits Year 3 Work Based Practice B 30 Credits.

The programme being on a one day a week basis allows for employers to send multiple employees at different levels as they can attend on different days helping with laboratory staffing requirement levels. As industry demands may change over the programme it is possible to change days and timings to meet work pressure needs providing a flexibility not available to a full time course.

Over the course the students will spend a much greater time in the real working environment, than when on a short placement as with a full time programme.

5. Support for students and their learning.

(For apprenticeships this should include details of how student learning is supported in the work place)

Higher Education students at The City of Liverpool College have access to a range of guidance, support and advice systems.

Disability

The College welcomes students with additional needs, for example physical difficulties, hearing or visual impairment, or Specific Learning Difficulties and actively supports them during their studies. Services available to higher education applicants and students with disabilities includes confidential guidance, training in assistive software, advice to course tutors regarding meeting students' needs. This includes providing advice and guidance on applications to Disabled Students' Allowance and the medical evidence or reports required for this and financial support for any costs associated with this.

Mental Health

The Mental Health team offer HE students practical support and day-to-day solutions to various issues. This includes assessments of how adjustments can be made to teaching environments in order to reduce the impact mental health conditions may have on students' studies.

Safeguarding

The College is committed to the well-being and development of all students and staff, especially those who are vulnerable. The College has a dedicated Safeguarding team who work closely with Programme Leaders and managers to ensure all members of the community are kept safe from harm and wrong-doing.

HE Achievement Coach

The HE Achievement Coach provides academic and study support to students studying between level 4 to level 6. This includes skills such as time-management, referencing and assignment structure.

Finance

The College's Student Finance Officers provide comprehensive advice and guidance on the financial support available for Higher Education students. This includes facilitating access to the College's bursary and hardship funding.

Careers Advice & Guidance

The CAG team hold weekly drop-in appointments for HE students and arrange bookable guidance meetings to help students plan for their progression into graduate-level employment or further study. This include preparing for interviews and assessment centres, setting up a business and applying for postgraduate courses. The College hosts an annual careers week for all students and a dedicated HE Careers Event with employers, recruitment agencies and local postgraduate HEIs.

Entrepreneurship and Employability

Students enrolled on HE and FE programmes at the City of Liverpool College are offered many opportunities and support to develop their entrepreneurial skills.

Business start-up support, guidance and mentoring programmes and business start-up qualifications are run alongside regular entrepreneurial events in College.

Students have the opportunity to take part in entrepreneurial challenges whilst gaining experience working on business plans and researching new business ideas.

During the work-based learning units they will be able to self-manage, plan, organise and make decisions independently. Their skills in interaction will be developed including communication, collaboration, leadership and negotiation.

The College has a work experience team who are able to arrange work experience, placements and facilitate links with employers for HE students.

6. Criteria for admission

(For apprenticeships this should include details of how the criteria will be used with employers who will be recruiting apprentices.)

At CoLC we welcome applications from people of all ages and backgrounds with an interest in studying dental technology. We actively encourage and welcome people from the widest range of economic and cultural backgrounds and value the contribution of mature students. Students entering via non-standard entry routes will be interviewed.

The normal minimum entry requirement for FD programmes is the possession of 4 GCSEs (Grade C/4 or above) including English and Mathematics and 1 A Level (or equivalent Level 3 qualification). Credit can be given for mature students or those with prior industry experience in accordance with the Recognition of Prior Learning Policy.

7. Language of study

English

8. Information about non-OU standard assessment regulations (including PSRB requirements)

Students are required to achieve all of the General Dental Council 'Preparing for Practice' Learning Outcomes (2015, due to be updated 2023) in order to be eligible for PSRB registration as a Dental Care Professional (DCP) using the protected title of Dental Technician.

9. For apprenticeships in England End Point Assessment (EPA).

(Summary of the approved assessment plan and how the academic award fits within this and the EPA)

N/A

10. Methods for evaluating and improving the quality and standards of teaching and learning.

- Annual Programme Evaluation
- Internal Student Survey participation
- Module Evaluation Questionnaires
- Termly Focus Groups (Conducted by Head of School and Head of HE)
- External Examiner reports
- Academic Reviewer support and end of year report
- Student feedback gathered in group and individual tutorials.
- Internal Verification of module assignments and tutor marking
- Observation of classes
- School Annual Monitoring Review
- HE Specific CPD sessions
- Academic Board meetings, Board of Study and Exam Board Meetings
- Election of student reps (who participate in regular meetings)
- Institutional Overview – end of year monitoring for all OU validated programmes.

10. Changes made to the programme since last (re)validation

It is planned to move away from time constrained written examinations towards assignments that can be submitted through 'Turnitin' where appropriate. Practical examinations will continue as evidence for 'Safe Beginner' level confirmation. Two previously taught 30 credit units will be split into 15 credit units and spaced over the course to embed professional skills and anatomical knowledge, over levels 4 and 5.

Annexe 1: Curriculum map

Annexe 2: Curriculum mapping against the apprenticeship standard or framework (delete if not required.)

Annexe 3: Notes on completing the OU programme specification template

Annexe 1 - Curriculum map

This table indicates which study units assume responsibility for delivering (shaded) and assessing (✓) particular programme learning outcomes.

| Level | Study module/unit | Programme outcomes | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------|--|--------------------|----|----|----|----|----|----|----|----|--|--|--|--|----|----|----|----|--|--|--|--|----|----|----|----|---|
| | | A1 | A2 | A3 | A4 | A5 | A6 | A7 | B1 | B2 | | | | | C1 | C2 | C3 | C4 | | | | | D1 | D2 | D3 | D4 | |
| 4 | DT1401 Dental Anatomy 1 | ✓ | | | | | | | ✓ | | | | | | | | | ✓ | | | | | | | ✓ | | |
| | DT1402 Professional Practice 1 | | | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | | | | | | | ✓ | | | | | | ✓ | | | ✓ | |
| | DT1403 Introduction to Dental Technology | | | | | ✓ | ✓ | | ✓ | ✓ | | | | | ✓ | ✓ | | | | | | | ✓ | ✓ | ✓ | | |
| | DT2404 Dental Materials | | ✓ | | | | ✓ | | ✓ | | | | | | | | | ✓ | | | | | | | ✓ | | |
| | DT2405 Work Based Practice A | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | ✓ | ✓ | ✓ | ✓ | | | | | | ✓ | ✓ | ✓ | ✓ |

| Level | Study module/unit | Programme outcomes | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------|---------------------------------------|--------------------|----|----|----|--|--|--|----|----|----|--|--|--|---|----|----|--|--|--|--|--|---|----|----|----|--|
| | | A1 | A2 | A3 | A4 | | | | B1 | B2 | B3 | | | | | C1 | C2 | | | | | | | D1 | D2 | D3 | |
| 5 | DT2506 Dental Technology Techniques 1 | | | | ✓ | | | | ✓ | ✓ | ✓ | | | | ✓ | ✓ | | | | | | | ✓ | ✓ | ✓ | | |
| | DT3507 Professional Practice 2 | | ✓ | ✓ | ✓ | | | | | | ✓ | | | | | ✓ | | | | | | | ✓ | | | | |
| | DT3508 Dental Anatomy 2 | ✓ | | | ✓ | | | | | ✓ | ✓ | | | | | ✓ | | | | | | | ✓ | ✓ | | | |
| | DT3509 Work Based Practice B | ✓ | | | ✓ | | | | ✓ | ✓ | ✓ | | | | ✓ | ✓ | | | | | | | ✓ | ✓ | ✓ | | |
| | DT3510 Dental Technology Techniques 2 | | ✓ | | ✓ | | | | ✓ | ✓ | ✓ | | | | ✓ | ✓ | | | | | | | ✓ | ✓ | ✓ | | |

2: Notes on completing programme specification templates

- 1 - This programme specification should be mapped against the learning outcomes detailed in module specifications.
- 2 – The expectations regarding student achievement and attributes described by the learning outcome in section 3 must be appropriate to the level of the award within the **QAA frameworks for HE qualifications**: <http://www.qaa.ac.uk/AssuringStandardsAndQuality/Pages/default.aspx>
- 3 – Learning outcomes must also reflect the detailed statements of graduate attributes set out in **QAA subject benchmark statements** that are relevant to the programme/award: <http://www.qaa.ac.uk/AssuringStandardsAndQuality/subject-guidance/Pages/Subject-benchmark-statements.aspx>
- 4 – In section 3, the learning and teaching methods deployed should enable the achievement of the full range of intended learning outcomes. Similarly, the choice of assessment methods in section 3 should enable students to demonstrate the achievement of related learning outcomes. Overall, assessment should cover the full range of learning outcomes.
- 5 - Where the programme contains validated **exit awards** (e.g. CertHE, DipHE, PGDip), learning outcomes must be clearly specified for each award.
- 6 - For programmes with distinctive study **routes or pathways** the specific rationale and learning outcomes for each route must be provided.
- 7 – Validated programmes delivered in **languages other than English** must have programme specifications both in English and the language of delivery.

Module Specifications

Module DT1401: Dental Anatomy 1

| 1. Factual information | | | |
|--------------------------------|---|---------------------|----|
| Module title | DT1401 Dental Anatomy 1 | | |
| Module tutor | Christopher Fielding | Level | 4 |
| Module type | Taught | Credit value | 15 |
| Mode of delivery | 100% face-to-face | | |
| Notional learning hours | Indicative learning hours out of Total number of 150 hours 45 are guided learning hours (Lecture, Tutorial), other learning including 105 independent study. | | |

| 2. Rationale for the module and its links with other modules | |
|--|--|
| <p>This module will provide the basic essential knowledge of Dental Anatomy to underpin dental appliance design and enhance communication. This module is a precursor to DT3508 Dental Anatomy 2.</p> <p>This module gives the student the opportunity to investigate the oral and dental aspects of the biomedical sciences and anatomical knowledge to understand how anatomical features have a significant influence on dental appliance design. The student will gain knowledge on the underpinning anatomical terminology, identify, and describe the structures of the head and neck to include bones, muscles of facial expression and mastication. Students will describe and identify a range of human teeth and explain their structure, development and eruption patterns. They will interpret the various structures that can be observed using dental radiographs.</p> | |

| 3. Aims of the module | |
|---|--|
| <p>Individual Module Aims:</p> <ol style="list-style-type: none"> 1. Identify anatomical landmarks, the bones of the skull, the temporomandibular joint, the muscles of mastication, tongue, facial expression, soft palate and pharynx and associated cranial nerves. The structure and function of the masticatory system including the temporomandibular joint, associated musculature (masticatory, hyoid and tongue) and the composition and role of saliva in the oral cavity. Anatomical influences upon appliance design. 2. Identify various human teeth, their characteristics, function and location in the oral cavity. 3. Describe the development and eruption of teeth and the general characteristics of teeth relating to function, structure, composition, influences on appliance design, dental anomalies and radiological appearance. | |

| 4. Pre-requisite modules or specified entry requirements | |
|--|--|
| Students must be employed full time in a dental laboratory | |

5. Is the module compensatable?

No

6. Are there any PSRB requirements regarding the module?

The GDC PfP Learning outcomes related to dental anatomy must be achieved.

Overarching Outcomes

Recognise the role and responsibility of being a registrant and demonstrate professionalism throughout education, training and practice in accordance with GDC guidance.

Apply an evidence-based approach to learning, practice, clinical judgment and decision making and utilise critical thinking and problem solving skills.

GDC Preparing for Practice Learning Outcomes (2015)

1.1.2 Describe the range of normal dental and oral anatomy and physiology.

1.1.3 Recognise abnormalities of the oral cavity and their effect on dental devices.

1.10.2 Explain how the design and manufacture of custom made dental devices can contribute to the prevention of oral disease and the interests of the patient's long term oral health, safety and well-being.

| 7. Intended learning outcomes | | |
|--|--|--|
| A. Knowledge and understanding | Programme Learning Outcome(s) this maps against | Learning and teaching strategy |
| <p><i>At the end of the module, learners will be expected to:</i></p> <p>Describe the range of normal dental and oral anatomy and physiology and recognise abnormalities of the oral cavity and evaluate their effect on the design, modification and manufacture of dental devices and patient oral health.</p> | A1 | <p>Taught sessions</p> <p>Case evaluation applying knowledge</p> <p>Independent research</p> <p>Self-directed learning</p> <p>Self-managed learning</p> <p>Application in the work place</p> |

| B. Cognitive skills | Programme Learning Outcome(s) this maps against | Learning and teaching strategy |
|---|--|--|
| <p><i>At the end of the module learners will be expected to:</i></p> <p>Apply a critical and evidence-based approach to learning practice, technical judgment and decision making and utilise critical thinking and problem solving skills.</p> | B1 | <p>Taught sessions</p> <p>Case evaluation applying knowledge</p> <p>Independent research</p> <p>Self-directed learning</p> <p>Self-managed learning</p> <p>Application in the work place</p> |

| B. Cognitive skills | Programme Learning Outcome(s) this maps against | Learning and teaching strategy |
|----------------------------|--|---------------------------------------|
| | | |

| C. Practical and professional skills | Programme Learning Outcome(s) this maps against | Learning and teaching strategy |
|---|--|--|
| <p><i>At the end of the module, learners will be expected to:</i></p> <p>Demonstrate complementary skills required to contribute to and influence development and evaluation of evidence based practice in the context of the changing health agenda, patient demands and technological expectations.</p> | C4 | <p>Taught sessions</p> <p>Case evaluation applying knowledge</p> <p>Independent research</p> <p>Self-directed learning</p> <p>Self-managed learning</p> <p>Application in the work place</p> |

| D Key transferable skills | Programme Learning Outcome(s) this maps against | Learning and teaching strategy |
|--|--|--|
| <p><i>At the end of the module, learners will be expected to:</i></p> <p>Effectively communicate by spoken, written and electronic methods to a range of healthcare professionals working with other members of the dental team to create an inter-professional environment and, provide an appropriate level of leadership.</p> <p>Critically assess their own capabilities and limitations in the interest of high-quality patient care taking responsibility for personal development planning, recording of evidence, and reflective practice.</p> | D2 | <p>Taught sessions</p> <p>Case evaluation applying knowledge</p> <p>Independent research</p> <p>Self-directed learning</p> <p>Self-managed learning</p> <p>Application in the work place</p> |

| D Key transferable skills | Programme Learning Outcome(s) this maps against | Learning and teaching strategy |
|---------------------------|---|--------------------------------|
| | D3 | |

| 8. Indicative content. |
|---|
| <p>1. A general overview of the gross anatomy of the head and neck.</p> <p>The cranium and face.</p> <p>Bones of the head.</p> <p>The Temporomandibular joint.</p> <p>Musculature associated with the oral cavity.</p> <p>Muscles of facial expression.</p> <p>Muscles of mastication.</p> <p>Musculature of the tongue, pharynx and soft palate.</p> <p>Cardio-vascular system.</p> <p>Nerves associated with dental treatment.</p> <p>Masticatory movement.</p> <p>Salivary glands.</p> <p>Composition and functions of saliva.</p> <p>Anatomical influences upon appliance design.</p> |

8. Indicative content.

2. Human tooth morphology.

Tooth forms and features.

Recognition of natural tooth forms.

3. The structure and function of teeth.

Tooth development and eruption.

Ageing features of the dentition, changes in tooth structure throughout life.

Radiographic interpretation.

-Purpose and types.

-Diagnostic uses.

-Legislation and organisational policies and practices.

-Risks.

-Processing, assessment and interpretation of images.

-Alternatives to radiography.

Anatomical influences upon appliance design.

9. Assessment strategy, assessment methods, their relative weightings and mapping to module learning outcomes

Assessment Strategy:

To pass this module a student must complete a:

Practical Assessment - to recognise and identify various human tooth forms. Duration 1 hour.

| 9. Assessment strategy, assessment methods, their relative weightings and mapping to module learning outcomes | | | | |
|--|------------------|-----------------------|-------------------------------------|---|
| Summative Theory Examination – covering basic human head and neck anatomy to include their influences upon appliance design. Duration 2 hours. | | | | |
| Assessment Task | Weighting | Week submitted | Grading (Pass / Fail / %) | Module Learning Outcome(s) the assessment task maps to |
| Practical assessment | 40% | 8 | Pass 40-59% | A1, B1, C4, D2 |
| Exam | 60% | 15 | Merit 60-69% Distinction 70-100% | A1, B1, C4, D2, D3 |

| 10. Teaching staff associated with the module |
|---|
| Name and contact details |
| Christopher Fielding chris.fielding@liv-coll.ac.uk 0151 252 4833 |
| |

| 11. Key reading list | | | | |
|------------------------------|-------------|---|-----------------------|-----------------|
| Author | Year | Title | Publisher | Location |
| Brand RW, D. E. Isselhard DE | 2018 | Anatomy of Orofacial Structures, 8th edition, | Mosby | Edinburgh |
| Marsh P.D., Martin MV | 2016 | Oral Microbiology. 6th edition, | Churchill Livingstone | Edinburgh |
| Miller C.H., Palenik C.J. | 2022 | Infection Control and Management of Hazardous Materials for the Dental Team, 7th edition, | Elsevier Mosby | Edinburgh |
| Samaranayake., L.P. | 2018 | Essential Microbiology for Dentistry, 5th edition, | Churchill Livingstone | Edinburgh |
| Whaites E. | 2020 | Radiography and Radiology for Dental Professionals, 4th Edition | Churchill Livingstone | Edinburgh |

| 12. Other indicative text (e.g. websites) |
|---|
| https://derweb.co.uk https://www.dla.org.uk https://www.dta-uk.org https://www.gdc-uk.org/information-standards-guidance https://www.gov.uk/government/collections/oral-health https://www.nature.com/vital/ https://www.nature.com/bdjteam/ https://pocketdentistry.com/1-introduction-to-dental-anatomy/ https://www.dentalone-md.com/dental-anatomy-and-development-of-the-mouth/ |

| 13. List of amendments since last (re)validation | | |
|---|---|--------------------------------------|
| Area amended | Details | Date Central Quality informed |
| Module size and timing | This module has been split in to two smaller modules and will be taught in year 1 and 3 | |

Module DT1402: Professional Practice 1

| 1. Factual information | | | |
|--------------------------------|---|---------------------|----|
| Module title | DT1402 Professional Practice 1 | | |
| Module tutor | Christopher Fielding | Level | 4 |
| Module type | Taught | Credit value | 15 |
| Mode of delivery | 100% face-to-face | | |
| Notional learning hours | Indicative learning hours out of Total number of 150 hours 45 are guided learning hours (Lecture, Tutorial), other learning including 105 independent study. | | |

| 2. Rationale for the module and its links with other modules | |
|---|--|
| <p>This module will provide the basic essential knowledge of Professional Practice as a GDC registrant. This module is the precursor to DT3507 Professional Practice 2.</p> <p>The module introduces the key aspects of patient focused provision, encompassing the legal basis under which patients are treated, patient confidentiality, consent, and data protection. It provides an opportunity for the students to gain understanding of the legal and ethical obligations of GDC registration and the responsibilities of the other members of the dental team and wider health care teams. The application of the main features of the EU Medical Devices Directive/ Medical and Healthcare products regulatory agency is provided for further application in other modules.</p> | |

| 3. Aims of the module | |
|--|--|
| <p>Individual Module Aims.</p> <ol style="list-style-type: none">1. Discuss the role of the GDC upon the provision of dental care and the responsibilities of the Dental Technician as a DCP.2. To develop understanding of GDC Standards, policies and guidance. | |

| 4. Pre-requisite modules or specified entry requirements | |
|---|--|
| Students must be employed full time in a dental laboratory. | |

| 5. Is the module compensatable? | |
|--|--|
| No | |

6. Are there any PSRB requirements regarding the module?

The GDC PfP Learning outcomes related to profession practice must be achieved.

Overarching Outcomes,

Practise safely and effectively, making the high quality long term care of patients the first concern.

Recognise the role and responsibility of being a registrant and demonstrate professionalism throughout education, training and practice in accordance with GDC guidance.

Apply an evidence-based approach to learning, practice, clinical judgment and decision making and utilise critical thinking and problem solving skills.

Accurately assess own capabilities and limitations, demonstrating reflective practice, in the interest of high quality patient care and act within these boundaries.

Recognise the importance of lifelong learning and apply it to practice.

GDC Preparing for Practice Learning Outcomes (2015)

1.1.1, Describe the principles of an evidence-based approach to learning, professional practice and decision making.

1.5.3 Recognise and take responsibility for establishing personal networks with dental professionals, specialists and other relevant individuals and organisations.

1.5.4 Discuss the role of the dental technician and other members of the dental team in the treatment plan.

1.5.5 Explain the principles of obtaining valid patient consent.

1.7.1 Treat all patients with equality, respect and dignity.

1.7.5 Discuss the role of the dental technician and other members of the dental team in the patient management process.

1.8.3 Take responsibility for ensuring compliance with current best practice guidelines and European manufacturing legislation

1.8.6 Explain the importance of and maintain accurate, contemporaneous and comprehensive patient records in accordance with legal and statutory requirements and best practice.

2.2 Describe the dental healthcare systems dental professionals work within including health policy and organisation, delivery of healthcare and equity.

2.3 Recognise the impact of clinical guidelines relating to the delivery of oral health care on laboratory practice and their implications.

4.4 Communicate appropriately and effectively in professional discussions and transactions within the health and other sectors.

5.1 Communicate appropriately, effectively and sensitively by spoken, written and electronic methods and maintain and develop these skills.

5.2 Explain the importance of and maintain accurate, contemporaneous and comprehensive patient records in accordance with legal and statutory requirements and best practice.

5.3 Recognise the use of a range of communication methods and technologies and their appropriate application in support of the practice of dental technology.

5.4 Recognise and act within the principles of information governance.

6.1 Put patients' interests, dignity and choice first and act to protect them.

6. Are there any PSRB requirements regarding the module?

6.2 Be honest and act with integrity

6.3 Respect patients' dignity and choice

6.4 Maintain and protect patients' information

6.5 Recognise and respect the patient's perspective and expectations of dental care and the role of the dental team, taking into account current equality and diversity legislation, noting that this may differ in England, Scotland, Wales and Northern Ireland.

7.1 Be familiar with and act within the GDC's standards and within other professionally relevant laws, ethical guidance and systems.

7.2 Recognise and act upon the legal and ethical responsibilities involved in protecting and promoting the health of individual patients.

7.3 Act without discrimination and show respect for patients, colleagues and peers and the general public.

7.4 Recognise the importance of candour and effective communication with patients when things go wrong, knowing how and where to report any patient safety issues which arise.

7.5 Take responsibility for and act to raise concerns about your own or others' health, behaviour or professional performance as described in Standards for the Dental Team.

8.1 Describe and respect the roles of dental and other healthcare professionals in the context of learning and working in a dental and wider healthcare team.

8.2 Ensure that any team you are involved in works together to provide appropriate dental care for patients.

8.3 Explain the contribution that team members and effective team working makes to the delivery of safe and effective high quality care.

9.1 Recognise and demonstrate own professional responsibility in the development of self and the rest of the team.

9.7 Describe and demonstrate the attributes of professional attitudes and behaviour in all environments and media.

10.1 Put patients' interests first and act to protect them.

10.3 Recognise the impact of personal behaviour and manage this professionally

10.4 Recognise the significance of the management and leadership role and the range of skills and knowledge required to do this effectively

10.7 Ensure that all aspects of practice comply with legal and regulatory requirements.

Legal requirement to maintain full, accurate clinical and laboratory records

11.1 Recognise the need for a patient centred approach when working with the dental and wider healthcare team

11.2 Recognise and respect own and others' contribution to the dental and wider healthcare team and demonstrate effective team working.

11.3 Recognise and demonstrate personal accountability to the regulator, the team and wider community

11.4 Recognise and comply with the team working requirements in the Scope of Practice and Standards for the Dental Team documents.

11.5 Describe the impact of Direct Access on each registrant group's scope of practice and its effect on dental team working.

6. Are there any PSRB requirements regarding the module?

11.6 Recognise, take responsibility for and act to raise concerns about their own or others' health, behaviour or professional performance as described in Standards for the Dental Team Principle 8 Raise concerns if patients are at risk.

12.3 Recognise and demonstrate the procedures for handling of complaints as described in Standards for the Dental Team Principle 5 Have a clear and effective complaints procedure.

| 7. Intended learning outcomes | | |
|--|---|---|
| A. Knowledge and understanding | Programme Learning Outcome(s) this maps against | Learning and teaching strategy |
| <p><i>At the end of the module, learners will be expected to:</i></p> <p>Describe and evaluate the principles of good research, how to access research and interpret it for use as part of an evidence based approach to practice.</p> <p>Describe and apply the principles of professional practice applied to the Dental Technician Dental Care Professional.</p> <p>Critically appraise and use appropriate methodologies in dental technology and healthcare practice and research.</p> <p>Know and apply the requirements and develop methods of achieving the required level of professionalism as applied to a registered Dental Care Professional (Dental Technician).</p> | <p>A3</p> <p>A4</p> <p>A5</p> <p>A7</p> | <p>Independent research</p> <p>Self-directed learning</p> <p>Taught sessions</p> <p>Mentoring sessions</p> <p>Self-managed learning</p> <p>Reflective practice sessions</p> |

8. Indicative content.

Social Media.

Equality & Diversity.

Scope of Practice.

Continuing Professional Development. Recognise the importance of continued updating of knowledge and skills and mechanisms for recording such accredited development

Dental Team Working.

Leadership.

Indemnity.

Complaints Handling.

GDPR – Patient Records

Demonstrate a knowledge of the current requirements of the current MHRA (Medical Devices Directive) MDD/MDR or replacement.

Principles of Equality and Diversity in employment and practice.

9. Assessment strategy, assessment methods, their relative weightings and mapping to module learning outcomes

Assessment Strategy:

Students will complete an assignment to research and evaluate the professional responsibilities associated with the role of a Dental Technician as a Dental Care Professional identifying and explaining the professional and legal requirements of being registered with a regulatory body. Word count – up to 3,000.

| Assessment Task | Weighting | Week submitted | Grading (Pass / Fail / %) | Module Learning Outcome(s) the assessment task maps to |
|-----------------|-----------|----------------|---------------------------|--|
| Assignment | 100% | 25 | Pass 40-59% | A3, A4, A5, A7 |

| 9. Assessment strategy, assessment methods, their relative weightings and mapping to module learning outcomes | | | | |
|---|--|--|---------------------|--------------|
| | | | Merit 60-69% | B1, B2 |
| | | | Distinction 70-100% | C3 D1, D4 |

| 10. Teaching staff associated with the module |
|---|
| Name and contact details |
| Christopher Fielding chris.fielding@liv-coll.ac.uk 0151 252 4833 |

| | | | | |
|--------------------------|------|---|-------------------|-------------------------|
| Beemsterboer, P, L | 2016 | Ethics and Law in Dental Hygiene, 3 rd Edition | Saunders | London |
| Brennan, M | 2006 | Ethics and Law for the Dental Team | PasTest | Knutsford, Cheshire |
| Chapman, A | 2021 | Basic Guide to Oral Health Education and Promotion, 3rd Edition | Wiley Blackwell | Chichester, west Sussex |
| Ewles and Simnet | 2017 | Promoting Health a Practical Guide 7 th edition | Bailliere Tindall | London |
| Groten M, Janda R | 2004 | Clinical Investigation of Medical Devices in Dentistry | Quintessence | New Malden, Surrey |
| Inglehart M, Bagramian R | 2002 | Oral Health- Related Quality of Life | Quintessence | New Malden, Surrey |

| | | | | |
|--|-------------|---|--|---------------------------|
| Sandeep Kumar, S. Kumar, A. Basak, D Lambden, P | 2018 | Dental Laws and Moral Ethics | Wiley-Blackwell | |
| | 2003 | Dental Law and Ethics | Pearson | Birmingham |
| Miles, L | 2003 | Dynamic Dentistry | Link Publishing | London |
| Mitchell L and Mitchell D | 2020 | Oxford Handbook of Clinical Dentistry, 7th edition | OUP Oxford | Oxford |
| Pine C, Harris R | 2007 | Community Oral Health | Quintessence | New Malden, Surrey |
| Rule J, Veatch R | 2004 | Ethical Questions in Dentistry 2nd Ed | Quintessence | New Malden, Surrey |
| Scriven A | 2010 | Promoting Health: A Practical Guide, 6th edition | Bailliere Tindall | London |
| Serio F G | 1998 | Understanding Dental Health (Understanding Health and Sickness Series) | University Press of Mississippi | Mississippi USA |
| Stuart-Wilson F | 2009 | Professionalism and Ethics | Quay Books | London |
| Serio F G | 1998 | Understanding Dental Health (Understanding Health and Sickness Series) | University Press of Mississippi | Mississippi USA |
| | | Dental Technologies | CRG Publications. | London |
| | | The Dental Technician | A. E. Morgan Publications Ltd | Epson, Surrey |
| | | Quintessence Journal of Dental Technology: | Quintessence Publishing Co. LTD | New Malden, Surrey |

12. Other indicative text (e.g. websites)

General Dental Council, Student Fitness to Practice. The General Dental Council https://www.gdc-uk.org/docs/default-source/guidance-for-students/student-professionalism-and-fitness-to-practise-guidance-for-students.pdf?sfvrsn=5ddbc404_2

<https://www.gdc-uk.org/information-standards-guidance>

<https://derweb.co.uk>

<https://www.dla.org.uk>

<https://www.dta-uk.org>

<https://www.gov.uk/government/collections/oral-health>

<https://www.nature.com/vital/>

<https://www.nature.com/bdjteam/>

13. List of amendments since last (re)validation

| Area amended | Details | Date Central Quality informed |
|------------------------|--|-------------------------------|
| Module size and timing | This module has been split in to two smaller modules and will be taught in year 1 and 3 to embed professionalism | |

Module DT1403: Introduction to Dental Technology

| 1. Factual information | | | |
|--------------------------------|---|---------------------|----|
| Module title | DT1403 Introduction to Dental Technology | | |
| Module tutor | Christopher Fielding | Level | 4 |
| Module type | Taught, Portfolio | Credit value | 30 |
| Mode of delivery | 100% face-to-face | | |
| Notional learning hours | Lecture 30 hours, Demonstration Practical classes and workshops 90 hours, Independent guided study 190 hours. | | |

| 2. Rationale for the module and its links with other modules |
|--|
| <p>This module lays the groundwork for the following practical units: DT1403 Introduction to Dental Technology, DT2506 Dental Technology Techniques 1 and DT3510 Dental Technology Techniques 2, developing the core basic skills and the professional responsibilities and requirements for a dental technologist.</p> <p>The Introduction to Dental Technology module is focused upon the basic techniques of knowledge, understanding and technical skills necessary for the production sequence of custom-made dental devices. This module is designed to provide the student with the fundamental manipulative skills required in the basic procedures in fixed, removable prosthodontics and orthodontics. It provides an opportunity for the student to analyse the sequence of techniques used in the fabrication of a range of custom made dental appliances while developing their manipulative skills.</p> <p>To achieve high levels of effective communication necessary to meet the clinical requirements and to enhance the links to the clinical team. It is important for student dental technicians to develop an understanding of the clinical aspects of patient care that has a direct effect on their role.</p> <p>As part of this module the student will be made aware of their role as part of the oral healthcare team and comprehend the roles and responsibilities of all the other oral healthcare team members. They should also be aware of the range of treatments that are routinely provided to patients and the team members who provide such service.</p> <p>The students should be able to practice in a safe manner in a regulated environment.</p> <p>This module will enable students to develop and create a final body of work to develop basic practical skills for each dental technology discipline. Students will gain an understanding of their role in the dental laboratory and the wider implications of being a professional practitioner.</p> |

| 3. Aims of the module |
|--|
| <p>Individual Module Aims:</p> <ol style="list-style-type: none">1. Describe the responsibilities required for safe laboratory practice, legislation, MHRA, scientific principles of research, evaluation and quality control, communication in the dental laboratory environment. |

3. Aims of the module

2. Explain and apply tooth notation and dentate classification systems.
3. Demonstrate the clinical rationale and basic construction stages for 'Complete Prosthodontics' Partial Prosthodontics', 'Fixed Prosthodontics' and 'Orthodontic Retainers'.

4. Pre-requisite modules or specified entry requirements

Students must be employed full time in a dental laboratory.

5. Is the module compensatable?

No

6. Are there any PSRB requirements regarding the module?

Overarching Outcomes

Recognise the role and responsibility of being a registrant and demonstrate professionalism throughout education, training and practice in accordance with GDC guidance.

Apply an evidence-based approach to learning, practice, clinical judgment and decision making and utilise critical thinking and problem solving skills.

Accurately assess own capabilities and limitations, demonstrating reflective practice, in the interest of high quality patient care and act within these boundaries

Recognise the importance of lifelong learning and apply it to practice

1.1.5 Describe and evaluate the procedures used in the design and manufacture of custom made devices.

1.5.4 Discuss the role of the dental technician and other members of the dental team in the treatment plan.

1.8.1 Recognise the risks around the working laboratory environment and manage these in a safe and efficient manner.

1.14.1 Design, manufacture, assess and provide biomechanically sound removable devices.

1.14.2 Design, manufacture, assess and provide biomechanically sound fixed prostheses.

1.14.3 Design, manufacture, assess and provide biomechanically sound orthodontic appliances.

2.2 Describe the dental healthcare systems dental professionals work within including health policy and organisation, delivery of healthcare and equity.

4.1 Communicate effectively with colleagues from dental and other healthcare professions in relation to the direct care of individual patients, including oral health promotion.

4.2 Explain the role of appraisal, training and review of colleagues, and giving and receiving effective feedback.

6. Are there any PSRB requirements regarding the module?

5.3 Recognise the use of a range of communication methods and technologies and their appropriate application in support of the practice of dental technology.

8.1 Describe and respect the roles of dental and other healthcare professionals in the context of learning and working in a dental and wider healthcare team.

8.2 Ensure that any team you are involved in works together to provide appropriate dental care for patients.

8.3 Explain the contribution that team members and effective team working makes to the delivery of safe and effective high quality care.

10.2 Effectively manage their own time and resources.

10.5 Recognise the importance of managing the delivery of dental technology and the range of skills and knowledge required to do this effectively.

12.1 Recognise and comply with systems and processes to support safe patient care.

12.5 Recognise and comply with national and local clinical governance and health and safety requirements.

| 7. Intended learning outcomes | | |
|--|--|--|
| A. Knowledge and understanding | Programme Learning Outcome(s) this maps against | Learning and teaching strategy |
| <p><i>At the end of the module, learners will be expected to:</i></p> <p>Critically appraise and use appropriate methodologies in dental technology and healthcare practice and research.</p> <p>Critically analyse and apply concepts, theories and contemporary knowledge relevant to the safe delivery of dental technology in a laboratory setting</p> | <p>A5</p> <p>A6</p> | <p>Independent research</p> <p>Self-directed learning</p> <p>Tutor-led workshops</p> <p>Taught sessions</p> <p>Practical demonstration and participation</p> <p>Mentoring sessions</p> <p>Portfolio development.</p> |

| B. Cognitive skills | Programme Learning Outcome(s) this maps against | Learning and teaching strategy |
|---|--|--|
| <p><i>At the end of the module learners will be expected to:</i></p> <p>Apply a critical and evidence-based approach to learning practice, technical judgment and decision making and utilise critical thinking and problem-solving skills.</p> <p>Apply theory and knowledge to reflect on experience and performance accurately assess own capabilities and limitations, demonstrating reflective practice, in the interest of high-quality patient care and act within these boundaries.</p> | <p>B1</p> <p>B2</p> | <p>Independent research</p> <p>Self-directed learning</p> <p>Tutor-led workshops</p> <p>Taught sessions</p> <p>Practical demonstration and participation</p> <p>Mentoring sessions</p> <p>Portfolio development.</p> |

| D Key transferable skills | Programme Learning Outcome(s) this maps against | Learning and teaching strategy |
|---|---|--------------------------------|
| <p>Critically assess their own capabilities and limitations in the interest of high-quality patient care taking responsibility for personal development planning, recording of evidence, and reflective practice.</p> | <p>D3</p> | |

| 8. Indicative content. |
|---|
| <p>1. Demonstrate an awareness of health & safety practices, including potential hazards, and cross infection control. Medical Devices Directives applied to the manufacture of items.</p> <p>The dental team, use of communication skills, barriers to communication, work independently, evaluate their work critically and respond to change; dental team working. The Dental Healthcare system. Health and Safety requirements.</p> <p>Scientific research and evaluation.</p> <p>Quality Control and Quality Assurance applied – MDD requirements, Medicines and Healthcare products Regulatory Agency (MHRA) application to the dental laboratory.</p> <p>2. Tooth charting systems(Palmer, Universal, FDI), Classification systems (Beckett, Kennedy).</p> <p>3. Methods of manufacture for fixed and removable prosthodontics, and orthodontic retainers.</p> <p>Basic manufacturing procedures (stages) for fixed prosthodontics, removable prosthodontics and orthodontic retainers.</p> <p>Development of a wide range of dental technology manipulative skills to include casting models for all areas.</p> <p>Development of a wide range of introductory dental technology manipulative skills related to Removable Complete and Partial Dentures to include special trays, Occlusal Rims, articulation, Teeth setting, denture repairs, basic ‘waxing up’ procedures, processing and finishing methods.</p> <p>Development of a wide range of introductory dental technology manipulative skills related to Fixed Conservation to include inlays, diagnostic ‘wax ups’/Full Shell Crowns, wax incremental techniques and articulation.</p> |

8. Indicative content.

Development of a wide range of introductory dental technology manipulative skills related to Orthodontic Retainers. Wire work for simple clasps and orthodontic cribs construction, retainer construction to include base plate design. Retainer examples to include a simple retainer such as a 'Hawley Retainer'. Simple vacuum formed retainers such as the 'Essix Type'.

Quality assurance: forms of checks used to assure that the case meets the prescription requirement, decontamination, packaging and recording cases for dispatch or collection.

9. Assessment strategy, assessment methods, their relative weightings and mapping to module learning outcomes

Assessment Strategy:

Coursework Test: to confirm understanding of safe laboratory practice, methods of classification, and basic appliance design principles. Duration 1 hour.

Portfolio: The construction of simulated cases for all areas demonstrating critical self-evaluation. Appliances and stages covered will include Removable Prosthodontics, Partial Prosthodontics, Fixed Prosthodontics and Orthodontics. An item from each area will be summatively assessed.

Summative Practical Exam: Produce a range of introductory devices and stages of construction to a basic safe standard. Duration 18 hours to be completed over 3 Mondays (6 hours) in a four week period (18 hours).

| Assessment Task | Weighting | Week submitted | Grading (Pass / Fail / %) | Module Learning Outcome(s) the assessment task maps to |
|-----------------------|-----------|----------------|---------------------------|--|
| Coursework Test | 20% | 18 | Pass 40-59% | A5, A6, D1, D2 |
| Practical Portfolio | 30% | 25 | Merit 60-69% | A5, A6, B1, B2, C2, D2, D3 |
| Practical Examination | 50% | 26-30 | Distinction 70-100% | A6, B1, B2, C1, C2, D2, D3 |

| 9. Assessment strategy, assessment methods, their relative weightings and mapping to module learning outcomes | | | | |
|---|--|--|--|--|
| | | | | |

| 10. Teaching staff associated with the module |
|---|
| Name and contact details |
| Christopher Fielding (chris.fielding@liv-coll.ac.uk) 0151 252 4833 |
| |

| 11. Key reading list | | | | |
|---|------|--|--------------------|-------------------------|
| Author | Year | Title | Publisher | Location |
| Basker R. M | 2002 | Prosthetic treatment of the edentulous patient. 4th Edition | Blackwel | |
| Powers J.M. and. Sakaguchi R, | 2006 | Craigs Restorative Dental Materials, 12th Edition, | Mosby | Edinburgh |
| Basker R M, Davenport J C and Thomason J M | 2011 | Prosthodontic Treatment of the Edentulous Patient, 5th edition | Blackwell Science | New Jersey USA |
| Brennan, M | 2006 | Ethics and Law for the Dental Team | PasTest | Knutsford, Cheshire |
| George A. Zarb, Charles L. Bolender, et al. | | Treatment of Edentulous Patients | | |
| Johnson, T, Patrick, D etal | 2016 | Basics of Dental Technology 2 nd edition | Wiley Blackwell | Chichester, west Sussex |
| Mitchell L | 2013 | An Introduction to Orthodontics, 4th edition | Oxford Press | Oxford |
| Van Noort R | 2013 | Introduction to Dental Materials | 4th edition, Mosby | Edinburgh |

| 11. Key reading list | | | | |
|---------------------------|------|---|-------------------------|--------------------|
| Author | Year | Title | Publisher | Location |
| Shillingburg H T, Edwin L | 2020 | Guide to Occlusal Waxing 3 rd edition | Quintessence Publishing | New Malden Surrey |
| Shillingburg, H. T. | 1997 | Fundamentals of Fixed Prosthodontics. 3rd Revised edition | Quintessence Publishing | New Malden, Surrey |
| Stuart-Wilson F | 2009 | Professionalism & Ethics- A Guide for Dental Care Professionals | Quay Books | London |

| 12. Other indicative text (e.g. websites) |
|--|
| <p>General Dental Council, Student Fitness to Practice. The General Dental Council https://www.gdc-uk.org/docs/default-source/guidance-for-students/student-professionalism-and-fitness-to-practise-guidance-for-students.pdf?sfvrsn=5ddbc404_2</p> <p>https://derweb.co.uk</p> <p>https://www.dla.org.uk</p> <p>https://www.dta-uk.org</p> <p>https://www.gdc-uk.org/information-standards-guidance</p> <p>https://www.gov.uk/government/collections/oral-health</p> <p>https://www.nature.com/vital/</p> <p>https://www.nature.com/bdjteam/</p> <p>https://www.hse.gov.uk)</p> <p>Health & Safety Executive – Reporting Accidents and Incidents at Work: A brief guide to the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) (HSE Books, 2012) ISBN 9780717664603 (free download from the HSE website) Health & Safety Executive – Workplace Health, Safety and Welfare: A short guide for managers (HSE, 2007) ISBN 9780717622467 (free download from the HSE website)</p> |

Module DT2404: Dental Materials

| 1. Factual information | | | |
|--------------------------------|--|---------------------|----|
| Module title | DT2404 Dental Materials | | |
| Module tutor | Dr Lynn Borthwick | Level | 4 |
| Module type | Taught | Credit value | 30 |
| Mode of delivery | 100% face-to-face | | |
| Notional learning hours | Lecture 90 hours, Guided independent study 180 hours, Work based learning 30 hours | | |

2. Rationale for the module and its links with other modules

This module introduces the science of dental materials used in procedures and in the construction of various dental appliances. The unit develops the underpinning knowledge and understanding appropriate handling of Dental materials to achieve optimum and consistent results, this therefore supports other modules.

This module develops the learners' knowledge and understanding of how the properties of such materials can be altered or enhanced for maximum benefit. Learners consider the effects of the composition of dental materials on the resulting properties. This will enable them to select appropriate materials for the appliance they are constructing to optimize the material performance for a given device and the underpinning knowledge will also help students to identify the causes of material failure or faults that may be evident and thus prevent them occurring again.

3. Aims of the module

Individual Module Aims:

1. Understand the basic principles essential to dental technology science. Demonstrate the correct selection and manipulation of dental biomaterials used by the dental technician.
2. Understand the range and limitations of dental waxes and select them for appropriate use.
3. Understand the range and limitations of gypsum and synthetic stone materials and select them for appropriate use.
4. Understand the range and limitations of polymeric materials and select them for appropriate use.
5. Understand the range and limitations of alloys and refractory investments used in dental technology and select them for appropriate use.
6. Understand the range and limitations of dental ceramic materials and select them for appropriate use.

4. Pre-requisite modules or specified entry requirements

Students must be employed in a dental laboratory.

5. Is the module compensatable?

No

6. Are there any PSRB requirements regarding the module?

Overarching Outcomes

Recognise the role and responsibility of being a registrant and demonstrate professionalism throughout education, training and practice in accordance with GDC guidance.

Apply an evidence-based approach to learning, practice, clinical judgment and decision making and utilise critical thinking and problem solving skills.

1.1.6 Describe and evaluate the scientific principles underpinning the use of materials and dental biomaterials and discuss their selection.

12.2 Recognise the need for effective recorded maintenance and testing of equipment and requirements for appropriate storage, handling and use of materials

| C. Practical and professional skills | Programme Learning Outcome(s) this maps against | Learning and teaching strategy |
|--|--|---|
| <p><i>At the end of the module, learners will be expected to:</i></p> <p>Demonstrate complementary skills required to contribute to and influence development and evaluation of evidence-based practice in the context of the changing health agenda, patient demands and technological expectations</p> | C4 | Independent research Self-directed learning Tutor-led workshops Taught sessions Practical demonstration and participation Mentoring sessions |

| D Key transferable skills | Programme Learning Outcome(s) this maps against | Learning and teaching strategy |
|---|--|---|
| <p><i>At the end of the module, learners will be expected to:</i></p> <p>Critically assess their own capabilities and limitations in the interest of high-quality patient care taking responsibility for personal development planning, recording of evidence, and reflective practice.</p> | D3 | Independent research Self-directed learning Tutor-led workshops Taught sessions Practical demonstration and participation Mentoring sessions |

| 8. Indicative content. |
|--|
| 1. The periodic table: the use of the periodic table to organise elements used for constituents in dental materials to include metals and non-metals, ceramics and composites, acrylics and dental plaster; periods; groups (physical and chemical properties); relative atomic mass; atomic number; use of the periodic table to select dental materials. |

8. Indicative content.

- Electronic structure of atoms: Bohr's theory used to categorise dental materials, Lewis diagrams to show bonding within dental materials.
 - Bonding of elements: ionic bonding; covalent bonding and metallic bonding.
 - Ideal properties: dental materials and biomaterials.
 - Chemical properties: hydrophilic and hydrophobic; molecules; ions; electro negativity; dipoles; hydrogen bonds; van der Waals forces; intermolecular; intramolecular; oxidation; reactivity; chemical erosion; galvanic cell; corrosion; tarnishing; dissimilar metals present in the oral environment (galvanic cells).
 - Substances: inorganic and organic substances; solids; liquids; gases.
 - Physical properties: viscosity of dental materials and the effects of good and poor wetting; elasticity of dental materials; electrical conductivity, thermal conductivity of dental materials, thermal diffusion in dental alloys and other materials; thermal expansion of materials used in the oral environment; appearance; malleability, ductility, surface texture polished and etched surfaces.
 - Mechanical properties: requirements of dental biomaterials, tensile and compressive properties applied to dental alloys, ceramics, composites and acrylics, e.g. stress/strain, yield, elastic and plastic deformation, Young's modulus applied to dental alloys and ceramics; hardness, e.g. Vickers, Brinell, Rockwell used to determine the surface hardness of dental materials.
 - Biological properties: importance of this type of property when employed in the oral environment; biocompatibility; host reaction, non-toxic, non-irritant; allergenic properties of dental materials; principles of osseointegration; carcinogenic potential.
2. Properties of dental waxes and wax separators: melting points; storage; colours; ideal properties; limitations.
- Structure: compositions; natural/synthetic; grading; stability; effects of residue on process.
- Range of dental waxes: modelling wax; sticky wax; inlay/milling wax; tooth carving wax; carding wax.
- Types of wax separators.
- Material error evaluation.
3. Properties of gypsum materials and separators: types; variations and manufacturing processes; selection; ideal properties; mechanical properties.
- Uses: safe handling techniques; vacuum mixing; mixing ratios and effects on properties; defects; synthetic stone materials; relating the use of gypsum materials for the differing disciplines within dental technology processes; handling techniques and effects on gypsum materials; safe handling guidelines and practice; storage and disposal.
 - Risks: physical issues using gypsum materials; health and safety implications; impact on the environment.

8. Indicative content.

- Issues: ethical disposal of gypsum based dental materials.

Material error evaluation.

4. Science of polymers: basic polymer science.

- Terminology and definitions: natural, synthetic, monomer; polymer; co-polymer, composites; polymerisation; elasticity; polymerisation; structure of polymers; basic molecular chain and three-dimensional structures.
- Classification of dental polymers: thermoplastic; thermoset; elastomer; bioplastic; standard abbreviation in each classification.
- Properties of polymeric materials: requirements; ideal properties; limitations; selection and manipulation; safe storage; handling and disposal.
- Mechanical properties: tensile strength; hardness; impact strength; density.
- Biological properties: reaction of hard and soft oral tissues to the introduction of a dental polymeric material; effects of polymethyl methacrylate.
- Physical properties: cost of materials; aesthetic properties; surface finish; manufacturing faults.
- Function of additives: fillers; plasticisers; cross-linking agents; impact modifiers; antioxidants; stabilisers; blowing agents.
- Materials: thermo forming plastics; denture base and repair resins; denture teeth polymers; curing techniques and cycles; heat cure; cold cure and autopolymerising.

Material error evaluation.

5. Basic metallurgy: structure of metals and alloys, e.g. solid solutions, space lattice, grain boundaries; properties of pure metals; property changing by alloying metals; phase diagrams related to understanding alloy properties.

- Alloys: commonly used alloys; gold alloys; ceramic-bonding alloys, stainless steel alloys and cobalt chromium alloys.
- Applied dental metallurgy: ideal properties of alloys for dental devices; compositions and properties of gold alloys; carat ratings and the effect on properties; composition and properties of ceramic-bonding alloys, stainless steel alloys and cobalt chromium alloys; composition and properties of solders; biocompatibility, including allergies and hypersensitivity; corrosion and galvanic cells; joining metals by soldering and welding processes; safe handling and disposal.
- Changing structure: work hardening, fatigue and failure, e.g. bending stainless steel wire, over-stressing wire, over-flexing of cast alloys; heat treatments, e.g. relieving work hardening by the application of heat; melting and casting, e.g. gas/air torch, induction, centrifugal casting, vacuum casting.
- Processing techniques: trimming, polishing and finishing methods; surface treatments, e.g. blasting, electrolytic polishing; layer structure and function, e.g. anodic, passive, Beilby; manipulation methods for wrought alloys.

8. Indicative content.

- Material selection: properties in relation to the function of the dental device; cost analysis; availability and disposal; health and safety considerations.

Refractory Investments.

Terms and characteristics: refractory and binder; compensation expansion; heating cycles and breakdown.

- Types and uses: gypsum bonded, and phosphate bonded; constituents and properties of each type; effects of constituents on properties; refractory materials for fixed and removable prosthodontics, investments for ceramic work and soldering; surface mould finish and mould porosity; controlling expansion.

- Application: reasons for use; manipulation techniques; hardening refractory materials; setting and heating; removal from cast devices; safe storage, handling and disposal; environmental considerations; cost analysis; health and safety considerations.

6. Ceramic materials.

Simulation of natural teeth: material selection; constituents and properties of materials; effects of constituents on properties; optical features required of materials used to simulate natural teeth; pigments and colouring.

- Chemistry: chemical process during firing and curing; chemical bonding; fusion.
- Application: reasons for use; manipulation techniques; characterising materials; glazing processes and polishing systems; curing and firing cycles; health and safety considerations; cost analysis; quality assurance.

9. Assessment strategy, assessment methods, their relative weightings and mapping to module learning outcomes

Assessment Strategy:

To pass this module a student must complete:

Assignment - the range and limitations of polymeric materials: 1500 words.

Summative Examination – principles of selection, properties and limitations of waxes, gypsum casting materials, investments and ceramics and their derivatives. Duration 2 hours.

| Assessment Task | Weighting | Week submitted | Grading (Pass / Fail / %) | Module Learning Outcome(s) the assessment task maps to |
|-----------------|-----------|----------------|---------------------------|--|
|-----------------|-----------|----------------|---------------------------|--|

| 9. Assessment strategy, assessment methods, their relative weightings and mapping to module learning outcomes | | | | |
|---|-----|----|---------------------|--------------------|
| Coursework assignment task | 40% | 19 | Pass 40-59% | A2, B1 |
| Summative Exam | 60% | 28 | Merit 60-69% | A2, A6, B1, C4, D3 |
| | | | Distinction 70-100% | |

10. Teaching staff associated with the module

Name and contact details

Dr. Lynn Borthwick - lynn.borthwick@liv-coll.ac.uk

11. Key reading list

| Author | Year | Title | Publisher | Location |
|----------------------------|------|--------------------------------------|--|----------|
| Anusavice K J – Phillips | 2021 | Science of Dental Materials | 13th edition, W B Saunders | |
| Craig R G and Powers J M | 2021 | Restorative Dental Materials | 13th edition, Mosby | |
| Gladwin M and Bagby M | 2017 | Clinical Aspects of Dental Materials | 5 th edition, Lippincott Williams & Wilkins | |
| McCabe J F and Walls A W G | 2008 | Applied Dental Materials | 9th edition, Blackwell Science | |
| Van Noort R | 2013 | Introduction to Dental Materials | 4th edition, Mosby | |

12. Other indicative text (e.g. websites)

<https://derweb.co.uk>
<https://www.dla.org.uk>
<https://www.dta-uk.org>
<https://www.gdc-uk.org/information-standards-guidance>
<https://www.gov.uk/government/collections/oral-health>
<https://www.nature.com/vital/>
<https://www.nature.com/bdjteam/>

Module DT2405: Work Based Practice A

| 1. Factual information | | | |
|--------------------------------|--|---------------------|----|
| Module title | DT2405 Work Based Practice A | | |
| Module tutor | Christopher Fielding | Level | 4 |
| Module type | Work based practice record, Case Study | Credit value | 30 |
| Mode of delivery | 90% distance learning and 10% tutorial | | |
| Notional learning hours | Work Based Learning 300 hours, tutorial 30 hours | | |

2. Rationale for the module and its links with other modules

This module is to be developed in the related work place by Work-Based teaching and learning and the support of a named vocationally competent mentor. This unit will be developed and assessed in the real work place environment forming an introduction to applied skills and knowledge across the range of a particular vocational discipline of either Fixed Prosthodontics, Removable Prosthodontics or Orthodontics area of the dental technicians work role. A range of integrated learning activities and the preparation of the 'DCP portfolio of continuing professional development' confirming the individual's development of appropriate work based skills, knowledge and attitudes by undertaking those procedures appropriate to their particular discipline as outlined in the recording documentation. Work place cases are formally provided and recorded to enable the student to develop an understanding of the many factors and procedures involved in the provision of their particular discipline as defined by the GDC's current curricula. In this module it is expected that the student will be involved in all work aspects from initial phase through to the completion of the process, concentrating on the areas where the specific individual DCP have their greatest involvement and under the close supervision of a named vocationally competent mentor who will review and sign off their work.

3. Aims of the module

This module develops skills relevant to their workplace for potential dental technicians as Dental Care Professionals (DCP). It includes working with others; managing and developing self; communicating; managing tasks and solving problems; applying numeracy; technology; design and creativity. This incorporates the development of the individual; and application in the foundation of vocational skills in the work place to enable students to acquire the necessary technical understanding and competence within the framework of their prospective areas of work, and to be aware of their limitations whilst under close supervision. The acquisition of knowledge, understanding and vocational skills, along with the development of professional attitudes and behaviour that facilitate effective and appropriate interaction with patients and colleagues is essential to this work based module. The module is essential to those students wishing to develop a career in the area of a dental technology as a DCP using the real workplace dental laboratory for delivery and assessment.

Individual Module Aims:

3. Aims of the module

1. Show basic competence in the application of skills and knowledge related to the trainee's particular chosen discipline for a range of patient cases in one discipline being either Fixed Prosthodontics, Removable Prosthodontics or Orthodontics area of the dental technicians work role whilst under close supervision.
2. Apply the theoretical knowledge and practice of a range of specific DCP basic sections within the procedures related to the student's discipline and an appreciation of the need for a constant review and development of procedures, designs and techniques related to the role of an oral health care team member and showing positive response to mentors guidance.
3. Produce 'DCP portfolio of continuing professional development' and Case Study which shows focused and continual development over time and provides verifiable evidence of the developing skills, knowledge and attitudes gained in the work place for the basic fundamental aspects related to the chosen discipline.

4. Pre-requisite modules or specified entry requirements

DT1401 Dental Anatomy 1
DT1402 Professional Practice 1
DT1403 Introduction to Dental Technology

5. Is the module compensatable?

No

6. Are there any PSRB requirements regarding the module?

Overarching Outcomes

Recognise the role and responsibility of being a registrant and demonstrate professionalism throughout education, training and practice in accordance with GDC guidance.

Apply an evidence-based approach to learning, practice, clinical judgment and decision making and utilise critical thinking and problem solving skills.

Accurately assess own capabilities and limitations, demonstrating reflective practice, in the interest of high quality patient care and act within these boundaries

Recognise the importance of lifelong learning and apply it to practice

1.1.3 Recognise abnormalities of the oral cavity and their effect on dental devices.

1.5.1 Carry out procedures to meet the prescription.

1.5.2 Assess the fitness for purpose of custom made dental devices and propose alternative solutions where required.

1.5.4 Discuss the role of the dental technician and other members of the dental team in the treatment plan.

1.5.6 Obtain valid consent from the patient.

6. Are there any PSRB requirements regarding the module?

1.8.1 Recognise the risks around the working laboratory environment and manage these in a safe and efficient manner

1.8.2 Perform effective decontamination and infection control procedures, taking into account their effect on materials

1.8.3 Take responsibility for ensuring compliance with current best practice guidelines and European manufacturing legislation.

4.1 Communicate effectively with colleagues from dental and other healthcare professions in relation to the direct care of individual patients, including oral health promotion.

4.2 Explain the role of appraisal, training and review of colleagues, and giving and receiving effective feedback

4.3 Give and receive feedback effectively to other members of the team

4.4 Communicate appropriately and effectively in professional discussions and transactions within the health and other sectors

8.2 Ensure that any team you are involved in works together to provide appropriate dental care for patients.

9.1 Recognise and demonstrate own professional responsibility in the development of self and the rest of the team

9.2 Utilise the provision and receipt of effective feedback in the professional development of self and others.

9.3 Explain the range of learning and teaching methods and the importance of assessment, feedback, critical reflection, identification of learning needs and appraisal in personal development planning.

9.4 Develop and maintain professional knowledge and competence and demonstrate commitment to lifelong learning.

9.6 Accurately assess their own capabilities and limitations in the interest of high quality patient care and seek advice from supervisors or colleagues where appropriate.

9.7 Describe and demonstrate the attributes of professional attitudes and behaviour in all environments and media.

10.2 Effectively manage their own time and resources.

10.6 Take responsibility for personal development planning, recording of evidence, and reflective practice.

10.8 Demonstrate appropriate continuous improvement activities.

11.2 Recognise and respect own and others' contribution to the dental and wider healthcare team and demonstrate effective team working.

12.1 Recognise and comply with systems and processes to support safe patient care.

12.5 Recognise and comply with national and local clinical governance and health and safety requirements

| 7. Intended learning outcomes | | |
|--|---|--|
| A. Knowledge and understanding | Programme Learning Outcome(s) this maps against | Learning and teaching strategy |
| <p><i>At the end of the module, learners will be expected to:</i></p> <p>Describe and evaluate the principles of good research, how to access research and interpret it for use as part of an evidence based approach to practice.</p> <p>Describe and apply the principles of professional practice applied to the Dental Technician Dental Care Professional.</p> <p>Critically appraise and use appropriate methodologies in dental technology and healthcare practice and research.</p> <p>Critically analyse and apply concepts, theories and contemporary knowledge relevant to the safe delivery of dental technology in a laboratory setting.</p> <p>Know and apply the requirements and develop methods of achieving the required level of professionalism as applied to a registered Dental Care Professional (Dental Technician).</p> | <p>A3</p> <p>A4</p> <p>A5</p> <p>A6</p> <p>A7</p> | <p>Independent research</p> <p>Self-directed learning</p> <p>Tutor-led workshops</p> <p>Reflective practice</p> <p>Dental teamworking</p> <p>Practical demonstration and participation</p> <p>Real work based appliance/stage production</p> <p>Mentoring sessions</p> <p>Portfolio development.</p> <p>Technical Case Study</p> |

| C. Practical and professional skills | Programme Learning Outcome(s) this maps against | Learning and teaching strategy |
|---|--|--|
| <p>Demonstrate responsibility and effective non clinical decision making as an individual and as part of a team.</p> <p>Recognise the importance of lifelong learning and apply it to practice.</p> <p>Demonstrate complementary skills required to contribute to and influence development and evaluation of evidence-based practice in the context of the changing health agenda, patient demands and technological expectations.</p> | <p>C2</p> <p>C3</p> <p>C4</p> | <p>Dental teamworking</p> <p>Practical demonstration and participation</p> <p>Real work based appliance/stage production</p> <p>Mentoring sessions</p> <p>Portfolio development.</p> <p>Technical Case Study</p> |

| D Key transferable skills | Programme Learning Outcome(s) this maps against | Learning and teaching strategy |
|---|--|--|
| <p><i>At the end of the module, learners will be expected to:</i></p> <p>Evaluate the role and responsibility of being a registrant and demonstrate professionalism throughout education, training, and practice in accordance with GDC guidance.</p> <p>Effectively communicate by spoken, written and electronic methods to a range of healthcare professionals working with other members of the dental team to create an inter-professional environment and provide an appropriate level of leadership.</p> | <p>D1</p> <p>D2</p> | <p>Independent research</p> <p>Self-directed learning</p> <p>Tutor-led workshops</p> <p>Reflective practice</p> <p>Dental teamworking</p> <p>Practical demonstration and participation</p> |

| D Key transferable skills | Programme Learning Outcome(s) this maps against | Learning and teaching strategy |
|--|---|---|
| <p>Critically assess their own capabilities and limitations in the interest of high-quality patient care taking responsibility for personal development planning, recording of evidence, and reflective practice.</p> <p>Demonstrate respect for patients and colleagues that encompasses, without prejudice, diversity of background and opportunity, language, and cultures.</p> | <p>D3</p> <p>D4</p> | <p>Real work based appliance/stage production</p> <p>Mentoring sessions</p> <p>Portfolio development.</p> <p>Technical Case Study</p> |

| 8. Indicative content. |
|--|
| <p>The integration by structured goal setting and the development of the individual skills and knowledge by focused vocational teaching and learning in a real Work Based environment of the dental laboratory and is intended to establish the individual's basic vocational competence in one discipline being either Fixed Prosthodontics, Removable Prosthodontics or Orthodontics area of the dental technicians work role whilst under supervision of a GDC Registered vocational mentor (Dental Technician or Clinical Dental Technician)</p> <p>Content of the module covers the following where the student is under the guidance of a qualified and experienced dental technician:</p> <ol style="list-style-type: none"> 1. Receiving of work from the clinical area in a competent manner in a work-based environment. 2. Using a variety of types of information and data to establish the requirements for a particular custom-made dental device in a competent manner. 3. Developing a knowledge of the procedures used in the design and manufacture of custom-made dental devices in a Work-Based environment for either: Fixed Prosthodontics, Removable Prosthodontics or the Orthodontics disciplines. 4. Developing a knowledge of the 'Real Workplace' procedures used in the design and manufacture of custom-made dental devices for either: Fixed Prosthodontics, Removable Prosthodontics or Orthodontics disciplines. 5. Being able to analyse regularly cases as part of the formal contract review for clinical cases. 6. Applying the individual's knowledge of the design and manufacture of a range of custom-made dental devices, together with the provision of advice to other members of the dental team on these aspects of their fabrication when required. |

8. Indicative content.

7. Develop in the Work Based learning environment further competence regarding the managing of the manufacture of a range of custom-made dental devices from within one of the following treatment modalities: Orthodontics, Fixed Prosthodontics or Removable Prosthodontics whilst under direct supervision of a more experienced and registered dental technician or clinical dental technician.
8. Develop further competence at assessing the fitness for purpose both of items included in the manufacture of custom-made dental devices and of the final dental prosthesis device itself, within the individual's sphere of knowledge.
9. Demonstrate within designs a familiarity with the complex interactions between materials, designs and oral structures when reviewing the manufacture and acceptability of dental devices.
10. Be able to self-reflect and show knowledge of how to meet the design requirements by re-working and changing of components to meet the patient's needs and related treatment plans.
11. Experience and review their role in working as part of the dental team.
12. Judge and critically evaluate their own vocational development setting and achieving appropriate goals.
13. Apply appropriate quality assurance systems, documented evidence of cases, the providing of formal and informal information to others, specific role requirements, and preparing of items particular to their role as a DCP.
14. Consistently applies appropriate Health and Safety rational, implements risk assessment, uses personal protective equipment and implements appropriate cross infection control procedures in line with the real workplace requirements.
15. Review and evaluate own performance and make such changes as will enhance their future career.

9. Assessment strategy, assessment methods, their relative weightings and mapping to module learning outcomes

Assessment Strategy:

This module is to be developed and assessed in the related workplace by Work-Based teaching and learning and the support of a named vocationally competent mentor. This unit will be developed and assessed in the real workplace environment to continue to develop the applied skills and knowledge across the range of a particular vocational discipline of either Fixed Prosthodontics, Removable Prosthodontics or Orthodontics area of the dental technicians work role.

A range of integrated learning activities and the preparation of the 'DCP portfolio of continuing professional development' confirming the individual's improved development of appropriate work-based skills, knowledge and attitudes by undertaking those procedures appropriate to their particular discipline as outlined in the recording documentation for real cases.

9. Assessment strategy, assessment methods, their relative weightings and mapping to module learning outcomes

Workplace sessions are formally provided and recorded to enable the student to develop an understanding of the many factors and procedures involved in the provision of their particular discipline as defined by the GDC's current curricula. In this module it is expected that the student will be involved in all work aspects from initial phase through to the completion of the process, concentrating on the areas where the specific individual DCP have their greatest involvement and under minimal supervision of a named vocationally competent mentor.

The student will liaise with their mentor to select a suitable Case Study to complete, this will be evidenced by a Technical Report up to 3000 words and a Duplicate of the device made. The portfolio must include a record of at least 300 hours training supported by a work place mentor.

| Assessment Task | Weighting | Week submitted | Grading (Pass / Fail / %) | Module Learning Outcome(s) the assessment task maps to |
|---|-----------|----------------|--|--|
| Technical Case Study Report and Portfolio | 100% | 25 | Pass 40-59% Merit 60-69% Distinction 70-100% | A3, A4, A5, A6, A7 B1, B2 C1, C2, C3, C4 D1, D2, D3, D4 |

10. Teaching staff associated with the module

Name and contact details

Christopher Fielding chris.fielding@liv-coll.ac.uk 0151 252 4833

| 11. Key reading list | | | | |
|------------------------------|---------------|---|---------------------------------|---------------------------------|
| Author | Year | Title | Publisher | Location |
| Brennan, M | 2006 | Ethics and Law for the Dental Team | PasTest | Knutsford, Cheshire |
| Carr A, McGivney G P, Brown | 18 Jan. 2016 | McCracken's Removable Partial Prosthodontics, 13e | Mosby | Maryland Heights, Missouri. USA |
| Stratton R J and Wiebelt F J | 1998 | An Atlas of Removable Partial Denture Designs | Quintessence | New Malden Surrey |
| Barclay C W, Walmsley A D | 1998 | Fixed and Removable Prosthodontics | Churchill Livingstone | London |
| Rudd, K | 1985 | Dental Laboratory Procedures: Removable Partial Dentures (volume 3) (2 nd edition) | Mosby | Maryland Heights, Missouri. USA |
| Sowter, J. | 30 Sept. 1987 | Dental laboratory technology: Removable Prosthodontic Techniques | University North Carolina Press | North Carolina USA |
| Hayakawa I | 1999 | Principals and Practices of Complete Dentures: Creating the Mental Image of a Denture | Quintessence | New Malden Surrey |
| Murray H V, Sluder T B, | 30 Aug. 1989 | Fixed Restorative Techniques (Dental Laboratory Manuals) 2 nd edition | University North Carolina Press | North Carolina USA |
| Shillingburg H T, Edwin L | 2020 | Guide to Occlusal Waxing 3 rd edition | Quintessence Publishing Co, Inc | New Malden Surrey |
| Serio F G | 30 Jan. 1998 | Understanding Dental Health (Understanding Health and Sickness Series) | University Press of Mississippi | Mississippi USA |
| Rosenstiel S F, Land M F | 25 Sept. 2015 | Contemporary Fixed Prosthodontics 5 th edition | Mosby | Maryland Heights, Missouri. USA |

| 11. Key reading list | | | | |
|------------------------------------|---------------|---|---------------------------------|-------------------------|
| Author | Year | Title | Publisher | Location |
| Brennan, M | 2006 | Ethics and Law for the Dental Team | PasTest | Knutsford, Cheshire |
| Herbert T Shillingburg | 30 Mar. 2012 | Fundamentals of Fixed Prosthodontics 4th Revised ed. | Quintessence Publishing (IL) | New Malden Surrey |
| Jenkins G | 1999 | Precision Attachments: A Link to Successful Restorative Treatment | Quintessence Publishing (IL) | New Malden Surrey |
| White G E | 1 Jun. 1993 | Osseointegrated Dental Technology | Quintessence Publishing (IL) | New Malden Surrey |
| Hobkirk J., Watson R.M, Searson L. | 6 Aug. 2003 | Introducing Dental Implants | Churchill Livingstone | London |
| W. Patrick Naylor | 21 Oct. 2 | Introduction to Metal Cer | Quintessence Publishing Co, Inc | New Malden Surrey |
| Iaacson K G | 2000 | Removable Orthodontic Appliances | Wright | Wynyard, United Kingdom |
| McDonald F, Ireland A J | 1998 | Diagnosis of the Orthodontic Patient | Oxford Medical Publications)- | Oxford |
| Littlewood S.J., Mitchell L. | 27 April 2019 | An Introduction to Orthodontics 5 th ed | Oxford University Press | Oxford |
| Huge S | | The Orthodontic Appliance Reference Manual | Ortho-Care (UK) Ltd | Shipley, West Yorkshire |
| Richardson A. | 29 Nov. 1999 | Interceptive Orthodontic | British Dental Journal | London |
| Orton H S | 1993 | Functional Appliances in Orthodontic Treatment | Quintessence Publishing Co, Inc | New Malden Surrey |
| | | Dental Technologies | CRG Publications. | London |
| | | The Dental Technician | A. E. Morgan Publications Ltd | Epson, Surrey, |
| | | Quintessence Journal of Dental Technology: | Quintessence Publishing Co. LTD | New Malden, Surrey |

12. Other indicative text (e.g. websites)

General Dental Council, Student Fitness to Practice. The General Dental Council https://www.gdc-uk.org/docs/default-source/guidance-for-students/student-professionalism-and-fitness-to-practise-guidance-for-students.pdf?sfvrsn=5ddbc404_2
<https://derweb.co.uk>
<https://www.dla.org.uk>
<https://www.dta-uk.org>
<https://www.gdc-uk.org/information-standards-guidance>
<https://www.gov.uk/government/collections/oral-health>
<https://www.nature.com/vital/>
<https://www.nature.com/bdjteam/>

13. List of amendments since last (re)validation

| Area amended | Details | Date Central Quality informed |
|----------------|--|-------------------------------|
| Module Grading | Module changed from Pass/Fail to assessed. | November 2020 |

Module DT2506: Dental Technology Techniques 1

| 1. Factual information | | | |
|--------------------------------|---|---------------------|----|
| Module title | DT2506 Dental Technology Techniques 1 | | |
| Module tutor | Christopher Fielding | Level | 5 |
| Module type | Taught, Portfolio | Credit value | 30 |
| Mode of delivery | 100% face-to-face | | |
| Notional learning hours | Lecture 30 hours, Demonstration Practical classes and workshops 90 hours, Independent guided study 190 hours. | | |

2. Rationale for the module and its links with other modules

This module builds the basic knowledge and skills developed in DT1403 Introduction to Dental Technology. Through the module the foundation practical core skills and the professional responsibilities and requirements for a dental technologist will be further developed to include a range of appliances for Fixed Prosthodontics, Removable Prosthodontics and Orthodontics.

The Dental Technology Techniques 1 module is focused upon the techniques, knowledge, understanding and technical skills necessary for the production of custom-made dental devices. This module is designed to provide the student with the opportunity to further develop the manipulative skills required for registration with the GDC in the basic procedures in complete dentures, orthodontics, conservation fixed and partial removable prosthodontics. It provides an opportunity for the student to analyse the sequence of techniques used in the fabrication of a range of custom made dental appliances while developing their manipulative skills to a 'safe beginner' level.

To assess the levels of communication necessary to meet the clinical requirements and to enhance the links to the clinical team through a Case Study. It is important for student dental technicians to develop an understanding of the clinical aspects of patient care that has a direct effect on their role.

As part of this module the student will be aware of their role as part of the oral healthcare team and comprehend the roles and responsibilities of all the other oral healthcare team members. They should also be aware of the range of treatments that are routinely provided to patients and the team members who provide such service.

3. Aims of the module

Individual Module Aims:

1. Describe the clinical rationale, design, and manufacture of a complete removable dentures set to a class 1 relationship.
2. Explain the principles and provision of Partial Prosthetics. Describe the clinical rationale of a partial removable denture, classification methods for this area. Construct acrylic Partial Dentures.
3. Explain the principles and provision of fixed prosthodontics and describe the techniques used in the manufacture of bonded ceramic anterior crowns.

3. Aims of the module

4. Explain the principles and provision of simple removable orthodontic appliances to correct occlusions.

4. Pre-requisite modules or specified entry requirements

DT1401 Dental Anatomy 1

DT1402 Professional Practice 1

DT1403 Introduction to Dental Technology

5. Is the module compensatable?

No

6. Are there any PSRB requirements regarding the module?

Overarching Outcomes

Recognise the role and responsibility of being a registrant and demonstrate professionalism throughout education, training and practice in accordance with GDC guidance.

Apply an evidence-based approach to learning, practice, clinical judgment and decision making and utilise critical thinking and problem solving skills.

1.1.3 Recognise abnormalities of the oral cavity and their effect on dental devices.

1.1.5 Describe and evaluate the procedures used in the design and manufacture of custom made devices.

1.5.1 Carry out procedures to meet the prescription.

1.5.2 Assess the fitness for purpose of custom made dental devices and propose alternative solutions where required.

1.8.4 Recognise and take responsibility for the fitness for purpose of custom made dental devices provided.

1.10.2 Explain how the design and manufacture of custom made dental devices can contribute to the prevention of oral disease and the interests of the patient's long term oral health, safety and well-being.

1.10.3 Evaluate and apply the principles of evidence based and appropriate design in the manufacture and provision of custom made dental devices.

1.14.1 Design, manufacture, assess and provide biomechanically sound removable devices.

1.14.2 Design, manufacture, assess and provide biomechanically sound fixed prostheses.

1.14.3 Design, manufacture, assess and provide biomechanically sound orthodontic appliances.

1.14.4 Evaluate, for individual patients, the need for more complex treatment and seek advice.

1.15.1 Repair custom made dental devices to meet the needs of the patient.

1.15.2 Repair and modify custom made dental devices.

4.2 Explain the role of appraisal, training and review of colleagues, and giving and receiving effective feedback.

6. Are there any PSRB requirements regarding the module?

4.3 Give and receive feedback effectively to other members of the team.

9.2 Utilise the provision and receipt of effective feedback in the professional development of self and others.

9.3 Explain the range of learning and teaching methods and the importance of assessment, feedback, critical reflection, identification of learning needs and appraisal in personal development planning.

10.2 Effectively manage their own time and resources.

12.1 Recognise and comply with systems and processes to support safe patient care.

8. Indicative content.

Professional practice reflection.

2. Activities using polymeric Partial denture techniques:

Construct an example of P/P acrylic dentures. Digital techniques.

Occlusion: forming of appropriate occlusal relationships, path of insertion, retention and contacts.

Quality assurance: forms of checks used to assure that the case meets the prescription requirement, decontamination, packaging and recording cases for dispatch or collection.

Professional practice reflection.

3. Activities using Conservation cases:

Construct conservation examples to include ceramic bonded crowns.

Articulation: mounting of cases to articulators. Data transfer from occlusal registration and prescription information

Aesthetics: construction of copings to support ceramic materials.

Digital techniques.

Professional practice reflection.

Occlusion: forming of appropriate occlusal relationships and contacts using dental ceramics.

Quality assurance: forms of checks used to assure that the case meets the prescription requirement, decontamination, packaging and recording cases for dispatch or collection.

Professional practice reflection.

4. Orthodontic Metal forming for applications related to removable and fixed appliances:

Wire work for clasps and springs for simple orthodontic appliances to include vacuum forming. Examples could include an 'Hawley retainer', 'T spings', 'Z springs', 'buccal canine retractors' and 'finger springs'.

Other orthodontic components such as Flat Anterior and Posterior bite planes.

Orthodontic design principles.

8. Indicative content.

Digital techniques.

Quality assurance: forms of checks used to assure that the case meets the prescription requirement, decontamination, packaging and recording cases for dispatch or collection.

Professional practice reflection.

9. Assessment strategy, assessment methods, their relative weightings and mapping to module learning outcomes**Assessment Strategy:**

Summative Theory Examination: to confirm understanding of basic appliance design principles. Duration 2 hours.

Portfolio: The construction of simulated cases for all areas demonstrating critical self-evaluation. Appliances covered will include Removable Prosthodontics, Partial Prosthodontics, Fixed Prosthodontics and Orthodontics. An item from each area will be summatively assessed.

Summative Practical Exam: Produce a range of devices to a 'safe beginner' standard. Duration 24 hours to be completed over 4 Tuesdays (6 hours) in a four week period (24 hours)/

| Assessment Task | Weighting | Week submitted | Grading (Pass / Fail / %) | Module Learning Outcome(s) the assessment task maps to |
|--------------------------|------------------|-----------------------|----------------------------------|---|
| Summative Theory Exam | 20 | 27 | Pass 40-59% | B2, D1 |
| Portfolio | 30 | 26 | Merit 60-69% | A4, B1, B3, C1, C2, D1 |
| Summative Practical Exam | 50 | 28-31 | Distinction 70-100% | A4, B1, B2, C1, C2, D2, D3 |

| 9. Assessment strategy, assessment methods, their relative weightings and mapping to module learning outcomes | | | | |
|---|--|--|--|--|
| | | | | |

| 10. Teaching staff associated with the module |
|---|
| Name and contact details |
| Christopher Fielding chris.fielding@liv-coll.ac.uk 0151 252 4833 |
| |

| 11. Key reading list | | | | |
|------------------------------|---------------|---|---------------------------------|---------------------------------|
| Author | Year | Title | Publisher | Location |
| Brennan, M | 2006 | Ethics and Law for the Dental Team | PasTest | Knutsford, Cheshire |
| Carr A, McGivney G P, Brown | 18 Jan. 2016 | McCracken's Removable Partial Prosthodontics, 13e | Mosby | Maryland Heights, Missouri. USA |
| Stratton R J and Wiebelt F J | 1998 | An Atlas of Removable Partial Denture Designs | Quintessence | New Malden Surrey |
| Barclay C W, Walmsley A D | 1998 | Fixed and Removable Prosthodontics | Churchill Livingstone | London |
| Rudd, K | 1985 | Dental Laboratory Procedures: Removable Partial Dentures (volume 3) (2 nd edition) | Mosby | Maryland Heights, Missouri. USA |
| Sowter, J. | 30 Sept. 1987 | Dental laboratory technology: Removable Prosthodontic Techniques | University North Carolina Press | North Carolina USA |

| 11. Key reading list | | | | |
|------------------------------------|---------------|---|---------------------------------|---------------------------------|
| Author | Year | Title | Publisher | Location |
| Brennan, M | 2006 | Ethics and Law for the Dental Team | PasTest | Knutsford, Cheshire |
| Hayakawa I | 1999 | Principals and Practices of Complete Dentures: Creating the Mental Image of a Denture | Quintessence | New Malden Surrey |
| Murray H V, Sluder T B, | 30 Aug. 1989 | Fixed Restorative Techniques (Dental Laboratory Manuals) 2 nd edition | University North Carolina Press | North Carolina USA |
| Shillingburg H T, Edwin L | 2020 | Guide to Occlusal Waxing 3 rd edition | Quintessence Publishing Co, Inc | New Malden Surrey |
| Serio F G | 30 Jan. 1998 | Understanding Dental Health (Understanding Health and Sickness Series) | University Press of Mississippi | Mississippi USA |
| Rosenstiel S F, Land M F | 25 Sept. 2015 | Contemporary Fixed Prosthodontics 5 th edition | Mosby | Maryland Heights, Missouri. USA |
| Herbert T Shillingburg | 30 Mar. 2012 | Fundamentals of Fixed Prosthodontics 4th Revised ed. | Quintessence Publishing (IL) | New Malden Surrey |
| Jenkins G | 1999 | Precision Attachments: A Link to Successful Restorative Treatment | Quintessence Publishing (IL) | New Malden Surrey |
| White G E | 1 Jun. 1993 | Osseointegrated Dental Technology | Quintessence Publishing (IL) | New Malden Surrey |
| Hobkirk J., Watson R.M, Searson L. | 6 Aug. 2003 | Introducing Dental Implants | Churchill Livingstone | London |
| W. Patrick Naylor | 21 Oct. 2 | Introduction to Metal Cer | Quintessence Publishing Co, Inc | New Malden Surre |
| McDonald F, Ireland A J | 1998 | Diagnosis of the Orthodontic Patient | Oxford Medical Publications)- | Oxford |

| 11. Key reading list | | | | |
|---|---------------|--|---------------------------------|---|
| Author | Year | Title | Publisher | Location |
| Brennan, M | 2006 | Ethics and Law for the Dental Team | PasTest | Knutsford, Cheshire |
| Littlewood S.J., Mitchell L. | 27 April 2019 | An Introduction to Orthodontics 5 th ed | Oxford University Press | Oxford |
| Huge S | | The Orthodontic Appliance Reference Manual | Ortho-Care (UK) Ltd | Shipley, West Yorkshire |
| Richardson A. | 29 Nov. 1999 | Interceptive Orthodontic | British Dental Journal | London |
| Orton H S | 1993 | Functional Appliances in Orthodontic Treatment | Quintessence Publishing Co, Inc | New Malden Surrey |
| Journal | NA | Dental Technologies | CRG Publications. | (Kintyre court, 41 New Park Rd, London, SW2 4DY) |
| Journal | NA | The Dental Technician | A. E. Morgan Publications Ltd | Stanley House, 9 West Street, Epsom, Surrey, KT18 7RL |
| Journal | NA | Quintessence Journal of Dental Technology: | Quintessence Publishing Co. LTD | Grafton Road, New Malden, Surrey KT3 3AB |
| 12. Other indicative text (e.g. websites) | | | | |
| <p>General Dental Council, Student Fitness to Practice. The General Dental Council https://www.gdc-uk.org/docs/default-source/guidance-for-students/student-professionalism-and-fitness-to-practise-guidance-for-students.pdf?sfvrsn=5ddbc404_2 https://derweb.co.uk https://www.dla.org.uk https://www.dta-uk.org https://www.gdc-uk.org/information-standards-guidance https://www.gov.uk/government/collections/oral-health https://www.nature.com/vital/ https://www.nature.com/bdjteam/</p> | | | | |

Module DT3507: Professional Practice 2

| 1. Factual information | | | |
|--------------------------------|---|---------------------|----|
| Module title | DT3507 Professional Practice 2 | | |
| Module tutor | Christopher Fielding | Level | 5 |
| Module type | Taught | Credit value | 15 |
| Mode of delivery | 100% face-to-face | | |
| Notional learning hours | Indicative learning hours out of Total number of 150 hours 45 are guided learning hours (Lecture, Tutorial), other learning including 105 independent study. | | |

2. Rationale for the module and its links with other modules

This module will provide the essential knowledge of Professional Practice as a GDC registrant in relation to the professional responsibilities associated with the role of a Dental Technician as a Dental Care Professional identifying and explaining the professional and legal requirements of dental public health, preventative dentistry, and communication with patient and the dental team, patient consent and ethics.

This module is intended to extend the student's knowledge regarding aspects of preventative dentistry, disease prevention and health promotion in both technical and clinical situations. It covers an appreciation that educational approaches, around promotion of preventative dentistry and positive views of oral health can enable patients to control their own oral health. The module introduces the key aspects of patient focused provision, encompassing the legal basis under which patients are treated, patient confidentiality and consent. It provides an opportunity for the students to gain understanding of the legal and ethical obligations of GDC registration and the responsibilities of the other members of the dental team and wider health care teams. The module will extend the students understanding of communication with patient and the dental team, patient consent and ethics.

3. Aims of the module

Individual Module Aims

1. Familiarity with the procedures, successes and limitations of preventative dentistry
2. Understanding of ethical and legal related dental dilemmas.

4. Pre-requisite modules or specified entry requirements

DT1402 Professional Practice 1

5. Is the module compensatable?

No

6. Are there any PSRB requirements regarding the module?

The GDC PfP Learning outcomes related to profession practice must be achieved.

Overarching Outcomes,

Practise safely and effectively, making the high quality long term care of patients the first concern.

Recognise the role and responsibility of being a registrant and demonstrate professionalism throughout education, training and practice in accordance with GDC guidance.

Apply an evidence-based approach to learning, practice, clinical judgment and decision making and utilise critical thinking and problem solving skills.

Accurately assess own capabilities and limitations, demonstrating reflective practice, in the interest of high quality patient care and act within these boundaries.

Recognise the importance of lifelong learning and apply it to practice.

GDC Preparing for Practice Learning Outcomes (2015)

DT

1.1.1, Describe the principles of an evidence-based approach to learning, professional practice and decision making

1.5.5 Explain the principles of obtaining valid patient consent

1.7.1 Treat all patients with equality, respect and dignity

1.7.2 Explain the impact of medical and psychological conditions in the patient Health and safety legislation and application

1.7.3 Manage patient anxiety, support and reassure patients through effective communication and behavioural techniques

1.7.4 Recognise and take responsibility for understanding the management and organisation of local referral networks, local clinical guidelines and policies

1.7.5 Discuss the role of the dental technician and other members of the dental team in the patient management process.

2.1 Explain how social, cultural and environmental factors contribute to general and oral health.

2.2 Describe the dental healthcare systems dental professionals work within including health policy and organisation, delivery of healthcare and equity.

2.3 Recognise the impact of clinical guidelines relating to the delivery of oral health care on laboratory practice and their implications.

3.1 Communicate appropriately, effectively and sensitively at all times with and about patients, their representatives and the general public where required or as directed and in relation to:

- patients with anxious or challenging behaviour
- where patients are from diverse backgrounds or there are barriers to patient communication

6. Are there any PSRB requirements regarding the module?

3.2 Recognise the importance of non-verbal communication including listening skills, and barriers to effective communication

3.3 Explain and check patients understanding of treatment options

3.4 Obtain valid consent

4.1 Communicate effectively with colleagues from dental and other healthcare professions in relation to the direct care of individual patients, including oral health promotion.

4.4 Communicate appropriately and effectively in professional discussions and transactions within the health and other sectors

5.1 Communicate appropriately, effectively and sensitively by spoken, written and electronic methods and maintain and develop these skills.

5.2 Explain the importance of and maintain accurate, contemporaneous and comprehensive patient records in accordance with legal and statutory requirements and best practice.

5.3 Recognise the use of a range of communication methods and technologies and their appropriate application in support of the practice of dental technology.

5.4 Recognise and act within the principles of information governance.

8.1 Describe and respect the roles of dental and other healthcare professionals in the context of learning and working in a dental and wider healthcare team.

8.2 Ensure that any team you are involved in works together to provide appropriate dental care for patients.

8.3 Explain the contribution that team members and effective team working makes to the delivery of safe and effective high quality care.

9.1 Recognise and demonstrate own professional responsibility in the development of self and the rest of the team.

9.7 Describe and demonstrate the attributes of professional attitudes and behaviour in all environments and media.

10.1 Put patients' interests first and act to protect them.

10.7 Ensure that all aspects of practice comply with legal and regulatory requirements.

Legal requirement to maintain full, accurate clinical and laboratory records.

1.10.1 Describe the principles of preventive care.

10.8 Demonstrate appropriate continuous improvement activities.

Individual responses to work pressures and their management.

12.4 Describe the legal, financial and ethical issues associated with managing a dental practice

| 7. Intended learning outcomes | | |
|--|--|---|
| A. Knowledge and understanding | Programme Learning Outcome(s) this maps against | Learning and teaching strategy |
| <p><i>At the end of the module, learners will be expected to:</i></p> <p>Analyse and evaluate the principles of good research, how to access research and interpret it for use as part of an evidence based approach to practice</p> <p>Critically understand the impact of social, cultural and environmental factors on oral health.</p> <p>Evaluate and apply the principles and responsibilities of professional practice applied to the Dental Technician Dental Care Professional.</p> | <p>A2</p> <p>A3</p> <p>A4</p> | <p>Independent research</p> <p>Self-directed learning</p> <p>Taught sessions</p> <p>Mentoring sessions</p> <p>Self-managed learning</p> <p>Reflective practice sessions</p> |

| B. Cognitive skills | Programme Learning Outcome(s) this maps against | Learning and teaching strategy |
|--|--|---|
| <p><i>At the end of the module learners will be expected to:</i></p> <p>Utilise intellectual skills in debate, knowledge, reasoning and problem solving to enable an evaluation of contrasting approaches within the field of dental technology.</p> | <p>B3</p> | <p>Independent research</p> <p>Self-directed learning</p> <p>Taught sessions</p> <p>Mentoring sessions</p> <p>Self-managed learning</p> <p>Reflective practice sessions</p> |

| C. Practical and professional skills | Programme Learning Outcome(s) this maps against | Learning and teaching strategy |
|--|--|--|
| <p><i>At the end of the module, learners will be expected to:</i> Utilise employment behaviours relevant to the practice of dental technology.</p> | C2 | Independent research Self-directed learning Taught sessions Mentoring sessions Self-managed learning Reflective practice sessions |

| D Key transferable skills | Programme Learning Outcome(s) this maps against | Learning and teaching strategy |
|--|--|--|
| <p><i>At the end of the module, learners will be expected to:</i> Critically evaluate the role and responsibility of being a registrant and demonstrate professionalism throughout education, training and practice in accordance with GDC guidance.</p> | D1 | Independent research Self-directed learning Taught sessions Mentoring sessions Self-managed learning Reflective practice sessions |

8. Indicative content.

Overarching Outcomes

Preventative dentistry and Public Health

Oral health care education and promotion

Roles of the professional

Methods of payment and employment of members of the dental team

Patient Records and communication methods.

Barriers to communication.

Care and treatment for people with special needs

Child Protection, local and national policies

National health targets, National Dental Health Survey

Underpinning scientific basis of oral health themes

1. Familiarity with the procedures, successes and limitations of preventative dentistry

Inequalities in health Social, behavioural, environmental and economic factors methods and limitations of disease prevention and health promotion, social, cultural and environmental factors that contribute to general and oral health.

GDC Registration Process and Requirements.

Principles of Equality and Diversity in society.

Financial Legal and Ethical requirements of laboratory management.

Dental Public Health

Principles of preventative care

Principles of an evidence-based approach to learning, professional practice and decision making.

Sources of professional advice, such as from the dental defence organisations, and they should recognise and act upon their obligations as outlined in the GDC's publication Standards for Dental professionals.

Dental defence agencies and their role.

2. Ethical and legal dilemmas:

8. Indicative content.

Ethics

Ethical dilemmas

Sources of professional advice, such as from the dental defence organisations, and they should recognise and act upon their obligations as outlined in the GDC's publication Standards for Dental professionals.

Ethical and legal dilemmas:

Ethics

Ethical dilemmas

Social, ethnic and psychological issues related to patient needs.

Responding to questions

Patient consent, valid consent

Knowing who is the most appropriate person to give consent

Gaining consent in emergencies, establishing a patient's capacity to give consent

Importance of communication between members of the dental team and the patient (and with members of other healthcare professions)

Related topics e.g. pain, stress and anxiety, social class, poverty and the needs of children and the elderly

9. Assessment strategy, assessment methods, their relative weightings and mapping to module learning outcomes

Assessment Strategy:

Students will complete an assignment of up to 3,000 words to research and evaluate the professional responsibilities associated with the role of a Dental Technician as a Dental Care Professional identifying and explaining the professional and legal requirements of dental public health, preventative dentistry, communication with patient and the dental team, patient consent and ethics.

| Assessment Task | Weighting | Week submitted | Grading (Pass / Fail / %) | Module Learning Outcome(s) the assessment task maps to |
|-----------------|-----------|----------------|---------------------------|--|
| Assignment | 100% | 25 | Pass 40-59% | A2, A3, A4 |

| 9. Assessment strategy, assessment methods, their relative weightings and mapping to module learning outcomes | | | | |
|---|--|--|---------------------|----------|
| | | | Merit 60-69% | B3 |
| | | | Distinction 70-100% | C2 D1 |

| 10. Teaching staff associated with the module |
|---|
| Name and contact details |
| Christopher Fielding chris.fielding@liv-coll.ac.uk 0151 252 4833 |
| |

| 11. Key reading list | | | | |
|----------------------|------|---|-------------------|-------------------------|
| Author | Year | Title | Publisher | Location |
| Beemsterboer, P, L | 2016 | Ethics and Law in Dental Hygiene, 3 rd Edition | Saunders | London |
| Brennan, M | 2006 | Ethics and Law for the Dental Team | PasTest | Knutsford, Cheshire |
| Chapman, A | 2021 | Basic Guide to Oral Health Education and Promotion, 3rd Edition | Wiley Blackwell | Chichester, west Sussex |
| Ewles and Simnet | 2017 | Promoting Health a Practical Guide 7 th edition | Bailliere Tindall | London |

| 11. Key reading list | | | | |
|--------------------------------------|-------------|--|---------------------------------|--------------------|
| Author | Year | Title | Publisher | Location |
| Groten M, Janda R | 2004 | Clinical Investigation of Medical Devices in Dentistry | Quintessence | New Malden, Surrey |
| Inglehart M, Bagramian R | 2002 | Oral Health- Related Quality of Life | Quintessence | New Malden, Surrey |
| Sandeep Kumar, S. Kumar, A. Basak, D | 2018 | Dental Laws and Moral Ethics | Wiley-Blackwell | |
| Lambden, P | 2003 | Dental Law and Ethics | Pearson | Birmingham |
| Miles, L | 2003 | Dynamic Dentistry | Link Publishing | London |
| Mitchell L and Mitchell D | 2020 | Oxford Handbook of Clinical Dentistry, 7th edition | OUP Oxford | Oxford |
| Pine C, Harris R | 2007 | Community Oral Health | Quintessence | New Malden, Surrey |
| Rule J, Veatch R | 2004 | Ethical Questions in Dentistry 2nd Ed | Quintessence | New Malden, Surrey |
| Scriven A | 2010 | Promoting Health: A Practical Guide, 6th edition | Bailliere Tindall | London |
| Serio F G | 1998 | Understanding Dental Health (Understanding Health and Sickness Series) | University Press of Mississippi | Mississippi USA |
| Stuart-Wilson F | 2009 | Professionalism and Ethics | Quay Books | London |
| Serio F G | 1998 | Understanding Dental Health (Understanding Health and Sickness Series) | University Press of Mississippi | Mississippi USA |
| | | Dental Technologies | CRG Publications. | London |

| 11. Key reading list | | | | |
|----------------------|------|--|---------------------------------|--------------------|
| Author | Year | Title | Publisher | Location |
| | | The Dental Technician | A. E. Morgan Publications Ltd | Epson, Surrey |
| | | Quintessence Journal of Dental Technology: | Quintessence Publishing Co. LTD | New Malden, Surrey |

| 12. Other indicative text (e.g. websites) |
|---|
| <p>General Dental Council, Student Fitness to Practice. The General Dental Council https://www.gdc-uk.org/docs/default-source/guidance-for-students/student-professionalism-and-fitness-to-practise-guidance-for-students.pdf?sfvrsn=5ddbc404_2</p> <p>https://www.gdc-uk.org/information-standards-guidance</p> <p>https://derweb.co.uk</p> <p>https://www.dia.org.uk</p> <p>https://www.dta-uk.org</p> <p>https://www.gov.uk/government/collections/oral-health</p> <p>https://www.nature.com/vital/</p> <p>https://www.nature.com/bdjteam/</p> |

| 13. List of amendments since last (re)validation | | |
|--|---|-------------------------------|
| Area amended | Details | Date Central Quality informed |
| Module size and timing | This module has been split in to two smaller modules and will be taught in year 1 and 3 to embed professionalism. | |

Module DT3508: Dental Anatomy 2

| 1. Factual information | | | |
|--------------------------------|---|---------------------|----|
| Module title | DT3508 Dental Anatomy 2 | | |
| Module tutor | Christopher Fielding | Level | 5 |
| Module type | Taught | Credit value | 15 |
| Mode of delivery | 100% face-to-face | | |
| Notional learning hours | Indicative learning hours out of Total number of 150 hours 45 are guided learning hours (Lecture, Tutorial), other learning including 105 independent study. | | |

| 2. Rationale for the module and its links with other modules | |
|---|--|
| <p>This module will continue to build on the knowledge that was developed in DT1401 Dental Anatomy.</p> <p>This module gives the student the opportunity to investigate the oral and dental aspects of the biomedical sciences and anatomical knowledge to understand how anatomical features have a significant influence on dental appliance design. The student will gain knowledge of microorganisms and dental disease, methods of disinfection and sterilisation. Students will gain a knowledge of the effects of the aging process on the oral structures and the process of embryological development. Students will demonstrate a competence in dealing with basic medical emergencies.</p> | |

| 3. Aims of the module | |
|---|--|
| <p>Individual Module Aims:</p> <ol style="list-style-type: none">1. Identify the range of oral microorganisms and their significance in relation to dental disease, associate dental diseases, anomalies and trauma that affect hard and soft tissues of the oral cavity, wound and bone healing processes, immune response and cross infection. The scientific principles and application of sterilisation, disinfection and antisepsis techniques.2. Assess the changes in oro-facial structures during embryological development, anomalies (cleft lip and palate), cranial growth and the ageing process. Anatomical influences upon appliance design.3. Medical Emergencies and emergency First Aid. | |

| 4. Pre-requisite modules or specified entry requirements | |
|---|--|
| DT1401 Dental Anatomy 1 | |

5. Is the module compensatable?

No

6. Are there any PSRB requirements regarding the module?

Overarching Outcomes

Recognise the role and responsibility of being a registrant and demonstrate professionalism throughout education, training and practice in accordance with GDC guidance.

Apply an evidence-based approach to learning, practice, clinical judgment and decision making and utilise critical thinking and problem solving skills.

GDC Preparing for Practice Learning Outcomes (2015)

1.1.2 Describe the range of normal dental and oral anatomy and physiology.

1.1.3 Recognise abnormalities of the oral cavity and their effect on dental devices.

1.1.4 Explain the potential routes of transmission of infectious agents in dental practice, mechanisms for the prevention of infection, the scientific principles of decontamination and disinfection and their relevance to health and safety

1.8.5 Recognise and manage medical emergencies

1.10.2 Explain how the design and manufacture of custom made dental devices can contribute to the prevention of oral disease and the interests of the patient's long term oral health, safety and well-being.

| B. Cognitive skills | Programme Learning Outcome(s) this maps against | Learning and teaching strategy |
|----------------------------|--|--|
| | B3 | Self-managed learning Application in the work place |

| C. Practical and professional skills | Programme Learning Outcome(s) this maps against | Learning and teaching strategy |
|---|--|---|
| <p><i>At the end of the module, learners will be expected to:</i></p> <p>Utilise employment behaviours relevant to the practice of dental technology.</p> | C2 | Taught sessions Case evaluation applying knowledge Independent research Self-directed learning Self-managed learning Application in the work place |

| D Key transferable skills | Programme Learning Outcome(s) this maps against | Learning and teaching strategy |
|--|--|---|
| <p><i>At the end of the module, learners will be expected to:</i></p> <p>Critically evaluate the role and responsibility of being a registrant and demonstrate professionalism throughout education,</p> | | Taught sessions Case evaluation applying knowledge |

8. Indicative content.

Antisepsis

Cross infection control

Individual responsibility

2. Effects of Ageing and anatomical oral development:

Changes in oral mucosa

Changes in the teeth, their positions and their supporting structures

Factors affecting the aging process

The normal embryonic development of the oro-facial structure

Cleft lip and palate

Causes and mechanisms of oro-facial malformations

The appearance of oro-facial malformations

Malocclusions (skeletal and related to teeth)

3. One Day Emergency First Aid Course

To include:

Incident Management.

Casualty Assessment and Prioritise Treatment.

Cardio Pulmonary Resuscitation (CPR). (To include Defib).

Choking.

Circulatory Shock.

Heart Conditions.

Bleeding.

Wounds & Treatment.

Burns.

8. Indicative content.

Rule of Nines.
 Anaphylactic shock.
 Diabetes.

9. Assessment strategy, assessment methods, their relative weightings and mapping to module learning outcomes**Assessment Strategy:**

To pass this module a student must complete a One Day Emergency First Aid Course and an assignment of up to 3,000 words covering oral disease and the effects of ageing and anatomical oral development.

| Assessment Task | Weighting | Week submitted | Grading (Pass / Fail / %) | Module Learning Outcome(s) the assessment task maps to |
|------------------------------------|-----------|----------------|-------------------------------------|--|
| Assignment | 80% | 15 | Pass 40-59% | A1, A4, B2, B3, C2, D1, D2 |
| One Day Emergency First Aid Course | 20% | 6 | Merit 60-69% Distinction 70-100% | A4, B2, B3, C2, D2 |

10. Teaching staff associated with the module**Name and contact details**

Christopher Fielding chris.fielding@liv-coll.ac.uk 0151 252 4833

| 11. Key reading list | | | | |
|------------------------------|-------------|---|-----------------------|-----------------|
| Author | Year | Title | Publisher | Location |
| Brand RW, D. E. Isselhard DE | 2018 | Anatomy of Orofacial Structures, 8th edition | Mosby | |
| Marsh P.D., Martin MV | 2016 | Oral Microbiology, 6th edition, | Churchill Livingstone | Edinburgh |
| Miller C.H., Palenik C.J. | 2022 | Infection Control and Management of Hazardous Materials for the Dental Team, 7th edition. | Mosby | Edinburgh |
| Samaranayake., L.P. | 2018 | Essential Microbiology for Dentistry, 5th edition | Churchill Livingstone | Edinburgh |
| Whaites E. | 2020 | Radiography and Radiology for Dental Professionals, 4th Edition, | Churchill Livingstone | Edinburgh: |

| 12. Other indicative text (e.g. websites) |
|---|
| https://derweb.co.uk https://www.dla.org.uk https://www.dta-uk.org https://www.gdc-uk.org/information-standards-guidance https://www.gov.uk/government/collections/oral-health https://www.nature.com/vital/ https://www.nature.com/bdjteam/ https://pocketdentistry.com/1-introduction-to-dental-anatomy/ https://www.dentalone-md.com/dental-anatomy-and-development-of-the-mouth/ |

| 13. List of amendments since last (re)validation | | |
|---|---|--------------------------------------|
| Area amended | Details | Date Central Quality informed |
| Module size and timing | This module has been split in to two smaller modules and will be taught in year 1 and 3 | |

Module DT3509: Work Based Practice B

| 1. Factual information | | | |
|--------------------------------|--|---------------------|----|
| Module title | DT3509 Work Based Practice B | | |
| Module tutor | Christopher Fielding | Level | 5 |
| Module type | Work based practice record, Case Study | Credit value | 30 |
| Mode of delivery | 90% distance learning and 10% tutorial | | |
| Notional learning hours | Work Based Learning 300 hours, tutorial 30 hours | | |

2. Rationale for the module and its links with other modules

This module builds on the skills and methodologies developed in DT2405 Work Based Practice A and is to be developed in the related work place by Work-Based teaching and learning and the support of a named vocationally competent mentor. This module will continue with the development of applied skills and knowledge to a more complex level, across the range of a particular vocational discipline of either Fixed Prosthodontics, Removable Prosthodontics or Orthodontics area of the dental technicians vocational professional role within the dental team. A range of integrated learning activities and the preparation of the 'DCP portfolio of continuing professional development' confirming the individual's development of appropriate work based skills will demonstrate working at a higher level of competence than that achieved during DT2405 Work Based Practice A. The knowledge and attitudes undertaken during procedures will demonstrate the application of 'Professional GDC Standards' appropriate to their particular discipline as outlined in the recording documentation. Work place cases are formally provided and recorded to enable the student to develop an understanding of the real work place and the many factors and procedures involved in the provision of their particular discipline as defined by the GDC's current curricula. In this module it is expected that the student will be involved in **all work aspects from initial phase through to the completion of the process**, concentrating on the areas where the specific individual DCP have their greatest involvement and under the supervision of a named vocationally competent mentor who will review and sign off their work confirming that it is at a 'safe beginner' level and is suitable for clinical presentation to a Dental Surgeon who when fitting the device confirms its clinical suitability and that is safe for patient use.

3. Aims of the module

This module develops skills relevant to their workplace for potential dental technicians as Dental Care Professionals (DCP). It includes working with others; managing and developing self; communicating; managing tasks and solving problems; applying numeracy; technology; design and creativity. This incorporates the development of the individual; and application in the higher development of vocational skills in the work place to enable students to acquire the necessary technical understanding and competence within the framework of their prospective areas of work, and to be aware of their limitations whilst under **minimal** supervision. The acquisition of knowledge, understanding and vocational skills, along with the development of professional

| |
|---|
| 3. Aims of the module |
| <p>attitudes and behaviour that facilitate effective and appropriate interaction with patients and colleagues is essential to this work based module. The module is essential to those students wishing to develop a career in the area of a dental technology as a DCP using the real workplace dental laboratory for delivery and assessment.</p> <p>Individual Module Aims:</p> <ol style="list-style-type: none"> 1. Show 'safe beginner' competence in the application of skills and knowledge related to the trainee's particular chosen discipline for a range of patient cases in one discipline being either Fixed Prosthodontics, Removable Prosthodontics or Orthodontics area of the dental technicians work role whilst under close supervision. 2. Apply the theoretical knowledge and practice of a range of specific procedures and skills related to the student's discipline and demonstrate an appreciation of the need for a constant review and development of procedures, designs and techniques related to the role of a dental team member showing a positive response to mentors guidance. Demonstrate the ability to make independent decisions and seek mentor approval. 3. Produce 'DCP portfolio of continuing professional development' and Case Study which shows focused and continual development over time to a competent level. Provides verifiable evidence of the developing skills, knowledge and attitudes gained in the work place for the technical and professional aspects related to the chosen discipline at a more complex level building of the skills and methodologies developed in DT2405 Work Based Practice A. |
| 4. Pre-requisite modules or specified entry requirements |
| <p>DT1401 Dental Anatomy 1</p> <p>DT1402 Professional Practice 1</p> <p>DT1403 Introduction to Dental Technology</p> <p>DT2404 Dental Materials</p> <p>DT2405 Work Based Practice A</p> <p>DT2506 Dental Technology Techniques 1</p> |
| 5. Is the module compensatable? |
| No |
| 6. Are there any PSRB requirements regarding the module? |
| <p>Overarching Outcomes</p> <p>Recognise the role and responsibility of being a registrant and demonstrate professionalism throughout education, training and practice in accordance with GDC guidance.</p> <p>Apply an evidence-based approach to learning, practice, clinical judgment and decision making and utilise critical thinking and problem solving skills.</p> <p>Accurately assess own capabilities and limitations, demonstrating reflective practice, in the interest of high quality patient care and act within these boundaries</p> <p>Recognise the importance of lifelong learning and apply it to practice</p> <p>1.1.3 Recognise abnormalities of the oral cavity and their effect on dental devices.</p> <p>1.5.1 Carry out procedures to meet the prescription.</p> <p>1.5.2 Assess the fitness for purpose of custom made dental devices and propose alternative solutions where required.</p> |

3. Aims of the module

- 1.5.4 Discuss the role of the dental technician and other members of the dental team in the treatment plan.
- 1.5.6 Obtain valid consent from the patient.
- 1.8.1 Recognise the risks around the working laboratory environment and manage these in a safe and efficient manner
- 1.8.2 Perform effective decontamination and infection control procedures, taking into account their effect on materials
- 1.8.3 Take responsibility for ensuring compliance with current best practice guidelines and European manufacturing legislation.
- 4.1 Communicate effectively with colleagues from dental and other healthcare professions in relation to the direct care of individual patients, including oral health promotion.
- 4.2 Explain the role of appraisal, training and review of colleagues, and giving and receiving effective feedback
- 4.3 Give and receive feedback effectively to other members of the team
- 4.4 Communicate appropriately and effectively in professional discussions and transactions within the health and other sectors
- 8.2 Ensure that any team you are involved in works together to provide appropriate dental care for patients.
- 9.1 Recognise and demonstrate own professional responsibility in the development of self and the rest of the team
- 9.2 Utilise the provision and receipt of effective feedback in the professional development of self and others.
- 9.3 Explain the range of learning and teaching methods and the importance of assessment, feedback, critical reflection, identification of learning needs and appraisal in personal development planning.
- 9.4 Develop and maintain professional knowledge and competence and demonstrate commitment to lifelong learning.
- 9.6 Accurately assess their own capabilities and limitations in the interest of high quality patient care and seek advice from supervisors or colleagues where appropriate.
- 9.7 Describe and demonstrate the attributes of professional attitudes and behaviour in all environments and media.
- 10.2 Effectively manage their own time and resources.
- 10.6 Take responsibility for personal development planning, recording of evidence, and reflective practice.
- 10.8 Demonstrate appropriate continuous improvement activities.
- 11.2 Recognise and respect own and others' contribution to the dental and wider healthcare team and demonstrate effective team working.
- 12.1 Recognise and comply with systems and processes to support safe patient care.
- 12.5 Recognise and comply with national and local clinical governance and health and safety requirements

| B. Cognitive skills | Programme Learning Outcome(s) this maps against | Learning and teaching strategy |
|---|--|--|
| <p>and decision making in dental care environments.</p> <p>Utilise intellectual skills in debate, knowledge, reasoning and problem solving to enable an evaluation of contrasting approaches within the field of dental technology.</p> | <p>B2</p> <p>B3</p> | <p>Dental teamworking</p> <p>Practical demonstration and participation</p> <p>Real work based appliance/stage production</p> <p>Mentoring sessions</p> <p>Portfolio development.</p> <p>Technical Case Study</p> |

| C. Practical and professional skills | Programme Learning Outcome(s) this maps against | Learning and teaching strategy |
|--|--|--|
| <p><i>At the end of the module, learners will be expected to:</i></p> <p>Work independently and be able to make autonomous decisions when constructing dental appliances of increasing complexity, from prescription, for the design, manufacture and modification of custom made dental devices to a 'safe beginner' level and to meet current industry standards and legislation requirements.</p> <p>Utilise employment behaviours relevant to the practice of dental technology.</p> | <p>C1</p> <p>C2</p> | <p>Independent research</p> <p>Self-directed learning</p> <p>Tutor-led workshops</p> <p>Reflective practice</p> <p>Dental teamworking</p> <p>Practical demonstration and participation</p> <p>Real work based appliance/stage production</p> <p>Mentoring sessions</p> |

8. Indicative content.

The integration by structured goal setting and the development of the individual skills and knowledge by focused vocational teaching and learning in a real Work Based environment of the dental laboratory and is intended to establish the individual's basic vocational competence in one discipline being either Fixed Prosthodontics, Removable Prosthodontics or Orthodontics area of the dental technicians work role whilst under supervision of a GDC Registered vocational mentor (Dental Technician or Clinical Dental Technician)

Content of the module covers the following where the student is under the guidance of a qualified and experienced dental technician:

1. Receiving of work from the clinical area in a competent manner in a work-based environment.
2. Using a variety of types of information and data to establish the requirements for a particular custom-made dental device in a competent manner.
3. Developing a knowledge of the procedures used in the design and manufacture of custom-made dental devices in a Work-Based environment for either: Fixed Prosthodontics, Removable Prosthodontics or the Orthodontics disciplines.
4. Developing a knowledge of the 'Real Workplace' procedures used in the design and manufacture of custom-made dental devices for either: Fixed Prosthodontics, Removable Prosthodontics or Orthodontics disciplines.
5. Being able to analyse regularly cases as part of the formal contract review for clinical cases.
6. Applying the individual's knowledge of the design and manufacture of a range of custom-made dental devices, together with the provision of advice to other members of the dental team on these aspects of their fabrication when required.
7. Develop in the Work Based learning environment further competence regarding the managing of the manufacture of a range of custom-made dental devices from within one of the following treatment modalities: Orthodontics, Fixed Prosthodontics or Removable Prosthodontics whilst under direct supervision of a more experienced and registered dental technician or clinical dental technician.
8. Develop further competence at assessing the fitness for purpose both of items included in the manufacture of custom-made dental devices and of the final dental prosthesis device itself, within the individual's sphere of knowledge.
9. Demonstrate within designs a familiarity with the complex interactions between materials, designs and oral structures when reviewing the manufacture and acceptability of dental devices.
10. Be able to self-reflect and show knowledge of how to meet the design requirements by re-working and changing of components to meet the patient's needs and related treatment plans.
11. Experience and review their role in working as part of the dental team.
12. Judge and critically evaluate their own vocational development setting and achieving appropriate goals.

8. Indicative content.

13. Apply appropriate quality assurance systems, documented evidence of cases, the providing of formal and informal information to others, specific role requirements, and preparing of items particular to their role as a DCP.
14. Consistently applies appropriate Health and Safety rational, implements risk assessment, uses personal protective equipment and implements appropriate cross infection control procedures in line with the real workplace requirements.
15. Review and evaluate own performance and make such changes as will enhance their future career.

9. Assessment strategy, assessment methods, their relative weightings and mapping to module learning outcomes

Assessment Strategy:

This module is to be developed and assessed in the related workplace by Work-Based teaching and learning and the support of a named vocationally competent mentor. This unit will be developed in the real workplace environment to continue to develop the applied skills and knowledge across the range of a particular vocational discipline of either Fixed Prosthodontics, Removable Prosthodontics or Orthodontics area to a more complex and challenging level than achieved for DT2405 Work Based Practice A demonstrating clear 'safe beginner' level competence.

A range of integrated learning activities and the preparation of the 'DCP portfolio of continuing professional development' confirming the individual's improved development of appropriate work-based skills and the demonstration to work independently where appropriate, knowledge and attitudes by undertaking those procedures appropriate to their particular discipline as outlined in the recording documentation for real cases.

Workplace sessions are formally provided and recorded to enable the student to develop an understanding of the many factors and procedures involved in the provision of their particular discipline as defined by the GDC's current curricula. In this module it is expected that the student will be involved in all work aspects **from initial phase through to the completion of the process**, concentrating on the areas where the specific individual DCP have their greatest involvement and **under minimal supervision** of a named vocationally competent mentor.

The student will liaise with their mentor to select a suitable Case Study to complete, this will be evidenced by a Technical Report and a Duplicate of the device made. It is expected that the device will be of a more complex level than for DT2405 Work Based Practice A.

Students will complete a work place log-book/portfolio to record all student training and activities for the module. This will include recording of day to day activities with weekly critical self-reflection, meeting with mentor to identify SMART targets. Completion of a Case Study constructing a real practical case from beginning to final fit, with **minimal** mentor support to demonstrate higher level skills. Construction of a physical duplicate of the patient case for presentation. Submission of a Case Study Technical Report of the case up to 3000 words. The portfolio must include a record of at least 300 hours training supported by a work place mentor. The Case Study Technical Report and Portfolio of Continuing Professional Development are to be submitted together.

9. Assessment strategy, assessment methods, their relative weightings and mapping to module learning outcomes

| Assessment Task | Weighting | Week submitted | Grading (Pass / Fail / %) | Module Learning Outcome(s) the assessment task maps to |
|---|-----------|----------------|--|--|
| Technical Case Study Report and Portfolio | 100% | 24 | Pass 40-59% Merit 60-69% Distinction 70-100% | A1, A4 B1, B2, B3 C1, C2 D1, D2, D3 |

10. Teaching staff associated with the module

| Name and contact details |
|---|
| Christopher Fielding chris.fielding@liv-coll.ac.uk 0151 252 4833 |
| |

11. Key reading list

| Author | Year | Title | Publisher | Location |
|------------------------------|--------------|---|--------------|---------------------------------|
| Brennan, M | 2006 | Ethics and Law for the Dental Team | PasTest | Knutsford, Cheshire |
| Carr A, McGivney G P, Brown | 18 Jan. 2016 | McCracken's Removable Partial Prosthodontics, 13e | Mosby | Maryland Heights, Missouri. USA |
| Stratton R J and Wiebelt F J | 1998 | An Atlas of Removable Partial Denture Designs | Quintessence | New Malden Surrey |

| 11. Key reading list | | | | |
|-----------------------------|---------------|---|---------------------------------|---------------------------------|
| Author | Year | Title | Publisher | Location |
| Barclay C W, Walmsley A D | 1998 | Fixed and Removable Prosthodontics | Churchill Livingstone | London |
| Rudd, K | 1985 | Dental Laboratory Procedures: Removable Partial Dentures (volume 3) (2 nd edition) | Mosby | Maryland Heights, Missouri. USA |
| Sowter, J. | 30 Sept. 1987 | Dental laboratory technology: Removable Prosthodontic Techniques | University North Carolina Press | North Carolina USA |
| Hayakawa I | 1999 | Principles and Practices of Complete Dentures: Creating the Mental Image of a Denture | Quintessence | New Malden Surrey |
| Murray H V, Sluder T B, | 30 Aug. 1989 | Fixed Restorative Techniques (Dental Laboratory Manuals) 2 nd edition | University North Carolina Press | North Carolina USA |
| Shillingburg H T, Edwin L | 2020 | Guide to Occlusal Waxing 3 rd edition | Quintessence Publishing Co, Inc | New Malden Surrey |
| Serio F G | 30 Jan. 1998 | Understanding Dental Health (Understanding Health and Sickness Series) | University Press of Mississippi | Mississippi USA |
| Rosenstiel S F, Land M F | 25 Sept. 2015 | Contemporary Fixed Prosthodontics 5 th edition | Mosby | Maryland Heights, Missouri.USA |
| Herbert T Shillingburg | 30 Mar. 2012 | Fundamentals of Fixed Prosthodontics 4th Revised ed. | Quintessence Publishing (IL) | New Malden Surrey |
| Jenkins G | 1999 | Precision Attachments: A Link to Successful Restorative Treatment | Quintessence Publishing (IL) | New Malden Surrey |
| White G E | 1 Jun. 1993 | Osseointegrated Dental Technology | Quintessence Publishing (IL) | New Malden Surrey |

| 11. Key reading list | | | | |
|------------------------------------|---------------|---|---------------------------------|---|
| Author | Year | Title | Publisher | Location |
| Hobkirk J., Watson R.M, Searson L. | 6 Aug. 2003 | Introducing Dental Implants | Churchill Livingstone | London |
| W. Patrick Naylor | 21 Oct. 2019 | Introduction to Metal Ceramic Technology 3 rd ed | Quintessence Publishing Co, Inc | New Malden Surrey |
| Iaacson K G | 2000 | Removable Orthodontic Appliances | Wright | Wynyard, United Kingdom |
| McDonald F, Ireland A J | 1998 | Diagnosis of the Orthodontic Patient | Oxford Medical Publications | Oxford |
| Littlewood S.J., Mitchell L. | 27 April 2019 | An Introduction to Orthodontics 5 th ed | Oxford University Press | Oxford |
| Huge S | | The Orthodontic Appliance Reference Manual | Ortho-Care (UK) Ltd | Shipley, West Yorkshire |
| Richardson A. | 29 Nov. 1999 | Interceptive Orthodontic | British Dental Journal | London |
| Orton H S | 1993 | Functional Appliances in Orthodontic Treatment | Quintessence Publishing Co, Inc | New Malden Surrey |
| Journal | NA | Dental Technologies | CRG Publications. | (Kintyre court, 41 New Park Rd, London, SW2 4DY) |
| Journal | NA | The Dental Technician | A. E. Morgan Publications Ltd | Stanley House, 9 West Street, Epsom, Surrey, KT18 7RL |
| Journal | NA | Quintessence Journal of Dental Technology: | Quintessence Publishing Co. LTD | Grafton Road, New Malden, Surrey KT3 3AB |

12. Other indicative text (e.g. websites)

General Dental Council, Student Fitness to Practice. The General Dental Council https://www.gdc-uk.org/docs/default-source/guidance-for-students/student-professionalism-and-fitness-to-practise-guidance-for-students.pdf?sfvrsn=5ddbc404_2
<https://derweb.co.uk>
<https://www.dla.org.uk>
<https://www.dta-uk.org>
<https://www.gdc-uk.org/information-standards-guidance>
<https://www.gov.uk/government/collections/oral-health>
<https://www.nature.com/vital/>
<https://www.nature.com/bdjteam/>

13. List of amendments since last (re)validation

| Area amended | Details | Date Central Quality informed |
|----------------|---|-------------------------------|
| Module Grading | Module changed from Pass/Fail to assessed | November 2020 |

Module DT3510: Dental Technology Techniques 2

| 1. Factual information | | | |
|--------------------------------|---|---------------------|----|
| Module title | DT3510 Dental Technology Techniques 2 | | |
| Module tutor | Christopher Fielding | Level | 5 |
| Module type | Taught, Portfolio | Credit value | 30 |
| Mode of delivery | 100% face-to-face | | |
| Notional learning hours | Lecture 30 hours, Demonstration Practical classes and workshops 90 hours, Independent guided study 190 hours. | | |

| 2. Rationale for the module and its links with other modules |
|--|
| <p>This module builds the basic knowledge and skills developed in DT2406 Dental Technology Techniques 1. Through the module the practical core skills and the professional responsibilities and requirements for a dental technologist will be further developed to include a range of appliances for Fixed Prosthodontics, Removable Prosthodontics and Orthodontics.</p> <p>The Dental Technology Techniques 2 module is focused upon the techniques, knowledge, understanding and technical skills necessary for the production of custom-made dental devices. This module is designed to provide the student with the opportunity to further develop the manipulative skills required for registration with the GDC in the more complex procedures in Complete dentures, orthodontics, conservation fixed and partial removable prosthodontics. It provides an opportunity for the student to analyse the sequence of techniques used in the fabrication of a range of custom made dental appliances while developing their manipulative skills to a 'safe beginner' level.</p> <p>To achieve the higher levels of effective communication necessary to meet the clinical requirements and to enhance the links to the clinical team through a Case Study. It is important for student dental technicians to develop an understanding of the clinical aspects of patient care that has a direct effect on their role.</p> <p>As part of this module the student will be aware of their role as part of the oral healthcare team and comprehend the roles and responsibilities of all the other oral healthcare team members. They should also be aware of the range of treatments that are routinely provided to patients and the team members who provide such service.</p> |

| 3. Aims of the module |
|---|
| <p>Individual Module Aims:</p> <ol style="list-style-type: none"> 1. Describe the clinical rationale, design, and manufacture of a complete removable dentures set to a class 2 & 3 relationship. Recognise and evaluate the impact of new techniques and technologies in clinical practice include Digital printing and CAD/CAM principles. 2. Explain the principles and provision of Partial Prosthetics. Describe the clinical rationale of a partial removable denture, classification methods for this area. Construct a Cobalt Chromium Partial Denture. Recognise and evaluate the impact of new techniques and technologies in clinical practice to include Digital printing and CAD/CAM principles. |

3. Aims of the module

3. Explain the principles and provision of fixed prosthodontics and describe the techniques used in the manufacture of dental bridges. Recognise and evaluate the impact of new techniques and technologies in clinical practice include Digital printing and CAD/CAM principles.

4. Explain the principles and provision of multi-functional removable orthodontic appliances to include the use of expansion screws. Recognise and evaluate the impact of new techniques and technologies in clinical practice include Digital printing and CAD/CAM principles.

4. Pre-requisite modules or specified entry requirements

DT1401 Dental Anatomy 1

DT1402 Professional Practice 1

DT1403 Introduction to Dental Technology

DT2404 Dental Materials

DT2405 Work Based Practice A

DT2506 Dental Technology Techniques 1

5. Is the module compensatable?

No

6. Are there any PSRB requirements regarding the module?

Overarching Outcomes

Recognise the role and responsibility of being a registrant and demonstrate professionalism throughout education, training and practice in accordance with GDC guidance.

Apply an evidence-based approach to learning, practice, clinical judgment and decision making and utilise critical thinking and problem solving skills.

1.1.3 Recognise abnormalities of the oral cavity and their effect on dental devices.

1.1.5 Describe and evaluate the procedures used in the design and manufacture of custom made devices.

1.5.1 Carry out procedures to meet the prescription.

1.5.2 Assess the fitness for purpose of custom made dental devices and propose alternative solutions where required.

1.8.4 Recognise and take responsibility for the fitness for purpose of custom made dental devices provided.

1.10.2 Explain how the design and manufacture of custom made dental devices can contribute to the prevention of oral disease and the interests of the patient's long term oral health, safety and well-being.

1.10.3 Evaluate and apply the principles of evidence based and appropriate design in the manufacture and provision of custom made dental devices.

1.14.1 Design, manufacture, assess and provide biomechanically sound removable devices.

1.14.2 Design, manufacture, assess and provide biomechanically sound fixed prostheses.

6. Are there any PSRB requirements regarding the module?

1.14.3 Design, manufacture, assess and provide biomechanically sound orthodontic appliances.

1.14.4 Evaluate, for individual patients, the need for more complex treatment and seek advice.

1.15.1 Repair custom made dental devices to meet the needs of the patient.

1.15.2 Repair and modify custom made dental devices.

4.2 Explain the role of appraisal, training and review of colleagues, and giving and receiving effective feedback.

4.3 Give and receive feedback effectively to other members of the team.

9.2 Utilise the provision and receipt of effective feedback in the professional development of self and others.

9.3 Explain the range of learning and teaching methods and the importance of assessment, feedback, critical reflection, identification of learning needs and appraisal in personal development planning.

10.2 Effectively manage their own time and resources.

12.1 Recognise and comply with systems and processes to support safe patient care.

| 7. Intended learning outcomes | | |
|--|--|---|
| A. Knowledge and understanding | Programme Learning Outcome(s) this maps against | Learning and teaching strategy |
| <p><i>At the end of the module, learners will be expected to:</i></p> <p>Analyse and evaluate the principles of good research, how to access research and interpret it for use as part of an evidence-based approach to practice</p> <p>Evaluate and apply the principles and responsibilities of professional practice applied to the Dental Technician Dental Care Professional.</p> | <p>A2</p> <p>A4</p> | <p>Independent research</p> <p>Self-directed learning</p> <p>Tutor-led workshops</p> <p>Taught sessions</p> <p>Practical demonstration and participation</p> <p>Mentoring sessions</p> <p>Portfolio development</p> |

| B. Cognitive skills | Programme Learning Outcome(s) this maps against | Learning and teaching strategy |
|--|--|---|
| <p><i>At the end of the module learners will be expected to:</i></p> <p>Evaluate own performance and capabilities, apply reflective strategies to enhance professional development through a portfolio to demonstrate effective critical self-appraisal and personal development planning following constructive feedback.</p> <p>Think critically, using higher levels of professional judgments and decision making in dental care environments.</p> <p>Utilise intellectual skills in debate, knowledge, reasoning and problem solving to enable an evaluation of contrasting approaches within the field of dental technology.</p> | <p>B1</p> | <p>Independent research</p> <p>Self-directed learning</p> <p>Tutor-led workshops</p> <p>Taught sessions</p> <p>Practical demonstration and participation</p> <p>Mentoring sessions</p> <p>Portfolio development</p> |

| B. Cognitive skills | Programme Learning Outcome(s) this maps against | Learning and teaching strategy |
|----------------------------|--|---------------------------------------|
| | B2 B3 | |

| C. Practical and professional skills | Programme Learning Outcome(s) this maps against | Learning and teaching strategy |
|--|--|---|
| <p><i>At the end of the module, learners will be expected to:</i></p> <p>Work independently and be able to make autonomous decisions when constructing dental appliances of increasing complexity, from prescription, for the design, manufacture and modification of custom made dental devices to a 'safe beginner' level and to meet current industry standards and legislation requirements.</p> <p>Utilise employment behaviours relevant to the practice of dental technology.</p> | C1 C2 | <p>Independent research</p> <p>Self-directed learning</p> <p>Tutor-led workshops</p> <p>Taught sessions</p> <p>Practical demonstration and participation</p> <p>Mentoring sessions</p> <p>Portfolio development</p> |

| D Key transferable skills | Programme Learning Outcome(s) this maps against | Learning and teaching strategy |
|--|--|---|
| <p><i>At the end of the module, learners will be expected to:</i></p> <p>Critically evaluate the role and responsibility of being a registrant and demonstrate professionalism throughout education, training and practice in accordance with GDC guidance.</p> <p>Adapt and be flexible both as an individual and a member of a wider dental team, demonstrating the ability to work within multi-professional & inter-professional dental care groups.</p> <p>Work independently and effectively in teams whilst utilising management and leadership skills and respecting other team members contributions.</p> | <p>D1</p> <p>D2</p> <p>D3</p> | <p>Independent research</p> <p>Self-directed learning</p> <p>Tutor-led workshops</p> <p>Taught sessions</p> <p>Practical demonstration and participation</p> <p>Mentoring sessions</p> <p>Portfolio development</p> |

8. Indicative content.

1. Activities using polymeric complete denture cases:

Construct a Class 2 case for Full/Full dentures with some balance.

Articulation: mounting of cases to articulators. Data transfer from occlusal registration and prescription information

Aesthetics: position of anterior teeth to meet occlusal registration information and data, centre line, lip support, overjet/overbite, application of tooth setting method to achieve balance.

8. Indicative content.

Occlusion: forming of appropriate occlusal relationships and contacts.

Waxing: simulated gingival contour, self-cleansing, lip support, forms of contouring, peripheral outline and thickness, palatal thickness, surface finish and presentation.

Quality assurance: forms of checks used to assure that the case meets the prescription requirement, decontamination, packaging and recording cases for dispatch or collection.

Recognise and evaluate the impact of new techniques and technologies in clinical and laboratory practice include Digital printing and CAD/CAM principles related to complete dentures.

Professional practice reflection.

2. Activities using metal/polymeric Partial denture techniques:

Construct an example of a cobalt chromium partial upper or lower denture.

Surveying, design methods and considerations, model preparation and duplication, waxing, spruing, investing and finishing methods.

Articulation: mounting of cases to articulators. Data transfer from occlusal registration and prescription information.

Occlusion: forming of appropriate occlusal relationships and contacts in harmony in the oral cavity.

Quality assurance: forms of checks used to assure that the case meets the prescription requirement, decontamination, packaging and recording cases for dispatch or collection.

Recognise and evaluate the impact of new techniques and technologies in clinical & laboratory practice to include Digital printing and CAD/CAM principles related to partial dentures.

Professional practice reflection.

3. Activities using Conservation cases:

Construct conservation examples to include dental bridges.

Articulation: mounting of cases to articulators. Data transfer from occlusal registration and prescription information

Design principles and application.

Aesthetics: construction of bridge designs.

8. Indicative content.

Occlusion: forming of appropriate occlusal relationships and contacts.

Quality assurance: forms of checks used to assure that the case meets the prescription requirement, decontamination, packaging and recording cases for dispatch or collection.

Recognise and evaluate the impact of new techniques and technologies in clinical & laboratory practice to include Digital printing and CAD/CAM principles related to conservation practice.

Professional practice reflection.

4. Activities using Orthodontic cases:

Wire work for clasps and combined springs for complex multi-functional orthodontic appliances to include multiple movements and the use of occlusal bite planes. The use of screws in orthodontics.

Quality assurance: forms of checks used to assure that the case meets the prescription requirement, decontamination, packaging and recording cases for dispatch or collection.

Recognise and evaluate the impact of new techniques and technologies in clinical & laboratory practice to include Digital printing and CAD/CAM principles related to orthodontic practice.

Professional practice reflection.

9. Assessment strategy, assessment methods, their relative weightings and mapping to module learning outcomes

Assessment Strategy:

Research Assignment: To evaluate the use of new technologies on dental appliance design and manufacture. Up to 3,000 words.

Portfolio: The construction of simulated cases for all areas demonstrating critical self-evaluation. Appliances covered will include Removable Prosthodontics, Partial Prosthodontics, Fixed Prosthodontics and Orthodontics. An item from each area will be summatively assessed

Summative Practical Exam: Produce a range of devices to a 'safe beginner' standard. Duration 24 hours to be completed over 4 Tuesdays (6 hours) in a four week period (24 hours).

| 9. Assessment strategy, assessment methods, their relative weightings and mapping to module learning outcomes | | | | |
|---|-----------|----------------|---------------------------|--|
| Assessment Task | Weighting | Week submitted | Grading (Pass / Fail / %) | Module Learning Outcome(s) the assessment task maps to |
| Assignment | 20 | 30 | Pass 40-59% | A2, A4, B2, B3, D1 |
| Portfolio | 30 | 25 | Merit 60-69% | A4, B1, B2, B3, C1, C2, D1, D2 |
| Summative Practical Exam | 50 | 26-29 | Distinction 70-100% | A4, B1, B2, B3, C1, C2, D1, D2, D3 |

| 10. Teaching staff associated with the module |
|---|
| Name and contact details |
| Christopher Fielding chris.fielding@liv-coll.ac.uk 0151 252 4833 |
| |

| 11. Key reading list | | | | |
|-------------------------------------|----------------------|---|--|--|
| Author | Year | Title | Publisher | Location |
| | | | | |
| Brennan, M | 2006 | Ethics and Law for the Dental Team | PasTest | Knutsford, Cheshire |
| Carr A, McGivney G P, Brown | 18 Jan. 2016 | McCracken's Removable Partial Prosthodontics, 13th edition | Mosby | Maryland Heights, Missouri. USA |
| Stratton R J and Wiebelt F J | 1998 | An Atlas of Removable Partial Denture Designs | Quintessence | New Malden Surrey |
| Barclay C W, Walmsley A D | 1998 | Fixed and Removable Prosthodontics | Churchill Livingstone | London |
| Rudd, K | 1985 | Dental Laboratory Procedures: Removable Partial Dentures (volume 3) (2nd edition) | Mosby | Maryland Heights, Missouri. USA |
| Sowter, J. | 30 Sept. 1987 | Dental laboratory technology: Removable Prosthodontic Techniques | University North Carolina Press | North Carolina USA |
| Hayakawa I | 1999 | Principals and Practices of Complete Dentures: Creating the Mental Image of a Denture | Quintessence | New Malden Surrey |
| Murray H V, Sluder T B, | 30 Aug. 1989 | Fixed Restorative Techniques (Dental | University North Carolina Press | North Carolina USA |

| 11. Key reading list | | | | |
|---|----------------------|---|--|--|
| Author | Year | Title | Publisher | Location |
| Brennan, M | 2006 | Ethics and Law for the Dental Team | PasTest | Knutsford, Cheshire |
| | | Laboratory Manuals) 2nd edition | | |
| Shillingburg H T, Edwin L | 2020 | Guide to Occlusal Waxing 3rd edition | Quintessence Publishing Co, Inc | New Malden Surrey |
| Serio F G | 30 Jan. 1998 | Understanding Dental Health (Understanding Health and Sickness Series) | University Press of Mississippi | Mississippi USA |
| Rosenstiel S F, Land M F | 25 Sept. 2015 | Contemporary Fixed Prosthodontics 5th edition | Mosby | Maryland Heights, Missouri. USA |
| Herbert T Shillingburg | 30 Mar. 2012 | Fundamentals of Fixed Prosthodontics 4th Revised ed. | Quintessence Publishing (IL) | New Malden Surrey |
| Jenkins G | 1999 | Precision Attachments: A Link to Successful | Quintessence Publishing (IL) | New Malden Surrey |
| White G E | 1 Jun. 1993 | Osseointegrated Dental Technology | Quintessence Publishing (IL) | New Malden Surrey |
| Hobkirk J., Watson R.M, Searson L. | 6 Aug. 2003 | Introducing Dental Implants | Churchill Livingstone | London |

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|-------------------------------------|----------------------|--|--|--------------------------------|
| Author | Year | Title | Publisher | Location |
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| Brennan, M | 2006 | Ethics and Law for the Dental Team | PasTest | Knutsford, Cheshire |
| W. Patrick Naylor | 21 Oct. 2 | Introduction to Metal Cer | Quintessence Publishing Co, Inc | New Malden Surrey |
| Iaacson K G | 2000 | Removable Orthodontic Appliances | Wright | Wynyard, United Kingdom |
| McDonald F, Ireland A J | 1998 | Diagnosis of the Orthodontic Patient | Oxford Medical Publications)- | Oxford |
| Littlewood S.J., Mitchell L. | 27 April 2019 | An Introduction to Orthodontics 5th ed | Oxford University Press | Oxford |
| Huge S | | The Orthodontic Appliance Reference Manual | Ortho-Care (UK) Ltd | Shipley, West Yorkshire |
| Richardson A. | 29 Nov. 1999 | Interceptive Orthodontic | British Dental Journal | London |
| Orton H S | 1993 | Functional Appliances in Orthodontic Treatment | Quintessence Publishing Co, Inc | New Malden Surrey |
| Journal | NA | Dental Technologies | CRG Publications. | London, |
| Journal | NA | The Dental Technician | A. E. Morgan Publications Ltd | Epson, Surrey, |
| Journal | NA | Quintessence Journal of Dental Technology: | Quintessence Publishing Co. LTD | New Malden, Surrey |

12. Other indicative text (e.g. websites)

General Dental Council, Student Fitness to Practice. The General Dental Council https://www.gdc-uk.org/docs/default-source/quidance-for-students/student-professionalism-and-fitness-to-practise-quidance-for-students.pdf?sfvrsn=5ddbc404_2

<https://derweb.co.uk>

<https://www.dla.org.uk>

<https://www.dta-uk.org>

<https://www.gdc-uk.org/information-standards-guidance>

<https://www.gov.uk/government/collections/oral-health>

<https://www.nature.com/vital/>

<https://www.nature.com/bdjteam/>